



Annual Report on the 1990 Business Year

BMW AG



		1990	1989	Change in %
BMW Group				
Sales				
Total	DM million	27,177.6	26,515.4	+ 2.5
Domestic	DM million	10,452.8	9,183.9	+ 13.8
Foreign	DM million	16,724.8	17,331.5	- 3.5
Production				
Automobiles	units	519,660	511,476	+ 1.6
Motorcycles	units	31,589	25,761	+ 22.6
Automobile sales				
Total	units	525,866	523,021	+ 0.5
Domestic	units	200,418	190,363	+ 5.3
Foreign	units	325,448	332,658	- 2.2
Motorcycle sales				
Total	units	29,701	26,805	+ 10.8
Domestic	units	8,127	7,486	+ 8.6
Foreign	units	21,574	19,319	+ 11.7
Workforce at end of year		70,948	66,267	+ 7.1
Investment in intangible assets and in tangible fixed assets	DM million	2,065.8	1,819.8	+ 13.5
Depreciation on intangible assets and on tangible fixed assets	DM million	1,778.0	1,548.8	+ 14.8
Year's net income	DM million	695.9	558.1	+ 24.7
BMW AG				
Sales	DM million	22,147.1	20,957.8	+ 5.7
Investment in intangible assets and in tangible fixed assets	DM million	1,749.9	1,416.7	+ 23.5
Workforce at end of year		59,544	57,087	+ 4.3
Year's net income	DM million	397.8	386.0	+ 3.1
Dividends	DM million	198.9 ¹⁾	193.0	+ 3.1
per ordinary share of DM 50 nominal value	DM	12.50 ¹⁾	12.50	
per preference share of DM 50 nominal value	DM	13.50 ¹⁾	6.75	
per preference share of DM 50 nominal value (entitled to dividend payment from July 1, 1990)	DM	6.75 ¹⁾	-	

¹⁾ proposal of the management

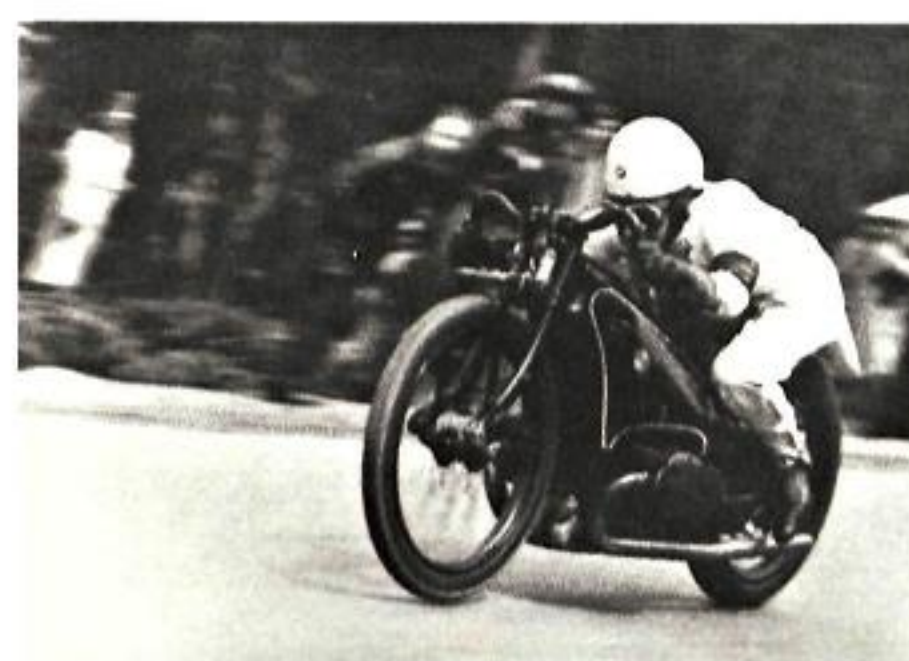
Bayerische
Motoren Werke
Aktiengesellschaft
Munich

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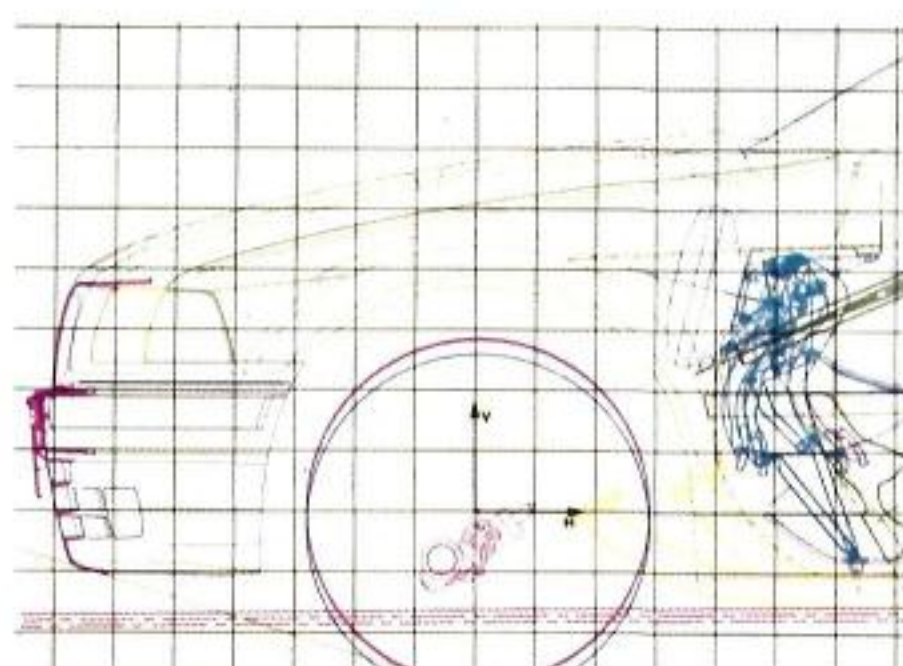
BMW AG



BMW cars and motorcycles on the Odeonsplatz in Munich (pages 28 to 31)



75 years of BMW: A history of aircraft engines, motorcycles and cars (pages 51 to 64)



New 3 Series cars: Trendsetting technology in development and production (pages 65 to 67)



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Freedom, one of the great prizes in the development of our culture, includes mobility of thought, people and goods. The automobile is one of the symbols of individual freedom. Modern life would be impossible without physical and intellectual mobility. Man has always striven for faster movement: by horse, rail, road and air.

Mobility has always been an essential part of civilisation. In particular, with the automobile we are free to choose where, when, how and with whom we travel. That is why the car has become uniquely successful. How long will this success last? Will the boon become a burden? It would appear that we, the car manufacturers, have performed our task too well. We have created the mass use of the automobile. This has led to high traffic densities. While the car industry has ensured mobility solely through the function and quality of its products, future success can no longer be guaranteed solely by the harnessing of technology. We face an immense challenge. Technology increasingly has gained a political dimension. That is why we have pursued, for some time, projects such as the co-operative traffic system, whereby all means of transport are utilized efficiently. The result would be the free flow of traffic once again. Other projects focus on the recycling of materials from scrapped cars; on alternative propulsion concepts. Intellectual mobility also means discovering new ways of minimizing both the use of energy and the raw materials needed to produce and run motor vehicles.

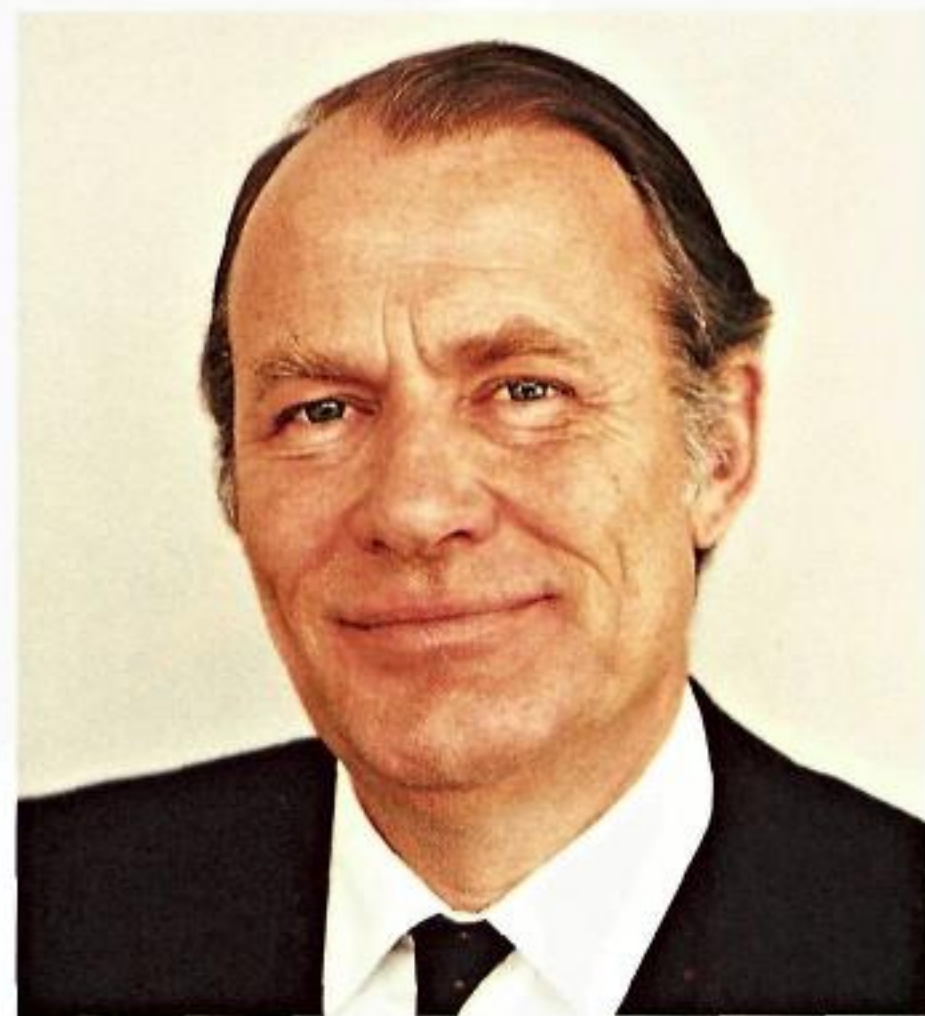
We know it is important to react to developments with speed and agility. Equally, it is vital at an early stage to allow in our planning for possible future developments. After all, we are working today on cars that will not be on the roads for ten or even twenty years. Thus, we help to shape the future. A form of mobility not new to us is to imagine what is currently unimaginable.

The car industry will act quickly and determinedly to ensure the car maintains its current worldwide popularity. Thus, it will safeguard an essential component of our present living standard. Everyone in industry and in politics should work towards this aim. After all, every driver determines how much energy his car uses by the manner of his driving. High traffic density is frequently nothing more than poor traffic distribution. Those in authority must re-examine present customs. For example, during the holiday season most hotel arrivals and departures are on Saturdays. All schools begin at the same hour. In Germany, and many other countries, all shops have the same opening hours. Surely we have the freedom to find new solutions? We can overcome new challenges with intellectual mobility.



Eberhard v. Kuenheim

BMW AG



The Supervisory Board regularly reviewed the Company's business throughout the business year. At its joint meetings with the Board of Management and on the basis of the latter's written and verbal reports, the Supervisory Board has studied closely the Company's situation, the course of business and the intended business policy, and discussed these matters with the Board of Management.

Joint discussions also focussed on the impact, on the Company, of international events and developments in the new "Länder" (federal states), including associated capital expenditure requirements and the need to open up the market. The Supervisory Board was particularly interested in the long-term development of business.

The Annual Financial Statements for the 1990 Business Year, the Books of Account and the Economic Review have been examined by KPMG Deutsche Treuhand-Gesellschaft Aktiengesellschaft Wirtschaftsprüfungsgesellschaft, Munich, which has provided its unrestricted confirmatory audit certificate. The Supervisory Board agrees to the result of this audit.

At its meeting on March 22, 1991, the Supervisory Board examined and approved the Annual Financial Statements and the Economic Review, prepared by the Board of Management. The Annual Financial Statements are thereby adopted.

The proposal of the Board of Management for the allocation of profits has been examined by the Supervisory Board which supports the proposal. According to the final result of the Supervisory Board's review, there are no objections to be raised.

The Consolidated Financial Statements and the Economic Review of the BMW Group included in the Economic Review, which have been provided with the unrestricted confirmatory audit certificate of KPMG Deutsche Treuhand-Gesellschaft Aktiengesellschaft Wirtschaftsprüfungsgesellschaft, Munich, as well as the report of the auditor of the Consolidated Financial Statements, have been duly submitted to the Supervisory Board.

At its meeting on May 30, 1990, the Supervisory Board appointed Mr. Bernd Pischetsrieder Deputy Member of the Board of Management.

After 20 years in office, Dr.-Ing. E.h. Hans C. Koch retired from the Board of Management as of August 31, 1990. The Supervisory Board expressed its thanks to Dr. Koch for his services to the Company.

Munich, March 22, 1991

A handwritten signature in blue ink, appearing to read 'Hans Graf von der Goltz'.

The Supervisory Board
Hans Graf von der Goltz
Chairman

Supervisory Board

Hans Graf von der Goltz
Bad Homburg v.d.H.
Chairman
Businessman

Manfred Schoch*, Munich
Deputy Chairman
Chairman of the Works Council

Eberhard von Heusinger
Bad Homburg v.d.H.
Deputy Chairman
Lawyer

Johann Vilsmeier*
Frauenbiburg nr. Dingolfing
Deputy Chairman
Chairman of the Works Council,
Dingolfing plant

Johanna Quandt
Bad Homburg v.d.H.
Deputy Chairwoman
Member of the Supervisory Board
of Altana Industrie-Aktien und
Anlagen AG

Dr.-Ing. E.h. Klaus Barthelt
Erlangen
Former Member of the Board of
Management of Siemens AG

Reinhold Bauer*, Landshut
Chairman of the Works Council,
Landshut plant

Helmuth Baumgärtner*, Dingolfing
Member of the Works Council,
Dingolfing plant

Klaus Bernhardt*, Frankfurt/Main
Trade union secretary

Nikolaus Held*, Regensburg
Member of the Works Council,
Regensburg plant

Dr. Hartmut Kämpfer*, Munich
Director of Berlin plant

Cornelis J. van der Klugt
Eindhoven, Netherlands
Former Chairman of the Board of
Management of N.V. Philips'
Gloeilampenfabrieken

Dr. Wolfgang Leeb, Munich
Member of the Supervisory Board
of Dresdner Bank AG

Dr. h.c. André Leysen,
Antwerp, Belgium
Chairman of the Supervisory
Board of Gevaert N.V.

Rudolf Lukes*, Munich
Trade union secretary

Alois Mathe*, Munich
Deputy Chairman of the Works
Council, Munich plant

Dr. Hans Meinhardt, Wiesbaden
Chairman of the Board of
Management of Linde AG

Dr. Dr.-Ing. E.h. Dr. phil. h.c. Kurt Werner
Darmstadt
Chairman of the Board of
Management of Maschinenfabrik
Goebel GmbH

Dr. Kurt Wessing, Düsseldorf
Lawyer

Klaus Zwickel*, Frankfurt/Main
Member of the Board of
Management of IG Metall

Board of Management

Dr.-Ing. E.h. Dr.-Ing. E.h.
Eberhard v. Kuenheim
Chairman

Dr. Robert Büchelhofer

Volker Doppelfeld

Dr.-Ing. E.h. Hans C. Koch
(until August 31, 1990)

Franz Köhne

Dr.-Ing. Wolfgang Reitzle

Dr. Helmut Schäfer

Bernd Pischetsrieder, Deputy
(from June 1, 1990)

General Counsel:

Dr. Hagen Lüderitz

* employees' representative

Business at BMW in 1990 gave rise to general satisfaction. Major development and investment projects were completed, and new projects begun. The change of model in two car series, and the resumption of the development of aircraft engines, underline the dynamic nature of the Company. Group sales rose only slightly to DM 27.2 billion. This was due to exchange losses incurred with the currencies of the USA, Canada and Japan. Net income increased worldwide by one-quarter to some DM 700 million.

Business at BMW still satisfactory in 1990

The steady upward trend of the previous years continued at BMW in 1990. Once again, production and sales of BMW cars increased. For the first time in a single year two new series were introduced: the 8 Series coupé, and a new generation of 3 Series cars which forms the backbone of the BMW automobile range.

The motorcycle business increased due to the reversal of the trend on the world market as well as the introduction of new models. Production capacities at motorcycle and car plants were fully utilized.

The Group's key business data improved yet again. Incoming and unfilled orders for cars reached record levels.

The Company's healthy financial and income position reflects its inner strength. Despite increasing external pressures, earnings power improved yet again. This was the result of measures taken years ago to increase efficiency in all fields.

New initiatives for the Group's development

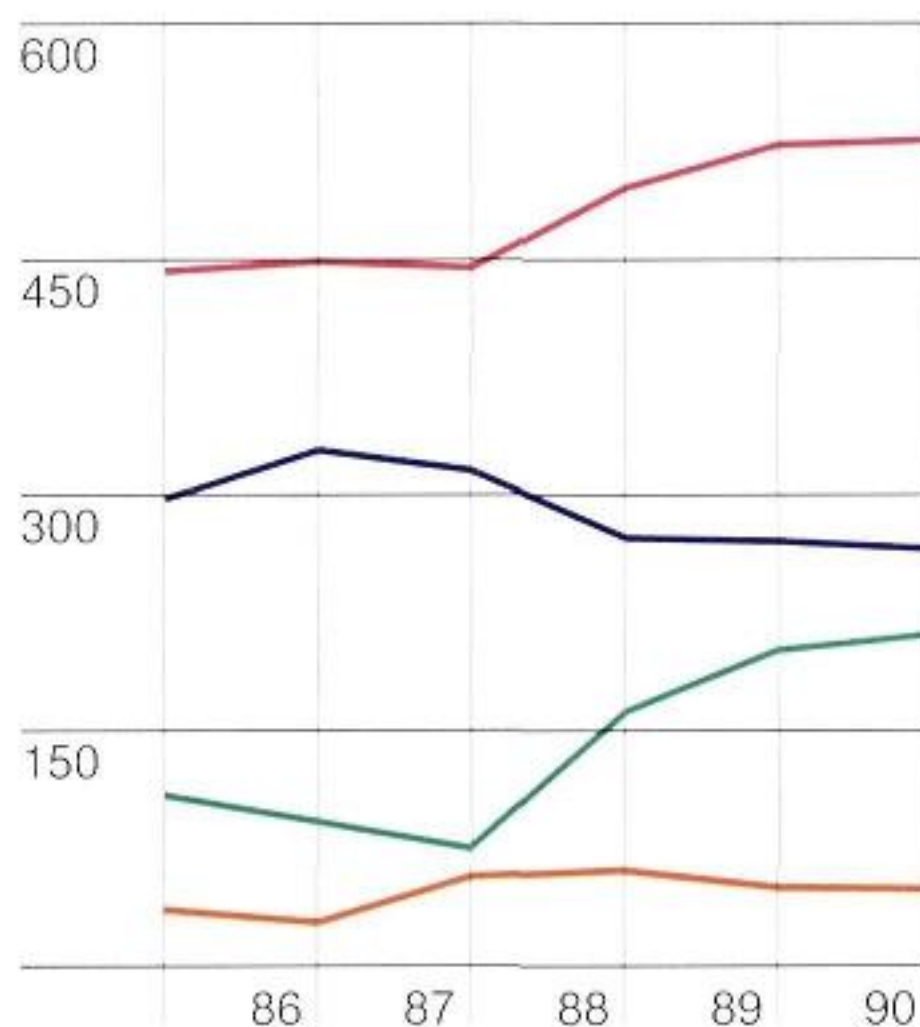
After a six-year construction and start-up period, and investments of some DM 1.4 billion, the new BMW car plant in Regensburg is gradually becoming fully operational. In the year under review a second shift was introduced, and production started in the Bodywork Hall. A further milestone was the completion of the fourth construction phase of the Research and Engineering Centre in Munich.

By building new plants in Wackersdorf, to the north of Regensburg, and near Eisenach in Thuringia, the Company is creating more scope for the further development of its system of linked production plants.

With two pilot projects under way, the improvement of the control of traffic flow on road and rail, and the recycling of parts and components from scrapped cars, BMW is helping to ensure that the technologies already available are soon used as widely as possible. The aim of both these activities is to reduce permanently the burdens on the environment and the use of natural resources. This will result in private transport continuing to be attractive, and socially acceptable, in years to come.

Together with Rolls-Royce plc., BMW has resumed the development and construction of aircraft engines. KONTRON GmbH, purchased in 1989, strengthens the Group in the field of electronics.

Automobile Sales of the BMW Group in thousand units



— Total
— 3 Series
— 5 Series
— 7 Series, 6/8 Series (coupé)

	86	87	88	89	90
Total	448.6	444.6	495.8	523.0	525.9
3 Series	328.0	311.5	272.2	270.5	265.4
5 Series	92.6	76.3	162.7	202.3	211.6
7 Series, 6/8 Series (coupé)	28.0	56.8	60.9	50.2	48.9

Total
3 Series
5 Series
7 Series, 6/8 Series (coupé)

Further rise in BMW sales

The sales of the BMW Group increased by 2.5 % to DM 27.2 billion in 1990. The declining exchange rates of the currencies of the USA, Canada and Japan, with which sales in foreign currencies were converted into D-marks, counteracted higher growth. The net sales of BMW AG rose by 5.7 % to DM 22.1 billion.

The proportion of expenditure on materials in the Group's total value of production decreased slightly to 57.0 %.

In contrast, expenditure on wages, salaries, pension plans and social security contributions increased by 13.0 % to DM 5.3 billion, their share in the total value of production rising to 19.2 %. This was due to rises in collectively and individually agreed wages and salaries, higher pension fund provisions, and the growth of the workforce in the Group. For the first time, the workforces of the KONTRON companies and BMW Bank GmbH were counted as BMW employees.

Depreciation increased again because of the markedly higher volume of investment, amounting to some DM 1.8 billion. The cash flow, i.e. internally generated financing, rose by DM 0.5 billion to DM 2.8 billion.

Purchasing volume increased to more than DM 15 billion

In 1990, BMW purchased materials, supplies and energy worth DM 13.6 billion. When including investment in fixed assets worldwide, the Group's total volume of purchasing rose by 6.1 % to DM 15.7 billion.

Stocks of raw materials and supplies, work in process and finished products remained low despite the increased volume of production. This was due largely to the systematic application of modern control technologies.

The prices of major raw materials generally declined during large parts of the year. This contrasts with the two-figure growth rates of the two previous years. In the second half of the year, the easing of the situation on the raw materials markets was interrupted by the Gulf war. Steeply rising prices for crude oil made prices soar for both fuels and plastics.

Programme of investment continued on schedule

Worldwide, BMW invested DM 2.1 billion in fixed assets in the year under review. More than DM 1 billion went on manufacturing preparations for new cars and components.

The largest single projects, not relating to a particular model, were the Research and Engineering Centre in Munich, the new foundry in Landshut and the final stage of construction of the engine plant at Steyr, Austria.

Special attention was paid, in 1990, to extending the international sales organization.

Company growth creates more jobs

Almost 71,000 people were employed at the companies of the BMW Group at the end of 1990; some 4,700 more than in the previous year.

The workforce at BMW AG increased by some 2,500 employees, mainly due to the expansion of the Regensburg plant. Other jobs were created as a result of the change of model in the 3 Series, the start-up of production at the Wackersdorf plant, and new locations for the German sales organization.

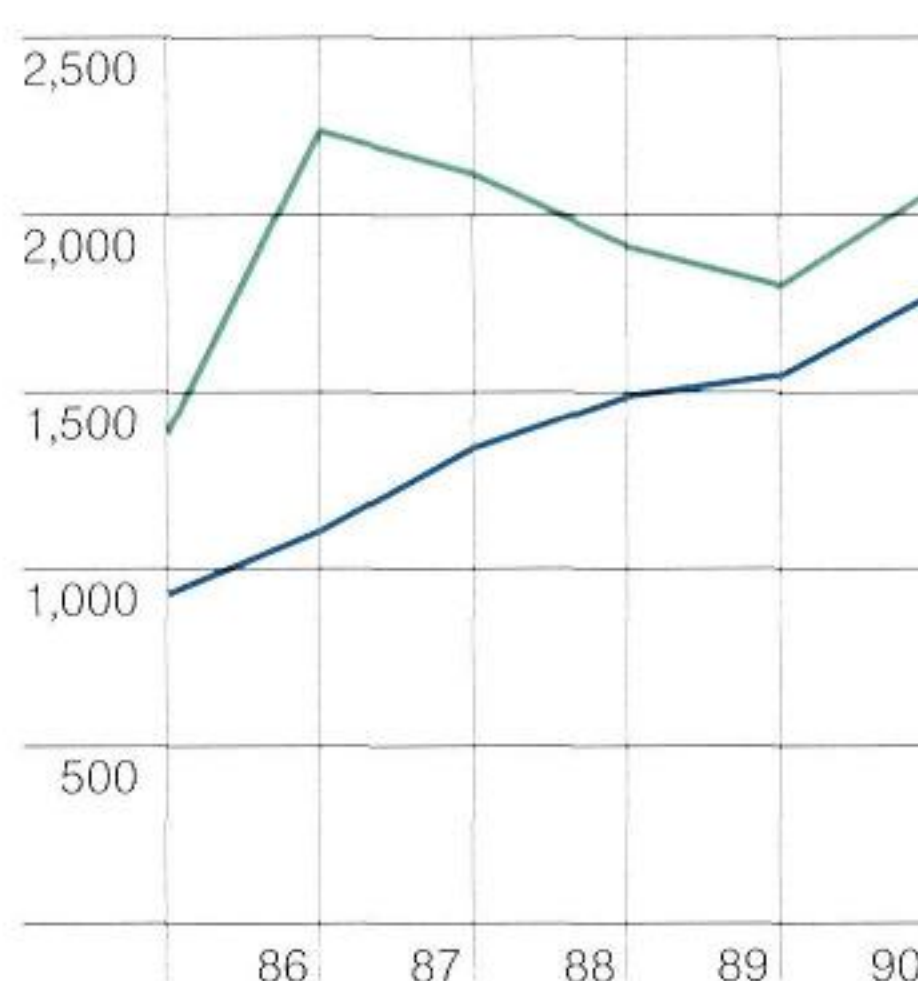
For the first time, an additional 1,500 employees at BMW companies in Germany were included in the total workforce.

Once again, proposed dividend of DM 12.50; increase in capital from corporate funds

The income from normal business improved worldwide by 6.6 % to DM 1.7 billion. The increasing interdependence of BMW companies, and lower tax rates in major purchasing countries, resulted in lower tax expenditure in the Group. Thus, the Group's net income of DM 696 million was far higher than the previous year's DM 558 million.

The Board of Management and the Supervisory Board propose to the Annual General Meeting that the balance sheet profit of DM 198.9 million be used to pay a dividend of DM 12.50 per ordinary share and DM 13.50 per preference share with a nominal value of DM 50 on the common stock with entitlement to full dividend payment for the 1990 business year (DM 750 million).

**Investment in and Depreciation on
Tangible Fixed Assets of the BMW Group**
in million DM



	2,236.9	2,112.3	1,910.5	1,819.8	2,065.8
	1,114.7	1,344.5	1,489.1	1,548.8	1,778.0

Investment
Depreciation

Investment
Depreciation

in ordinary shares and DM 40.6 million in preference shares), and that a dividend of DM 6.75 per preference share with a nominal value of DM 50 be paid on the common stock with entitlement to half the dividend payment for the 1990 business year (DM 3.1 million in preference shares).

In addition, to mark BMW's 75th anniversary, the Company would like to deepen its relations with its shareholders and express its appreciation in a special way. Therefore, the Board of Management and the Supervisory Board propose to the Annual General Meeting that the subscribed capital be increased from corporate funds in a ratio of 8 to 1, this increase being by DM 93.7 million in ordinary shares and DM 5.5 million in preference shares from the current DM 793.7 million to DM 892.9 million. The proposal also provides for the new shares to be entitled to full dividend payment for the 1991 business year.

New record for group sales of BMW cars

The Group sold 525,900 cars in the year under review. This large number was largely the result of the renewed increase in sales of 5 Series cars.

In the Federal Republic of Germany, the most important sales market for BMW cars, the development of sales was, once again, very pleasing. Indeed, 191,000 or so new registrations equalled the previous year's record. In Italy, the BMW company slightly increased its sales on an otherwise declining market.

The sales situation on the other European markets was influenced, in the second half of the year in particular, by the change of model in the 3 Series and generally weaker demand. The markets of Eastern Europe underwent great economic change in 1990. BMW sold some 2,500 new cars in this region.

In Europe, some 370,000 BMW cars were sold; more than 70 % of the total sales.

In North America, the general economic climate and taxation delayed renewed growth in demand. With total sales of almost 68,000 cars, the trend in business for BMW was much the same, in the USA and in Canada, as in the previous year.

The markets of East Asia continued to be dynamic. BMW sales rose by 9 % to a total of 50,000 units. The development of the Japanese market was outstanding; 36,500 new BMW cars were registered.

BMW dealers throughout the world made large investments in equipment and in intensive training in preparation for the introduction of new cars and components. Thus, yet again, the conditions for providing an individual service to customers were improved.

Special training centres are available to the dealers in all the major sales markets. Importers are assisted by service specialists from BMW AG.

New challenges for research and development

At BMW, research and development is devoted to all aspects of private transport, including links with public transport systems and impacts on resources and environment.

The further development of the wide range of high-quality cars and motorcycles is central to R & D work at BMW. The technical innovations thus achieved are gradually incorporated into all models.

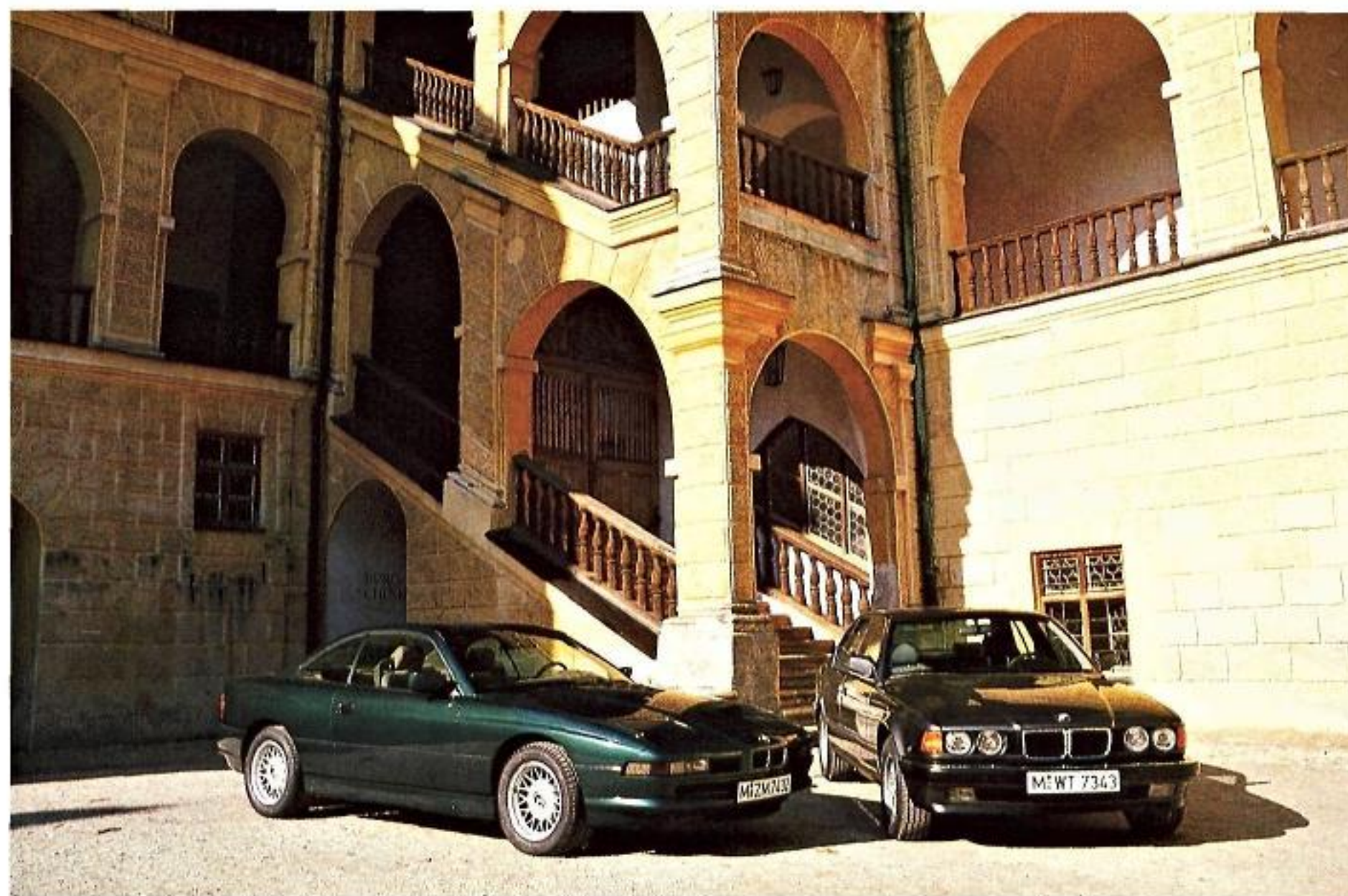
The development of aircraft engines has become another key area of activity since cooperation with Rolls-Royce plc. began in mid-1990. KONTRON GmbH, purchased in 1989, adds to BMW's already extensive expertise in the field of electronic components.

Further progress was made towards producing cars more compatible with the environment. This was due primarily to the increased application of electronic control systems, the introduction of which to automobile construction had been greatly encouraged by BMW. The controlled catalytic converter has been fitted in all new BMW cars with petrol-driven engines for some time. Now the K1 and K100 RS motorcycles are also available with this technology to purify exhaust emissions. Cars with diesel engines can be supplied with an uncontrolled catalytic converter.

The Company also plays a leading role in the field of active and passive safety. With the change of model in the 3 Series, the BMW safety concept is now integrated into every model. It incorporates the results of accident



The new 3 Series BMW



12-cylinder BMW cars:
the 850i coupé and the 750i/L saloon

research which BMW has undertaken since 1976.

The Research and Engineering Centre now provides 4,500 people with all the requirements and facilities for efficient work flows and structures. The Centre brings together engineers from all departments involved in development, purchasing and production preparation.

BMW Technik GmbH and BMW Motorsport GmbH are self-contained development units that work on innovative technical solutions, wholly independently of the demands of series production. BMW diesel engines are developed in a special centre at the plant at Steyr, Austria.

In addition to the test grounds near Munich, development engineers, from mid-1990, could use to the full a new test track near Miramas, in the South of France.

Cooperation with suppliers from all over the world was further intensified. The latest technical and scientific findings were exchanged with universities and scientific institutes.

As part of the European research initiatives, PROMETHEUS and DRIVE, BMW is involved in technical developments which aim to make future transport systems safe, economical and comfortable. Upon BMW's initiative, a first application will be the overall guidance of the traffic flows, including public transport, in the north of Munich.

Since July 1990, the possibilities have been examined of reprocessing parts and components from scrapped cars in a special automobile dismantling unit at the Landshut plant.

Work also progressed on new propulsion concepts and the use of alternative forms of energy.

Business prospects

In the first quarter of 1991, production and sales of BMW automobiles were below the equivalent 1990 figures. This was because the production facilities for the new 3 Series cars are only being started up gradually. They will not be operating to full capacity until the second half of the year.

The level of orders and foreseeable demand for BMW cars and motorcycles suggest a further rise in sales for the whole of 1991. With new models and components, BMW has consolidated its position as a supplier of technically leading products on all markets of the Western industrial world. Product innovations will continue to be made in 1991.

As to the internal structures and facilities required for the development, production, logistics and marketing of sophisticated cars, all the conditions have been created for continuing success on the world's automobile markets. The Company's technological base is being broadened with the development of new activities; the investment ratio will remain high.

Weak economic development in the USA and in several European countries is casting a shadow over the short-term prospects for the car markets.

German unity and the changes in Eastern Europe are opening up additional sales opportunities. However, in view of the present low standard of living and poor infrastructure in Eastern Europe, it will take some time for demand to fully develop.

In the medium to long term, international demand for cars is expected to continue to rise. The automobile will continue to form an indispensable part of any efficient economic and transport system.

The Company's development is the joint success of its employees, dealers and business partners throughout the world. BMW would like to express its thanks to all of them.

January

BMW Italia S.p.A., one of the first marketing companies abroad, celebrated its 25th anniversary. Founded in 1965 in Palazzolo di Sona near Verona, as the importer of BMW products, it became part of the BMW Group in 1974.

A BMW car with an electric motor, based on the 3 Series, demonstrated in Munich the state of the art of a new propulsion concept.

February

In addition to several awards by renowned automobile journals, the readers of "auto, motor und sport" voted the 3, 5 and 7 Series "the world's best cars" in their categories for the third successive year.

March

The 12-cylinder coupé, the 850i, made its debut at the Salon International de l'Automobile in Geneva. This model replaced the 6 Series, of which some 86,000 cars had been produced since 1976.

In Dresden, Bernd Hinkel opened the first BMW motorcycle workshop in the eastern part of Germany.

April

The fourth construction phase of the Research and Engineering Centre was completed and a further 600 employees moved in.

40,000 visitors came to the 2nd Munich Biennale, an International Festival of New Music Theatre. Again, BMW donated five prizes. Biennale productions will be performed in London, New York and other cities at a later date.

May

New 6-cylinder engines with four-valve technology were introduced in the 520i and 525i models.

BMW was represented for the first time at the Innovations Market for Research and Technology in the world's biggest industrial fair, in Hanover.

The 14th German regional office of BMW AG opened in Mannheim. In Dresden, Heinz Melkus, known from his motor sport days, opened the first BMW car centre in the new "Länder" (federal states).

BMW opened a new import centre in Auckland, New Zealand.

June

Second-shift working was introduced at the Regensburg plant. At the same time, the new Bodywork Hall became operational.

The BMW Service Card was introduced throughout Europe. This complements the "Emergency Service".

The legendary 24-hour race at the Nürburgring ended with a double victory by two BMW M3 cars.

July

BMW and Rolls-Royce plc., London, founded a joint company for the development and construction of aircraft engines.

A pilot project on the dismantling of scrapped cars was started at the Landshut plant. Such industrial processes are to be developed in international cooperation.

Some 100 scientists and journalists assembled for the first BMW Research Day at the Engineering and Research Centre. The Company created a prize for science.

At Wackersdorf, BMW's youngest car plant, 250 employees started to produce bodywork for 3 Series Convertibles.

The BMW health insurance scheme began business at its headquarters at Dingolfing.

August

During the works holiday, the Dingolfing plant produced 120 cars of the 7 and 8 Series a day.

September

The new 3 Series went into production at the Munich plant. Until the end of the year, two generations of the 3 Series were produced there simultaneously.

BMW was the first manufacturer to introduce motorcycles with controlled three-way converter technology.

October

On October 2, the day before German unity, the first sod was turned in Eisenach for a new BMW plant to be devoted to the production of large tools.

The development centre for diesel engines at BMW Motoren Ges.m.b.H. at Steyr in Austria celebrated its tenth anniversary.

November

The new generation of 3 Series cars had its international press debut in Nîmes, near the new BMW test grounds in Miramas, South of France. At the same time it was presented in Munich to BMW dealers.

The BMW regional office in Munich moved into new buildings on the Frankfurter Ring. It now has the largest BMW retail outlet in the world.

The Spanish painter, sculptor and architect, César Manrique, worked on a 7 Series model to produce the tenth BMW Art Car.

December

Following a decision by the Council of Ministers of the Bavarian Government, the City of Munich adopted the pilot project, initiated by BMW, to introduce a cooperative traffic system in Munich.

In 1990, after an eight-year boom, the economy cooled noticeably worldwide. Thus, it is all the more important to counteract protectionist tendencies. While the upward development continued in the west of Germany after unification, the east has to contend with the problems left by its past. New transport policy concepts are needed.

Divided world economy

In 1990, the world economy was in the late phase of an upturn that had lasted eight years. As interest rates rose and profit expectations fell, corporate investment confidence gradually declined. The renewed increase in inflation rates also made private consumers more cautious.

During this phase of slacker economic activity, rising oil prices, due to the Gulf crisis, became an additional burden. However, they were less drastic than during the oil crises of the 1970s. The trend in prices of crude oil reflects primarily the uncertainty among market participants; there were no supply bottlenecks.

The real Gross National Product of the Western industrial nations rose by 2.8% in 1990, compared with the previous year's 3.4%. The differences, to be observed for some time in the economic development of the individual countries, became more striking in 1990.

While signs of a downturn increased in the USA, Canada, Great Britain, and in Scandinavia, the economies of Germany and Japan continued to point steeply upward. Growth levelled off in most countries of Western Europe.

Europe: Consolidation at a high level

The economic situation remained generally favourable in Western Europe. Capacities continued to be well utilized. While private consumption rose again markedly in many sectors, demand for capital goods slackened.

Rising unit labour costs curbed prospective earnings. Expenditure on fixed assets became less attractive due to the high interest rates for financial investments.

Western European exports were far less dynamic in 1990. This was mainly because of a deterioration in competitive position, due to exchange rates, compared with rivals from the USA and Japan.

Special developments in the Federal Republic of Germany

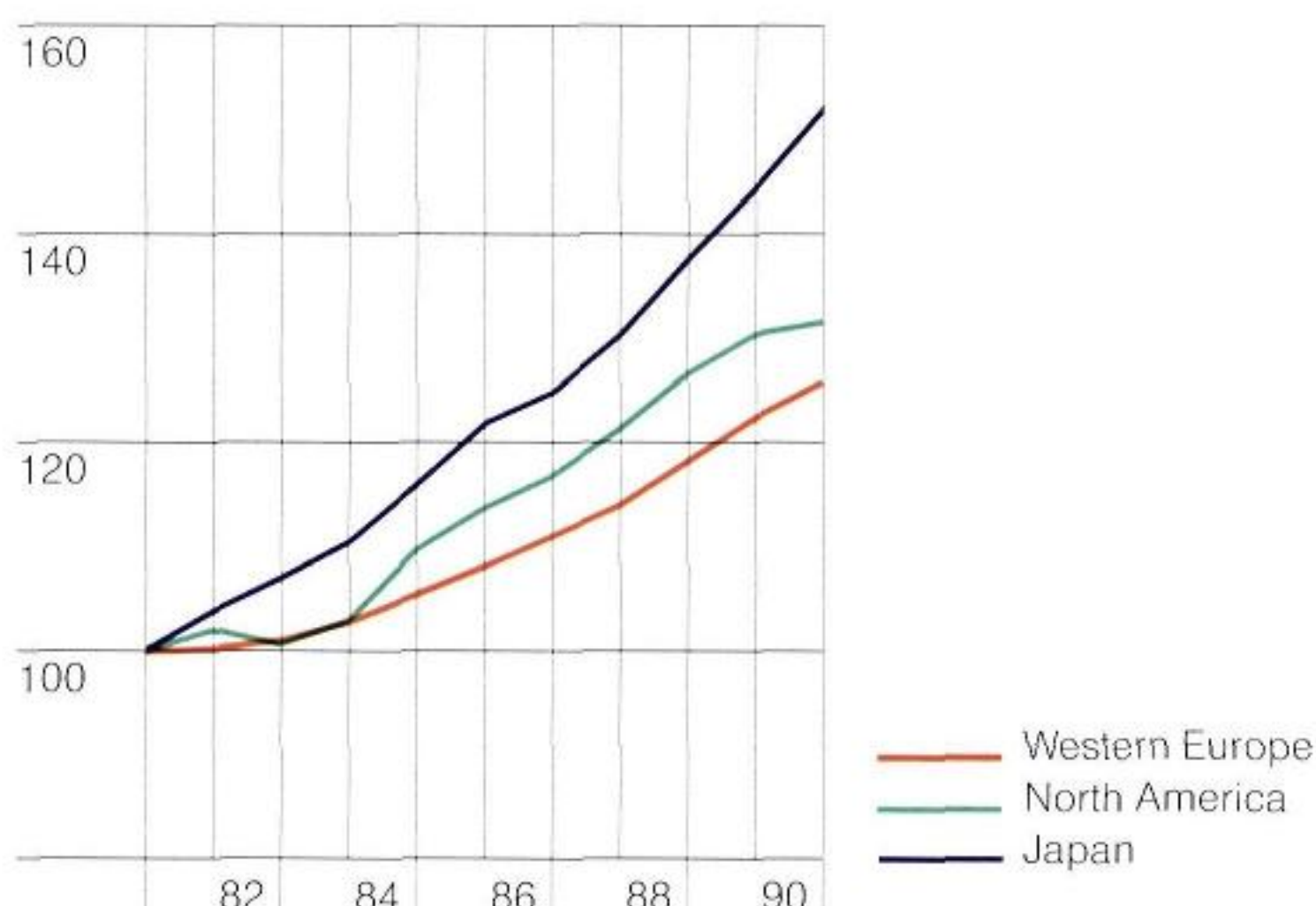
For Germany, 1990 was the year of economic and political unification. However, the economy was deeply divided.

In the old Federal Republic, the high growth rate of the previous two years increased. The impulses came primarily from the unusually high demand on the domestic market.

In the new "Länder" (federal states), the desolate state of the region became increasingly evident after economic, monetary and social union came into force. Until the dissolution of the former GDR, inaccurate statistics and balance sheets had painted a deceptive picture. Meanwhile, the extent of the economic and ecological crisis, hitherto concealed, has become obvious. Under free-market conditions, a large proportion of businesses proved incapable of survival.

Gross Domestic Product

Index: 1980 = 100



The indispensable process of restructuring and redeveloping the economy progressed only hesitantly because huge shortcomings in the infrastructure, and the rapid growth of wage costs, further exacerbated the geographical disadvantages of investment in the east of Germany.

Financial crisis in the USA, continuing boom in Japan

In the USA, the still unsolved problems of debt in the government budget, the crisis among the thrifts, and a growing number of bank collapses, revealed the weakness of the American financial system. At the same time, there was a deep recession on the property market. At present, these are undoubtedly the greatest obstacles to the sustained recovery of the economy.

This situation affected the international valuation of the US dollar, particularly as the American Central Bank lowered interest rates to ease the pressure on companies and consumers alike.

In Japan, economic growth accelerated further in 1990. Despite a restrictive monetary policy, domestic demand increased unabatedly. Capital spending continued to stimulate this development. Private consumption also rose substantially due to a marked growth of incomes and a noticeably higher level of employment.

Growing danger of protectionism

The trend continued towards weaker expansion of world trade. Nevertheless, cross-frontier flows of goods still increased by 6%, compared with 8% in the previous year.

As the economic upswing waned, the danger of protectionist intervention increased. Moreover, the eighth Conference on World Trade, within the framework of GATT (General Agreement on Tariffs and Trade), on the liberalization of world trade, was not concluded by the end of 1990 as planned. Thus, the worldwide industrial division of labour threatens to be permanently damaged because of the conflict of interests concerning the reduction of agricultural subsidies.

The German economy in particular depends on freely accessible markets and internationally recognized rules of competition. It now sees itself exposed to additional dangers.

Upward trend of the D-mark

Regional differences in the international economy resulted in shifts in the exchange rates. The dollar continued to decline over the year.

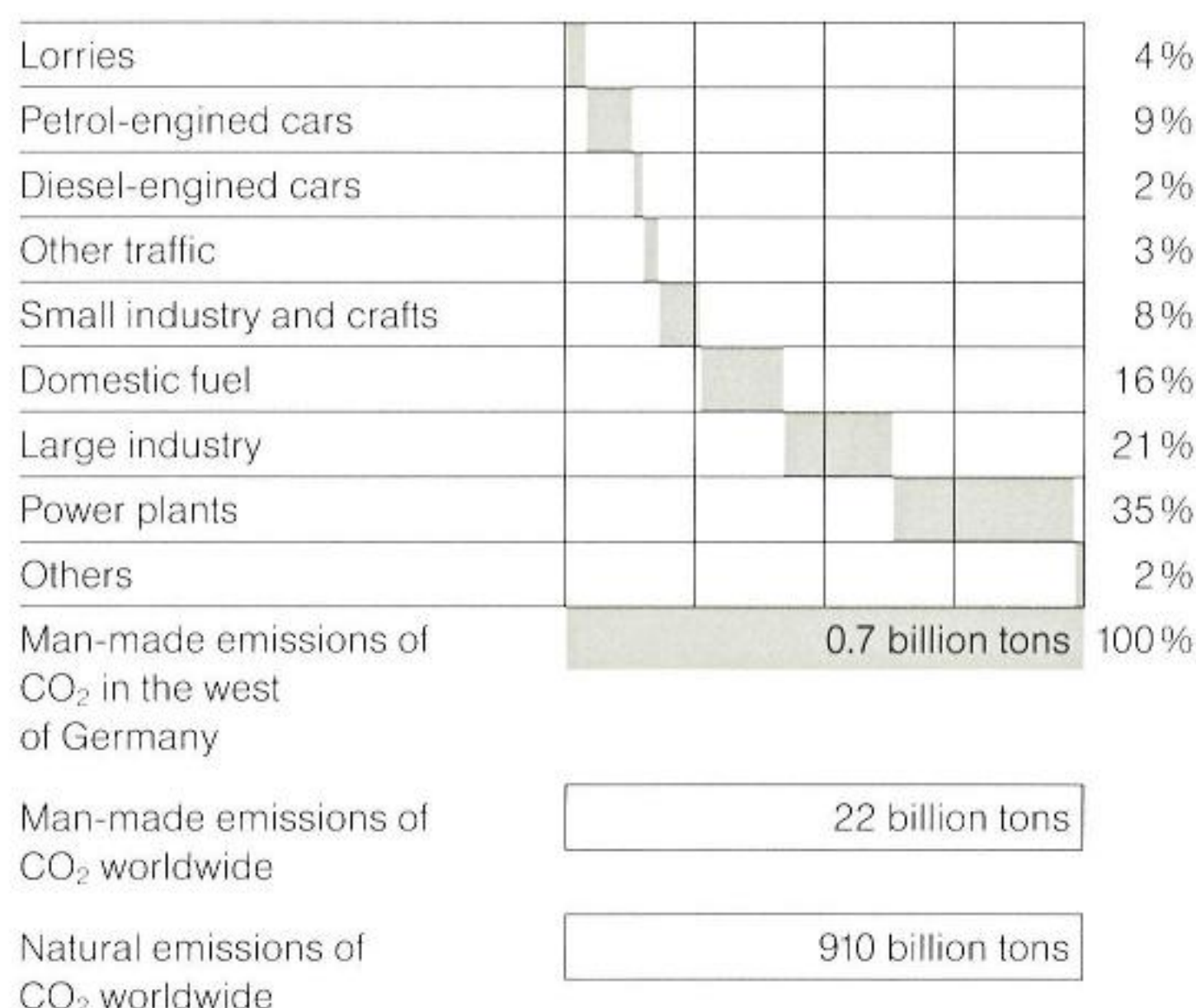
The comparatively low interest level in the USA prompted investors to increase their portfolios of higher-interest-bearing securities in European currencies. In addition, as East-West relations became more relaxed, the dollar temporarily lost its significance as a currency for times of crisis.

The yen and the pound sterling were also valued at a lower rate on the foreign exchange markets. After a steep decline, the exchange rate of the yen firmed up again slightly in the second half of the year. The pound sterling benefitted, in the short term, from entry into the exchange rate mechanism of the European Monetary System, but was quoted, soon afterwards, at the lower end of the fluctuation margin.

In December 1990, during the EC Summit Meeting in Rome, important steps were taken towards European monetary union. The aim is the establishment of a European central bank and the introduction of a single currency in a politically united Europe.

Emissions of Carbon Dioxide in 1990

A comparison

**Safeguarding individual mobility through integrated cooperation**

Densely-populated countries with large numbers of cars require socially-accepted concepts for the production, use and disposal of cars. This task goes far beyond the efforts, made so far, to protect the environment.

Although major improvements have already been made to individual cars, the increasing need for mobility demands further efforts to limit land requirements, save resources and spare the environment. For many years, BMW has made valuable contributions in this field. In 1990, considerable progress was achieved in integrated projects to guide traffic flows and dispose of scrapped cars.

Task of the future: Carbon dioxide emissions

Controlled three-way catalytic converters reduce a car's emissions of carbon monoxide, hydrocarbons and nitrogen oxides by 90%. Now that this system of purifying exhaust emissions has largely become established on the world's major markets, industry and politicians are increasingly turning their attention to emissions of carbon dioxide. This exists in large quantities in the earth's atmosphere and, until a few years ago, was considered completely harmless. Emissions from cars account for only up to 0.25%; while those from human beings account for up to 2.5% of total carbon dioxide output.

At the Environmental Conference in Toronto in 1990, the Government of the Federal Republic of Germany stated

that it intended lowering man-made emissions in Germany by 25% by the year 2005. The German car industry has undertaken to achieve this target, although the volume of traffic is expected to increase steadily.

Emissions can be reduced partly by further decreasing the specific fuel consumption of cars. Improved traffic flows would also help to reduce emission levels.

Measures of this kind are in the car drivers' interest. Therefore, they will achieve better results than the introduction of rules and regulations on limiting fuel consumption or emissions of carbon dioxide. BMW is confident that measures geared to the free market will produce the required effect in the long term.

One step in the right direction would be the introduction of a carbon dioxide component in the basis of calculation for car tax. This would help to accelerate the development and spread of engines with particularly economical fuel consumption. The car tax system should be reformed immediately.

However many efforts are made at political level to create the conditions for further reducing impacts on the environment, Europe-wide solutions are absolutely essential. They are required both in the interest of effective environmental protection and the single European market.

New emphases for the development of transport infrastructure

Substantial funds will be needed in order to rehabilitate the transport infrastructure in the new federal states, and link the east of Germany to the European transport networks. Rescheduling funds from the former Federal Republic would not suffice, particularly as these funds would then no longer be available for urgent tasks in the west.

After the planned increase in mineral-oil taxes, road users in particular will contribute a large amount to the federal budget. It is important that this money be used mainly for investments in the transport sector. This is a challenge to the Federal Government's budget policy. Expenditure could be financed by private capital in anticipation of, and in addition to, tax revenues. This would also provide considerable stimuli for the urgently needed economic upturn in the new federal states.

In view of the funds available, and the political problems of realizing new road construction projects, a large proportion of the expenditure should be on the improvement of traffic flows. New traffic guidance and communications technologies, and closer cooperation between different transport operators, could reduce traffic holdups and thus the burden on the environment.

This type of positive transport policy would render superfluous the restrictions, prohibitions, rules and regulations sometimes proposed or enforced at municipal and regional level.

Outlook for 1991

In 1991, general conditions for the world economy are less favourable than in previous years.

In the USA, various factors will continue to hold the economy in check for the time being. A more relaxed monetary policy, and exports favoured by lower exchange rates for the dollar, could make the economy pick up slightly from mid-1991. Japan's upturn will gradually slow down. Private consumption, and thus demand for cars, will no longer grow as quickly because of the accelerated rise in prices.

Economic development in the industrial nations of Western Europe will be characterized by less dynamic demand in 1991. Employment and real wages are increasing more slowly than in previous years.

The unusual economic development will continue, at first, in the west of Germany. However, in the second half of the year, the increases in mineral-oil and income taxes, that have already been decided, will lead to slower growth.

Even if these tax measures are justified in terms of the overall economy, they affect the automobile industry in particular. If this engine of German economic growth is not to be slowed down further, additional financial burdens and interference with car transport should be avoided, wherever possible. The structural crisis in the new federal states will peak in the second half of 1991 at the earliest.

Financial, monetary and pay policy bears a special responsibility for the

general conditions in which industry can both maintain permanently competitive jobs and create new ones.

From experience, an economic upturn is only possible with an efficient infrastructure. Large-scale private investment will not be made in the new federal states until the greatest barriers to investment have been eliminated. These include, in particular, inadequate administration, insufficient municipal services, and a lack of communications and transport networks.



In the eastern part of Germany, BMW is constructing its own production plant, establishing links with suppliers, and building a marketing organization for cars and motorcycles.

A production plant for large tools is being constructed on 8.5 hectares of land near Eisenach in Thuringia. Investment for the first stage of construction amounts to some DM 100 million. Firms from the region are participating substantially in the construction and installation of the new plant.

The Company is thus returning to a production location linked to BMW's history. Between 1929 and 1942, all BMW cars were manufactured in Eisenach.

BMW also endeavoured, at an early date, to find suppliers for car manufacturing. However, very few of the former state-run businesses at present fulfil the Company's requirements.

In order to develop contacts further, the 1991 BMW Suppliers' Meeting will be held in Leipzig. However, the development of business relations depends largely on the creation of suitable infrastructure in the eastern part of Germany.

The establishment of a marketing and customer service network has already made considerable progress. There were some 50 car and 20 motorcycle dealerships by the end of 1990.



BMW's new Research and Engineering Centre provides 4,500 employees with ideal working conditions. The production and function of electronic components are tested in new laboratories. These components guarantee the high safety standard and environmental compatibility of BMW cars and motorcycles. Light-sensitive cells point a way to new sources of energy.

BMW cars and motorcycles set the pace in vehicle technology

BMW cars and motorcycles offer outstanding performance and high-quality workmanship. Their active and passive safety measures set standards in vehicle technology. The concept of the BMW range provides plenty of scope to satisfy highly individual customer requirements as regards bodywork, engine, chassis and accessories.

Electronic control systems, and materials and components that can be re-used, take account of the demands of environmental protection.

Technology laboratory ensures the reliability of electronic systems

Electronic control systems are used increasingly to make cars more compatible with the environment, safer and more comfortable. All components and connections must be absolutely reliable.

BMW uses the capability of micro-processors to detect irregularities in the interplay of systems, and to provide substitute functions. Plug connections, that even exceed the safety standards customary in aviation, guarantee the serviceability of the entire system.

In the autumn of 1990, a new technology laboratory was set up. It serves to further increase the reliability of electronic components. Prototypes of new components can also be made there.

Research results are used for new products in close cooperation between BMW and suppliers of systems. They also improve BMW's own possibilities of quality assurance for bought-in parts. For many years, the Company has

played a leading role in the application of electronic systems in vehicle construction, for example with the introduction of digital engine control for 7 Series cars in 1977.

Testing electronic components in the Faraday Cage

Electronic components used in automobiles must satisfy the highest standards of durability and reliability. They must also be unaffected by external transmissions of electromagnetic waves. Equally, the components must neither influence one another nor emit unwanted signals.

A sheet steel hall was erected in order to measure without interference the interactions of electronic systems. It forms a Faraday Cage that wards off all external radiation. Inside this hall, all electronic components are tested individually, within their own system and in the complete cars.

"Night driving" in the light laboratory

The very latest ellipsoid headlights are fitted, as standard, in all BMW cars, from the 316i to the 850i.

The qualities of this headlight concept, for practical driving purposes, were also achieved with the measurement facilities available at the new BMW light laboratory. There, different road conditions at night can be reproduced exactly in order to ensure the efficiency of the headlights under all conditions.

Wet road surfaces and obstructed vision due to rain can be simulated for testing light distribution and the visibility of illuminated signals and traffic signs.

The new laboratories and test stands at the BMW Research and Engineering Centre serve primarily the safety and quality of BMW products:

In an hermetically sealed room, the sensitivity of electronic systems to electromagnetic waves is tested (large picture). The laboratory for assembly and interconnection technologies in electronics is also equipped for prototype board production (pictures on far right). A laboratory for operating stability, and dynamic chassis test stands guarantee constantly safe handling (pictures above right).

Road conditions at night can be simulated in the light laboratory. Simulation includes obstructions to vision such as rain (pictures below).



The aim of the work is the development of target data for future headlight systems. In the autumn of 1990, BMW was the first manufacturer to introduce a new light system with xenon electric discharge lamps.

Computer Aided Design (CAD) from the first draft to series production

Computer-aided design and test methods are now used in practically every stage of development of new BMW cars. The primary aim is the maximum quality of the new products.

The basic form of the new 3 Series car was developed by computer. The design model was then used as the basis for further designs that were assessed by numerical simulation. This included testing the behaviour of bodywork and chassis, aerodynamic characteristics, the climate in the passenger compartment, and acoustics. Later, physical tests on real cars and components confirmed the results obtained with the computer-designed model.

Integrated CAD techniques were also used in production planning, production and quality assurance. A constant flow of data makes it possible, during series production, to check the measurements of bodywork and components against the original car geometry.

This computer-aided overall concept contributed substantially to the start-up, on schedule, of series production of the new 3 Series.

Technological challenges: Light-sensitive cells and hydrogen

The energy used by man is generated largely by the combustion of fossil fuels. Since it is not possible to purify the carbon dioxide that occurs, efforts must be geared to the reduced consumption of natural gas, oil and coal, and to the development of new sources of primary energy.

Since BMW holds an interest in Solar-Wasserstoff-Bayern GmbH, it has, for years, participated actively in research into alternative technologies to generate electricity from solar energy. At a pilot plant near Neunburg vorm Wald, in the Upper Palatinate, the entire energy chain is being tested – from the photoelectric cell through electrolytic hydrogen production to the final application.

While problems of propulsion technology are likely to be solved in the foreseeable future, alternative methods of energy production still require large-scale, long-term research. Further progress must also be made on the storage of electricity and hydrogen for mobile applications.

Passive safety and car protection

The overriding aim of car development at BMW has long been the reduction of accident risks for driver and passengers, and other road users, as well as maximum car protection in collisions. Thus, using its own accident analyses, the Company has developed a comprehensive safety concept which has now been incorporated into all models. As a result, BMW cars surpass practi-

cally all the different standards of safety throughout the world.

The BMW concept is based on an extremely stable passenger compartment. Generously dimensioned deformation zones at back and front reduce, in a controlled manner, the deceleration and thus the forces affecting driver and passengers.

In addition, new bumper systems with integrated impact boxes reduce or even prevent damage to the car at very low speeds.

The restraint systems for driver and passengers ensure maximum safety. These include seat belts with integrated anchorage points, automatic belt height adjustment, an ergonomic belt system in the rear, a mechanical pre-load mechanism for the seat belts, and air-bag.



Constant changes at the workplace result in more demanding work structures for production workers. Hierarchies are flattening for office employees. Staff education and training schemes are particularly important at the threshold to the 1990s.

Increased efforts to gain qualified manpower

BMW devotes great efforts to increasing the efficiency and performance of its employees. These include staff selection and training, and the improvement of work structures and methods.

The Company's further development will depend largely on whether it can gain sufficient skilled manpower. Special information forums at trade fairs, and trainee programmes at BMW, aim at getting to know young people at an early date and interesting them in later employment at BMW.

In 1990, more than 1,000 students took the opportunity to gain their own impression of BMW. Those with a special aptitude were offered more comprehensive trainee programmes. Some of these included visits to group companies outside the Federal Republic of Germany.

Closer cooperation with universities and scientific institutes

Valuable experience was gained in more than 130 research and cooperation projects with universities and scientific institutes. Many staff with much-sought-after qualifications were gained by working together in this way.

BMW promoted scientific training through expert assistance with some 300 theses and dissertations.

In the year under review, the BMW Scientific Award was offered, for the first time, for theses and dissertations in engineering and natural sciences. The award is for outstanding technical work that contributes to the improved acceptance, by society, of the automobile.

New work structures and career schemes

Automation and efficient, interlinked computer systems were decisive prerequisites for increased labour productivity at the plants. The spread, throughout the Company, of workplaces with visual display units has made research, development and planning work, and commercial activities, more efficient in the last few years.

New methods change work forms and contents. For example, scientists, engineers, specialist staff and assistants at the Research and Engineering Centre work increasingly in project groups. This form of organization is also gaining ground in other areas of the Company. Thus, the trend is increasing towards fewer management levels with more responsibility for the individual.

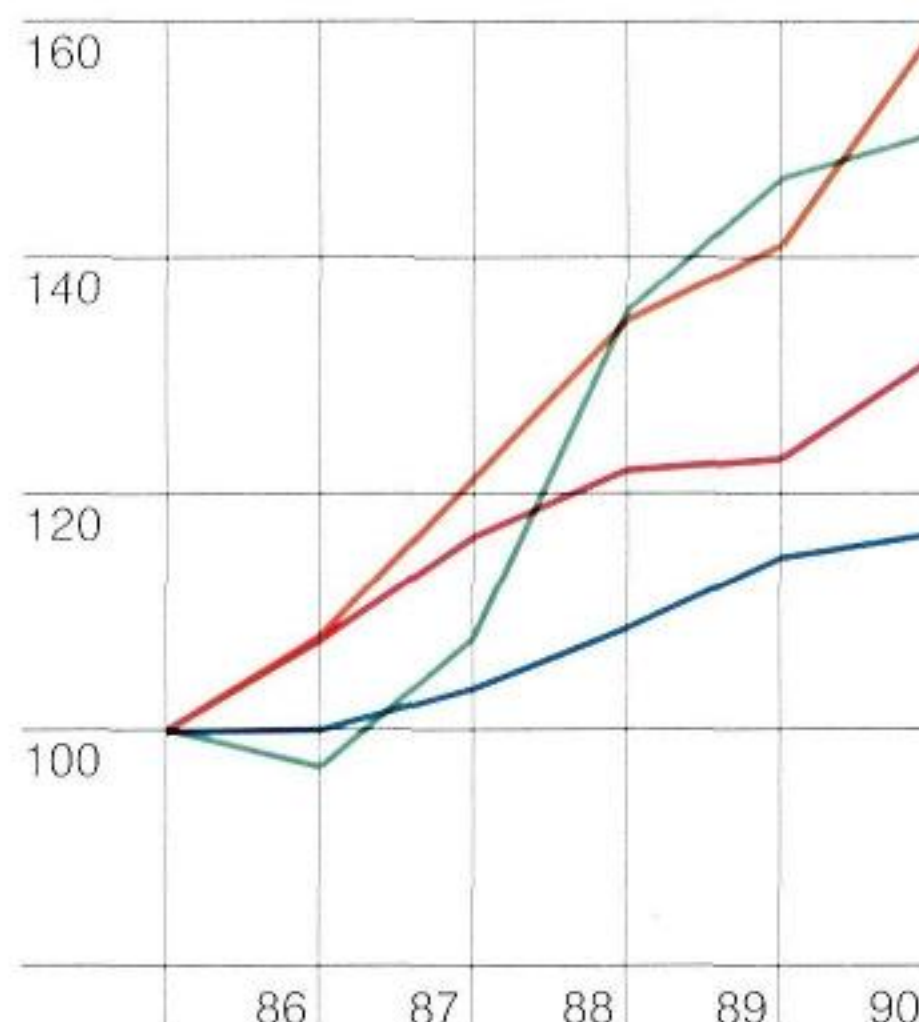
BMW offers highly-qualified specialists career schemes as an attractive opportunity for professional advancement.

Organization forms are also changing at the production plants. The great specialization and division of labour, that used to prevail, are now being reduced in some fields.

The pilot projects to integrate secondary functions were extended at

Sales, Expenditure on Personnel, Automobile Production and Workforce of the BMW Group

Index: 1985 = 100



— Sales
— Expenditure on personnel
— Automobile production
— Workforce

	17.51	19.46	24.47	26.52	27.18
	3.60	4.04	4.50	4.70	5.31
	446.4	461.3	484.1	511.5	519.7
	58,062	62,794	65,812	66,267	70,948

Sales in billion DM
Expenditure on personnel in billion DM
Automobile production in thousand units
Workforce at end of year

all production plants in the year under review. As part of these projects, planning and maintenance tasks, as well as logistical and quality assurance functions, are performed by the production groups.

The extension of group work aims to increase the efficiency of the entire production system. For the employees, this generally means more sophisticated work contents and more room for manoeuvre.

The Group's worldwide activities are supported by the development of an internationally oriented team of managers. The exchange of staff between the BMW companies has more than doubled in the last two years.

Collective agreements create new opportunities for flexible working hours

On April 1, 1990, a new collective agreement came into force for the metal industry. Wages and salaries were raised by 6%.

The collectively-agreed working week continues to be 37 hours for the time being. From April 1, 1993, the working week will be cut to 36, and from October 1, 1995, by a further hour to 35 hours.

However, a longer, regular working week, with a maximum of 40 hours, can be agreed with up to 13% of the employees.

BMW has taken advantage of this opportunity and concluded agreements, with longer working weeks, with many specialists, primarily from technical fields. Thus, the Company can maintain its development capacity. At the same time, capital-intensive workplaces are better utilized.

The collective agreement on the introduction of the 35-hour working week in 1995 has increased discussion about the right measure of working hours. General cuts in the working week, along with the shortage of specialists on the labour market, result in grave disadvantages for German industry. Today, foreign competitors already work up to one-third longer a year.

That is why conditions permitting the flexible employment of specially skilled manpower, in such short supply, are essential.

Flexible working hours increasingly important

At BMW, there are more than 200 different schedules of working hours. These include the schedule at the Regensburg plant, which is based on the idea of separating machine operation and individual working hours.

While plant and machinery operate on six working days, employees work, according to a continuous shift schedule, for an average of only four days a week. Every three weeks, the individual employee has five consecutive days off. For this, he works the early shift every third Saturday.

This schedule increases plant operating time by about one-third. A further 2,500 people have been employed to work this schedule. Since the introduction of a second shift in mid-1990, three-quarters of the employees in Regensburg work according to this new schedule.

The range of part-time work was substantially increased. This form of working hours helps to coordinate better the interests of the individual, particularly of women, and the Company. In the year under review, more than 1,400 staff had part-time employment.

18,000 employees now take advantage of flexi-time, and are thus free to choose, within limits, when they start and finish work each day.

In addition to more flexible working hours, employees' knowledge and skills are increased on a regular basis.

BMW participated, for the first time, in the Innovations Market for Research and Technology at the Hanover Industry Fair. Alongside universities, research institutes and other manufacturers, the Company presented perspectives for the car and mobility.

In addition to technical aspects, the predominantly young visitors took the opportunity to find out about possible careers at BMW.



The high unit labour costs in the Federal Republic of Germany have to be balanced, as far as possible, by further increases in efficiency. The Company created the necessary technical and organizational conditions for this. Company education and training is dealt with in a separate chapter from page 78.

Election of workers' representatives

In March 1990, elections for works councils were held at all the locations of BMW AG. These elections were a vote in favour of continuing the traditionally good and trusting cooperation between company management and the workers' representatives.

Industrial safety substantially improved again

Industrial safety at BMW plants has improved substantially in the last few years, despite far-reaching technical changes. Both accident frequency and severity decreased by more than half during the 1980s. The Company has now achieved a standard of safety which is well above the industry average. Again, further progress was made in the year under review.

The sickness rate of 6.1% was the same as in previous years. While it is amongst the lowest in the German automobile industry, it is too high by international comparison, mainly because of German legislation on continued payment of wages and salaries.

Workforce at End of Year

	1990	1989
BMW Group	70,948	66,267
Foreign subsidiaries	9,335	8,436
Domestic subsidiaries	2,069	744
BMW AG	59,544	57,087
thereof:		
Head office and Munich plant	25,370	26,470
Dingolfing plant	19,770	19,927
Regensburg plant (incl. Wackersdorf plant)	5,785	3,433
Landshut plant	3,041	2,104
Motorcycle division	2,088	2,033
BMW retail outlets	3,490	3,120

Company health insurance scheme begins

In the autumn of 1989, the employees decided in favour of a company health insurance scheme. This began, on schedule, on July 1, 1990. By the end of the year, more than 46,000 BMW employees, and members of their families, were covered by the scheme.

The contribution rate is currently 9.9%. Thus, employees are offered economical and comprehensive health insurance with a wide range of preventive measures.

Expenditure on personnel and additional benefits

Expenditure of the BMW Group on personnel was DM 5.3 billion in the year under review; that of BMW AG, DM 4.6 billion. The 6% rise in collectively-agreed wages and salaries in the Federal Republic of Germany, the growth of the workforce, and higher pension fund provisions, largely contributed to this increase. In 1990, additional expenditure on personnel reached the level of basic expenditure on personnel for work rendered.

In addition to monthly wages and salaries, employees received additional cash payments which go beyond the collectively-agreed amounts. These are linked to company profits or used for the financial savings plan. At BMW AG, these amounts came to some DM 465 million. Employees also received collectively-agreed vacation pay totalling some DM 185 million. For the individual employee, these cash payments were



the equivalent of more than two additional monthly salaries, depending on years of service.

About DM 29 million were paid for company social benefits to about 7,000 retired employees and surviving dependents in the year under review. Pension fund provisions were increased by DM 170 million because of structural adjustments to the employer's pension commitments.

Property ownership is encouraged by the issue of low-interest loans. At the end of 1990, BMW was helping employees in the purchase of some 3,150 properties with loans totalling about DM 45 million.

The individual establishment of financial savings at company level, offered by BMW since 1974, was continued in 1990. As in the previous year, employees were able to purchase, at favourable conditions, up to three BMW non-voting preference shares. The capital approved for this by the 1989 Annual General Meeting amounted to a nominal DM 15 million, of which a total of DM 6.2 million was used by the end of 1990. Some 21,000 employees took advantage of this offer. With this concept of financial savings, employees participate directly in the Company's profits.

Structure of Expenditure on Personnel of BMW AG

	1990 DM million	% ¹⁾	1989 DM million	% ¹⁾
Basic expenditure on personnel	2,337.8	100.0	2,151.3	100.0
Additional expenditure on personnel	2,330.1	99.7	2,045.9	95.1
Paid time off	722.7	30.9	620.5	28.8
Public holidays	138.6		118.3	
Vacation	390.3		335.1	
Sickness	127.9		116.6	
Other time off	65.9		50.5	
Additional cash payments	721.5	30.9	672.1	31.2
Annual bonuses	423.0		368.0	
Holiday pay	184.3		157.6	
Other direct payments	71.7		101.0	
Financial savings plan	42.5		45.5	
Social expenditure	554.4	23.7	522.4	24.3
Social security contributions	527.8		498.0	
Contributions to the employers' liability insurance association	26.6		24.4	
Old age pensions and benefits	195.2	8.4	105.6	4.9
Social services and facilities²⁾	89.2	3.8	79.0	3.7
Expenditure on education and training incl. continued payment of wages and salaries²⁾	138.5	5.9	124.5	5.8
Amounts included twice	- 91.4	- 3.9	- 78.2	- 3.6
Basic and additional expenditure on personnel	4,667.9	199.7	4,197.2	195.1
thereof other expenditure	73.1		70.6	
Expenditure on personnel	4,594.8		4,126.6	

¹⁾ of basic expenditure

²⁾ incl. imputed depreciation for income-tax purposes and other imputed costs of materials



1 316i
1596 cc 73 kW (100 bhp)

2 318i
1796 cc 83 kW (113 bhp)

3 320i
1991 cc 110 kW (150 bhp)

4 325i
2494 cc 141 kW (192 bhp)

5 318i touring
1796 cc 83 kW (113 bhp)

320i touring
1991 cc 95 kW (129 bhp)

324td touring
2443 cc 85 kW (115 bhp)

325i touring
2494 cc 125 kW (170 bhp)

325iX touring
2494 cc 125 kW (170 bhp)

318i Convertible
1796 cc 83 kW (113 bhp)

320i Convertible
1991 cc 95 kW (129 bhp)

6 325i Convertible
2494 cc 125 kW (170 bhp)

7 M3
2302 cc 158 kW (215 bhp)

8 Z1
2494 cc 125 kW (170 bhp)

9 520i
1991 cc 110 kW (150 bhp)

10 524td
2443 cc 85 kW (115 bhp)

11 525i
2494 cc 141 kW (192 bhp)

535i
3430 cc 155 kW (211 bhp)

12 M5
3535 cc 232 kW (315 bhp)

13 730i
2986 cc 138 kW (188 bhp)

14 735i
3430 cc 155 kW (211 bhp)

735iL
3430 cc 155 kW (211 bhp)

750i
4988 cc 220 kW (300 bhp)

15 750iL
4988 cc 220 kW (300 bhp)

16 850i
4988 cc 220 kW (300 bhp)

R 65*
650 cc 20 kW (27 bhp)

R 80, R 80 RT, R 80 GS
798 cc 37 kW (50 bhp)

17 R 100 GS
980 cc 44 kW (60 bhp)

R 100 GS Paris-Dakar
980 cc 44 kW (60 bhp)

R 100 RS, R 100 RT
980 cc 44 kW (60 bhp)

18 K 75, K 75 S, K 75 RT
740 cc 55 kW (75 bhp)

K 100 LT
987 cc 66 kW (90 bhp)

19 K 100 RS
987 cc 74 kW (100 bhp)

20 K 1
987 cc 74 kW (100 bhp)



Automobiles and Motorcycles

BMW AG **Munich**

Munich plant
Dingolfing plant
Regensburg plant
Wackersdorf plant
Landshut plant
Berlin plant

BMW Austria Ges. m. b. H.
Salzburg

BMW Australia Ltd.
Melbourne, Victoria

BMW Belgium S.A./N.V.
Bornem, Antwerp

BMW Canada Inc.
Whitby, Ontario

BMW France S.A.
Bois d'Arcy, Paris

BMW Japan Corp.
Tokyo

BMW Fahrzeugtechnik GmbH
Eisenach, Thuringia

BMW (GB) Ltd.
Bracknell, Berkshire

BMW New Zealand Ltd.
Auckland

BMW Motoren Ges. m. b. H.
Steyr, Austria

BMW Ibérica S.A.
Madrid

BMW of North America Inc.
Woodcliff Lake, New Jersey

BMW Motorrad GmbH + Co.
Munich

BMW Italia S.p.A.
Palazzolo di Sona, Verona

BMW (South Africa) (Pty) Ltd.
Pretoria, Transvaal

BMW Motorsport GmbH
Munich

BMW Nederland N.V.
The Hague

BMW Technik GmbH
Munich

BMW (Schweiz) AG
Dielsdorf, Zurich

Aeronautical Engineering

BMW Rolls-Royce GmbH
Oberursel, Taunus
Oberursel plant

Electronics

KONTRON Elektronik GmbH
Eching, Upper Bavaria
Eching plant
Freising plant

Loewe Opta GmbH
Kronach, Upper Franconia

Sales Financing

BMW Bank GmbH
Munich

BMW Leasing GmbH
Munich

Sales financing companies
in 8 foreign markets

Services

Bavaria Insurance Co. Ltd.
Dublin

Bavaria Wirtschaftsagentur
GmbH, Munich

Cisigraph S.A.
Vitrolles, Provence

softlab gmbh für system-
entwicklung und edv-anwendung
Munich

The companies shown here, representing the Group's different fields of business, are predominantly wholly-owned BMW companies. BMW has a 50.5 % investment in BMW Rolls-Royce GmbH.

BMW holds minority interests in Loewe Opta GmbH, Cisigraph S.A. and softlab gmbh für systementwicklung und edv-anwendung.

The international automobile market passed its peak in 1990. In the second half of the year, demand slackened in many countries. At BMW, the continuing success of all models resulted in the further growth of incoming orders and orders in hand. The dealer organization, with some 50,000 employees, offers a comprehensive customer service. At the plants, the production of two new car series began.

Automobile markets in the late phase of a long upturn

As the world economy weakened, there were also signs of a trend reversal on most automobile markets. In the Anglo-Saxon countries in particular, purchases were postponed.

Nevertheless, with the worldwide production and sale of 36 million cars in 1990, the same high level was achieved as in the previous year. However, regional differences increased.

West European manufacturers accounted for by far the largest share of automobile output with almost 40%. Japanese manufacturers, including their foreign assembly plants, accounted for one-third; in North America only 16% of the world's cars were produced, compared with 25% at the beginning of the 1980s.

Europe: Further differences in demand

The 13.2 million new registrations on the Western European market just fell short of the previous year's figure. After the previous steep upward trend, registrations decreased mainly in Great Britain and Spain. In contrast, sales continued to rise in the Federal Republic of Germany and in Austria. On both these markets, growth was strongly stimulated by the opening of the frontiers to their Eastern neighbours. There was also marked growth in Belgium. German manufacturers continued to expand their leading position in Europe; their market share increased slightly to 35%. French and Italian makes decreased their share. In

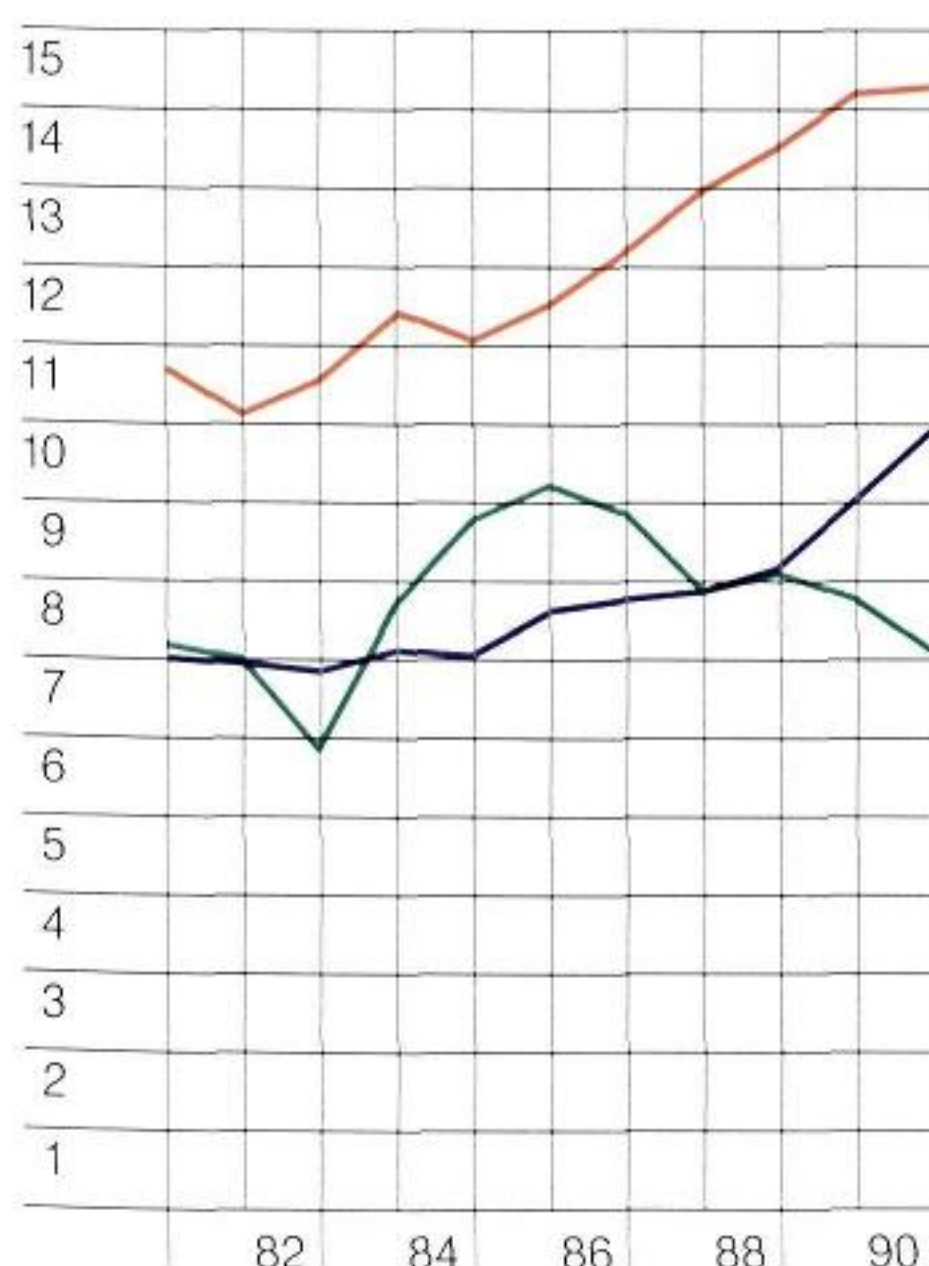
Europe, Japanese suppliers achieved an average market share of almost 12%.

The proportion of diesel-engined automobiles remained around 14% throughout Europe. However, developments varied from one market to another. In France, for example, every third new car had a diesel engine in 1990, compared with 15% five years ago. In Italy, Europe's largest market for diesel-engined cars six years ago, demand fell from 25% to 7% of the total market, mainly because of higher taxes on diesel-engined cars.

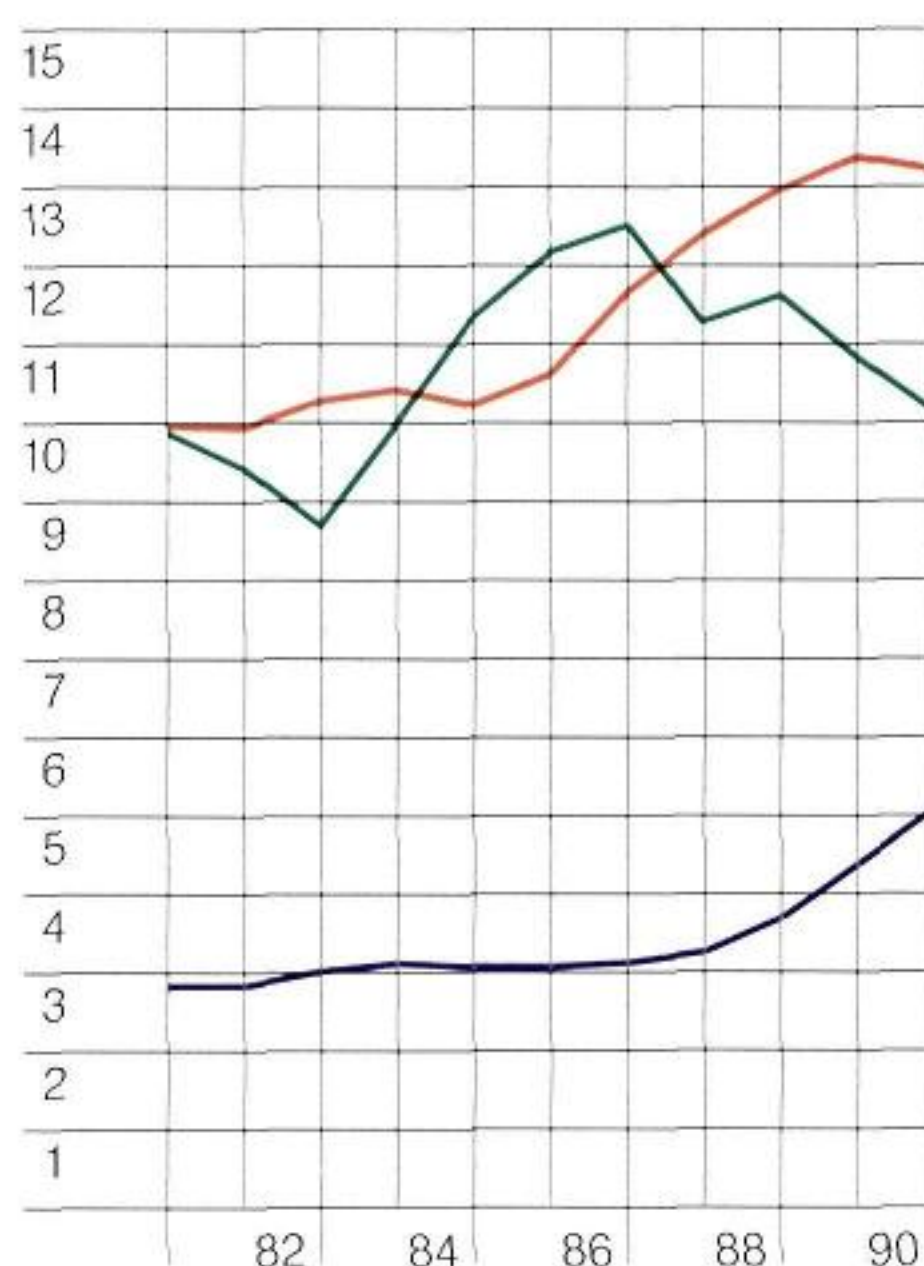
With a total of 14 million units, car production in Western Europe reached the previous year's high level. Outside Germany, however, production was cut in the last few months of the year. This resulted in short-time working and plant closures.

Once again, BMW sold more than 70% of its output in Europe, about 370,000 cars, in the year under review.

Automobile Production
in million units



Automobile Registrations
in million units



Boom on the German car market

In 1990, the European car industry benefitted from the strong demand for used cars in the new "Länder" (federal states), as well as purchases by ethnic and East Germans who moved to the west of Germany.

In the former Federal Republic alone, the number of newly-registered cars rose by 7% to a record 3.04 million. Such high sales would have been unlikely without the opening in the East.

Because of high-capacity utilization and the resultant longer delivery times for German cars, foreign makes benefitted in 1990. Their share rose by two percent to 32%. Every second imported car came from Japan.

In Germany, 98% of all newly-registered cars had low emission levels; nine out of ten petrol-driven cars were fitted with a controlled catalytic converter. All BMW cars have low emission levels.

Demand for diesel-engined cars rose again slightly after three years of decline; their market share increased to 11%. Rising sales of coupés, convertibles and touring cars indicate further alterations in customer requirements.

With some 191,000 registrations, BMW achieved the high level of the previous year.

Additional sales opportunities in the new "Länder"

In 1990, some 1 million automobiles were registered for the first time in the eastern part of Germany; they included 200,000 new cars. In this region, the number of cars in use increased by almost one-quarter to 4.8 million.

Within a short time, BMW established a customer service organization in the new "Länder", with more than 50 independent authorized dealers by the end of 1990. Further development into a comprehensive service network is continuing rapidly. In the year under review, almost 40,000 BMW cars, including 2,000 new ones, were registered for the first time in the east of Germany.

Record car output in the Federal Republic

In view of the brisk domestic demand, car output rose by 2% in 1990 to a new record of 4.66 million units.

In contrast, exports fell by 5% to 2.60 million cars. While sales to North America and Japan increased again, exports to most European countries, particularly to France and Great Britain, declined.

The industry is confident that the car business will nevertheless continue to develop favourably. This is reflected by the increase in the workforce by 17,000 to 775,000 employees.

US car market influenced by the weak economy

The obvious downturn of the US economy in 1990 left its mark on the automobile market. There were only 9.3 million new registrations.

Weak demand affected primarily domestic makes, sales of which decreased by 7% to 5.8 million units. Output decreased by as much as 16% to 4.8 million cars. This is the lowest figure for more than 40 years. As a result, the three large US manufacturers had to close several plants.

In contrast, sales of cars assembled in the USA, but of Japanese origin, rose by 36% to 1.1 million units. Total car production in the USA fell by 11% to 6.1 million units in 1990.

After declining for three years, sales of German-made cars stabilized at around 300,000 units due to increased marketing measures. With deliveries of 63,600 cars, BMW of North America almost achieved the level of the previous year.



New car taxes in the USA

At the beginning of 1991, new taxes were introduced in the USA. These made sales of European, and particularly of German, cars more difficult.

The luxury tax of 10% is levied on cars with a value exceeding 30,000 US dollars. At the same time, the additional consumption-dependent tax was doubled. The dollar's low rate of exchange is also reducing the competitiveness of European manufacturers.

Canada in the wake of the US economy

The Canadian car market also declined. A total of 885,000 new cars was registered, 10% fewer than the previous year.

Almost all manufacturers had setbacks. The market share of Japanese makes increased to 30%. BMW sold 4,000 cars, compared with 4,300 in the previous year.

New sales record in Japan

The favourable economic situation, and the abolition of further special taxes on cars of more than 2-litre engine capacity, now offered increasingly by Japanese manufacturers, made sales in Japan rise by 16% to 5.1 million cars.

Sales of new imported cars rose by 23%, again more strongly than the total market. Nevertheless, the 4.3% share of imported cars is still smaller than in any other industrial nation. About two-thirds of all foreign cars were German, their market share being 2.7%.

BMW registrations rose by 10% to 36,500 units. Thus, once again, BMW Japan was one of the leading car importers in 1990.

In view of the brisk domestic demand, output in Japan was increased by 10% to about 10 million cars. Exports rose by only 2% to 4.5 million units because the USA in particular, and European countries increasingly, are supplied by Japanese plants in these markets.

Outlook for 1991

By the end of 1990, the automobile industry in almost all countries was characterized by stagnating or declining registrations. This trend will continue for the time being.

The exception is the German market which will continue, at first, to benefit from the pent-up demand in the new "Länder". However, demand is also expected to flatten in this region in the second half of the year.

Future development is generally overshadowed by a weaker world economy and the repercussions of the Gulf crisis. The resultant burdens on private households and companies, in the form of higher taxes and charges, will also hamper car sales.

As a result, demand for cars will remain curbed, for the time being, on most markets of Western Europe and in North America. In the USA, imported cars will be affected more than domestic products because of the low value of the dollar and the new luxury tax.

The Japanese market is expected to settle at its present high level.



The debut of the third generation of the BMW 3 Series in December 1990: The new cars were introduced to the international press in the Arena of Nîmes, providing a contrast between ancient architecture and the state of the art. The new 3 Series was presented to international BMW dealers at the BMW Museum and the Research and Engineering Centre in Munich (picture on left page).



BMW sales rose to more than 525,000 cars

The BMW Group sold 525,900 new cars in the year under review. Once again, its world market share was 1.5%. In the top market segment, every tenth newly-registered car was a BMW.

A total of 257,000 small BMW cars was delivered to customers. Their availability on the markets was temporarily limited due to the model change.

The range still includes the touring versions and Convertibles available hitherto. In autumn, the 318i Convertible was added to the BMW range. A total of 6,500 Z1 roadsters had been manufactured in a limited production run by the end of 1990. Production will be phased out on schedule in the summer of 1991.

Towards the end of the year, the new generation of 3 Series cars was introduced almost simultaneously in Continental Europe; overseas markets followed shortly afterwards.

BMW 5 and 7 Series with technical innovations

In 1990, demand for 5 Series cars continued to rise. For the first time, more than 200,000 of these cars were delivered to customers, 6% more than in the previous year.

New 24-valve engines for the 520i and 525i models contributed to this development. This technology offers further possibilities for reducing both fuel consumption and emission levels.

A newly-developed five-gear automatic transmission is now available for 3 and 5 Series cars. Its electronic control offers outstanding driving comfort, extremely good performance and lower fuel consumption.

In the 7 Series, BMW introduced technologies which again set new standards. For example, insulating double glazing for the side and rear windows reduces both noise levels and excessive heat from the sun inside the passenger compartment. The windows are also non-misting.

New light technology with xenon electric discharge lamps improves vision. Other innovations facilitate parking by means of electronic distance control, and power-assisted closing of doors and luggage compartment lid.

In 1990, for the fourth successive year, the large BMW saloons were the most popular cars in their segment in Europe. 45,400 new 7 Series cars were registered worldwide.

The 750i/iL with 12-cylinder engine, the first such engine to be made in Germany for more than 50 years, again set standards for luxury saloons.

BMW coupé, the 850i, defines a new category of car

The new coupé, the 850i, was available from June 1990. It is also fitted with a BMW 12-cylinder engine.

The unique combination of outstanding performance, maximum comfort and a very high measure of safety gives the 8 Series BMW coupé its excellent status. By the end of the year, 4,300 of these cars had been delivered to customers.

Belgium

In 1990, the upturn of the Belgium automobile market continued for the eighth successive year. The share of diesel-engined cars was still high despite a slight decline to 33%. After above-average growth in the two previous years, the number of BMW registrations decreased during the course of the model change-over in the 3 Series.

Great Britain

In Great Britain, the car market was influenced by the recessionary trends of 1990. Once again, however, more than 2 million new cars were sold. BMW registrations were in line with market trends. Great Britain remained, by far, BMW's largest European export market. Sales of 5 Series cars almost reached the previous year's level, mainly because of the introduction of new engines. BMW (GB) Ltd. established a company of its own in London's Park Lane, specially for business with international diplomats.

Automobile registrations in 1990

Total market	473,500	+ 8%
BMW	11,100	- 7%

Total market	2,008,900	- 13%
BMW	43,000	- 12%

Germany

For the first time, more than 3 million new cars were delivered to customers in the old Federal Republic in 1990. There were a further 200,000 new and 800,000 used cars in the new "Länder". Foreign manufacturers increased their market share to 32%. About 11% of all new cars had diesel engines. In the western part of Germany, BMW registrations again numbered about 191,000 cars, of which some 100,000 were 5 and 7 Series saloons. Demand was stronger again for Convertibles and touring versions of the 3 Series.

Italy

After a good first half of the year, demand for cars fell noticeably in Italy. While Italian manufacturers in particular lost market shares, German makes accounted for as many as one-quarter of total registrations. The market for diesel-engined cars suffered a setback of more than 40%, mainly due to additional taxes. BMW Italia S.p.A. further improved its competitive position with double-digit growth rates for medium and large cars. The new 318is and the 318i touring version stimulated demand for 3 Series cars.

Automobile registrations in 1990

Total market	3,040,800	+ 7%
BMW	191,000	0%

Total market	2,348,200	- 1%
BMW	28,200	+ 2%

France

In 1990, new registrations reached a record level for the fourth successive year. Towards the end of the year, there were clear signs of generally weaker demand. The market share of French makes fell to about 60%. Demand developed particularly briskly for diesel-engined cars. BMW France S.A. achieved almost as good results as the previous year. Demand was particularly high for the new 318is and the 3 Series Convertible. In the 5 Series, interest focussed on the 524td BMW, fitted with a turbo-charged diesel engine.

Netherlands

In the Netherlands, economic growth continued, although less strongly. Higher taxes and charges put a strain on the automobile market. German manufacturers maintained their leading position with a 38% share of total registrations. The model change-over in the 3 Series resulted in a temporary decline in car sales for BMW Nederland B.V. Sales of 5 Series cars exceeded those of the previous year.

Automobile registrations in 1990

Total market	2,309,100	+ 2%
BMW	29,600	- 3%

Total market	502,700	+ 1%
BMW	9,600	- 8%

Austria

The upward trend, lasting four years on the Austrian car market, also continued in 1990. Registrations of new cars reached an extremely high level; almost half were German makes. The sales of BMW Austria Ges. m. b. H. were slightly below the previous year's high level. Incoming orders for new 3 Series cars suggest that sales will rise again in 1991. Business with 5 Series cars continued to develop well. In Austria, as in many other markets, the BMW 7 Series maintained its leading position in the top market segment.

Total market	288,600	+ 5%
BMW	8,900	- 6%

Australia

Over the year, the Australian car market was influenced increasingly by the general recession. After two years with high growth rates, total registrations hardly rose. Indeed, in the top market segment, sales fell by about 30% due to drastic tax increases. Imported cars were affected most. This also applied to BMW Australia Ltd. Decreased sales of 5 and 7 Series models were only partly offset by higher sales of 3 Series cars. Nevertheless, the company maintained its leading position among the importers of European cars.

Total market	462,500	+ 4%
BMW	4,000	- 17%

New Zealand

In New Zealand, the number of newly-registered cars decreased in 1990. 2,500 cars were sold in the market segment of BMW cars. This development also affected business at BMW New Zealand Ltd. BMW consolidated its position as a leading European car importer with a new import centre in Auckland.

Total market	74,400	- 11%
BMW	600	- 18%

Switzerland

In Switzerland, the upward trend in car demand, lasting several years, continued at a high level, although rising interest rates and unusually high inflation rates, by Swiss standards, put a strain on sales. German manufacturers maintained their market position with more than 40% of total registrations. For BMW, the model change-over in the 3 Series in particular affected sales unfavourably. Nevertheless, at 3.5%, BMW (Schweiz) AG again achieved the highest market share among foreign European companies in 1990. At the beginning of the year, the company introduced its own leasing programme.

Total market	325,700	- 4%
BMW	11,400	- 17%

Japan

In Japan, the dynamic growth of demand for cars continued at almost the same high rate. The trend towards individual and expensive cars showed no signs of abating. Once again, German manufacturers accounted for two-thirds of all imported cars. The upward trend, evident for years at BMW Japan Corp., also continued in 1990. With 14,300 registrations of 5 Series cars, BMW further improved its position in this segment. Registrations of 7 Series cars rose by 14% to 6,100.

Total market	5,102,700	+ 16%
BMW	36,500	+ 10%

South Africa

The weak level of economic activity, and stricter regulations on the local content, made business more difficult for car manufacturers operating in South Africa. Registrations of new BMW cars decreased slightly from a high level. The BMW market share was 8.6%. 3 Series cars accounted for about two-thirds of the total sales volume of BMW cars. At BMW (South Africa) (Pty) Ltd., good relations between plant management and employees continued to show benefits. Once again, the assembly plant was unaffected by strikes in 1990. In August, BMW Finanz (Pty) Ltd. was established.

Total market	209,600	- 5%
BMW	17,900	- 4%

Spain

In Spain, the unfavourable economic situation and high interest rates put an end to the upward trend that had lasted several years on the automobile market. The previous year's level of registrations of more than 1 million cars was not maintained. In 1990, BMW Ibérica S. A. continued to be among the leading importers in the top market segment. The network of authorized BMW dealers was developed further in order to provide a comprehensive and uniformly high standard of service.

Total market	943,200	- 12%
BMW	11,000	0%

Canada

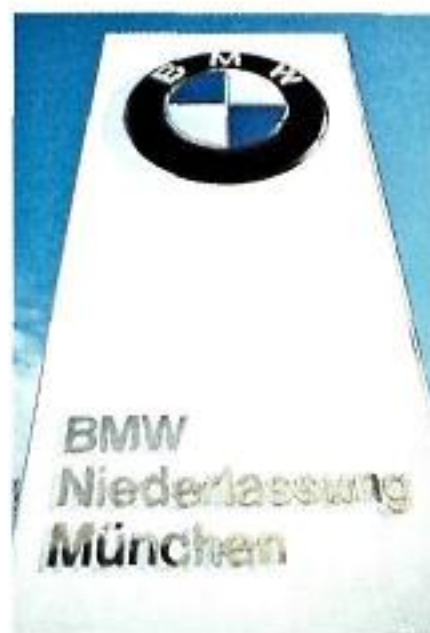
In Canada, the unfavourable economic situation resulted in a further decline of car sales, affecting American manufacturers in particular. Sales of cars costing more than 30,000 Canadian dollars actually fell by 23%. BMW Canada Inc. was also affected by this development, but managed to expand its market share in the top market segment to 11.5%. This was due primarily to the introduction of 318i cars. BMW accounted for about one-third of the sales in the 3 Series' segment.

Total market	884,500	- 10%
BMW	4,000	- 7%

USA

In 1990, the recessionary trends continued on the world's largest car market. American manufacturers were affected most. Towards the end of the year, the announcement of a luxury tax on cars in the top market segment made many customers bring forward their purchases. This was followed, at the beginning of 1991, by a corresponding decrease. BMW of North America Inc. achieved almost the same level of business as the previous year due to higher sales of 5 and 7 Series cars. Following the introduction of 3 Series cars with 4-cylinder engines, BMW is, once again, represented in the price range around 20,000 US dollars.

Total market	9,295,700	- 5%
BMW	63,600	- 2%



BMW sales organization in more than 100 countries

The Company is represented by its own marketing companies in 15 countries. These account for more than 90% of the total BMW sales volume. The development of the individual markets is described on pages 38 and 39.

The companies' tasks include the development of the national supplier industry. In various countries, purchasing is increasingly a prerequisite for the sale of cars and motorcycles to companies and authorities.

In Thailand, Malaysia, Indonesia and Uruguay, BMW cars are assembled, by local partners, with parts kits and locally-purchased components, because the import of complete cars is either not permitted or is heavily taxed. 7,800 cars were sold in these countries, 38% more than in 1989.

In South Africa, the domestic industry is also protected by import restrictions. BMW has had its own, and only, car assembly plant in South Africa since 1972. With sales of 17,900 cars, BMW (South Africa) (Pty) Ltd. achieved a market share of 8.6%.

Smaller markets, in which BMW cars and motorcycles are sold and serviced by independent importers, were also affected by severe economic and political upheavals in the year under review. This applies in particular to the countries in the Gulf region where sales either fell markedly or were nil.

Efficiency of the customer service increased further

In 1990, some 25,000 customer service employees looked after 5 million BMW cars and 350,000 motorcycles in more than 100 countries.

The training and upgrading of employees focussed on the technical innovations in BMW cars and the introduction of new models. The already comprehensive expertise on the diagnosis and maintenance of electronic systems was further enhanced.

These themes were also the subject of BMW's International Competition for Service Technicians. In this traditional competition, employees were able, once again, to distinguish themselves through their many years of experience with the electronics used for the safety, engine management and comfort of BMW products. In 1990 the Final, with 44 participants from 22 countries, took place in Munich.

Possible applications of innovative computer-assisted diagnostic systems, tailored to the individual needs of the workshops, are being elaborated in a joint scientific project with the Federal Ministry for Research and Technology and the Central Association of the German Motor Vehicle Trade. Through the new system, service technicians will receive all the information they need for a specific job. Thus, diagnosis and rectification can be carried out with even greater precision and speed.

BMW Service Card for all European purchasers of new cars

In 1990, the BMW "Emergency Service", in operation on all major markets for many years, was complemented, in Europe, by the BMW Service Card.

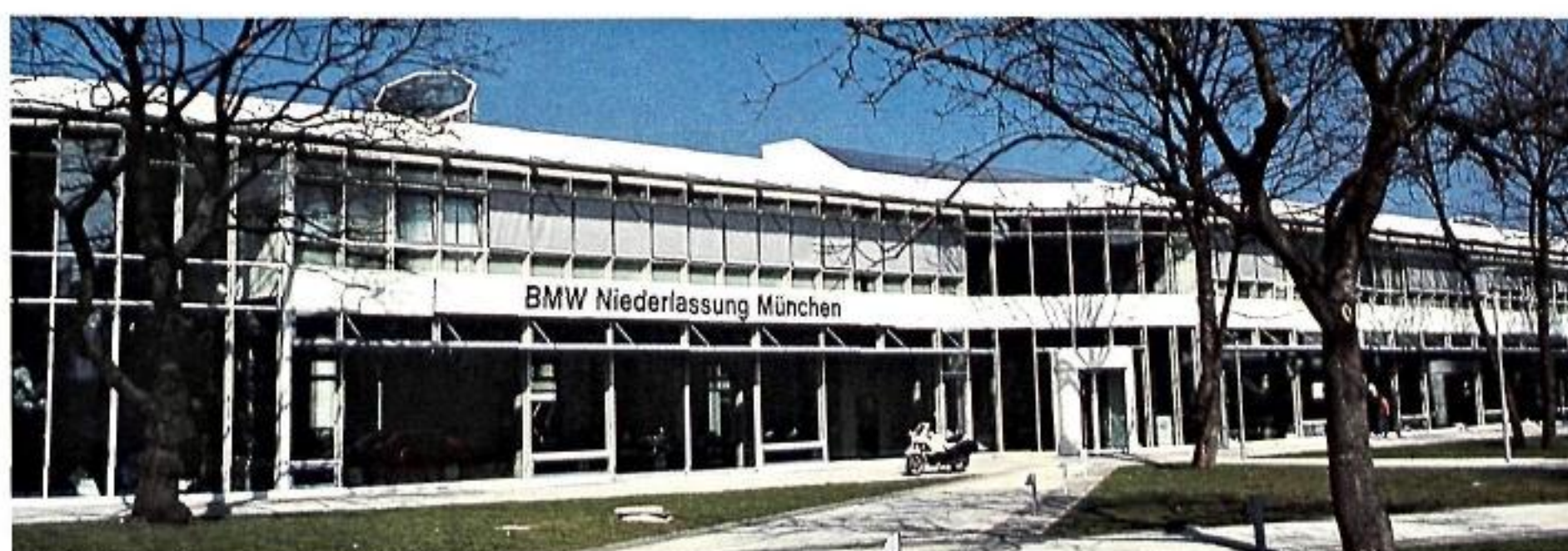
This offers purchasers of new cars additional cross-frontier services all over Europe and in the Mediterranean area. These include free breakdown assistance and towing services, overnight hotel accommodation and car hire. This service was introduced to the USA at the beginning of 1991; other overseas markets will follow stage by stage.

New supply systems for parts and accessories

The range of Genuine BMW Parts and Accessories grew, due to new models and additional fittings, to some 100,000 items. Internationally-coordinated logistical systems, highly-developed communications networks and automated dispatch technologies ensure the rapid and economical supply of parts and accessories throughout the world.

In 1990, new supply centres were established to provide a comprehensive 24-hour service throughout Europe. These centres permit cross-frontier deliveries and thus streamline further the channels of distribution.

BMW established a new, fully-automated stock of parts in Krefeld to supply the northwest of Germany from 1991. At a future date, the north of Germany will be supplied by another new centre which is currently being constructed to the north of Hanover, the capital of



The main new BMW retail outlet in Munich: An exemplary car centre has been built on the Frankfurter Ring with 500 workplaces and an exhibition area of 2,500 sq.m.

Lower Saxony. The new "Länder" have already been integrated into the European sales network. In a first step, they are being supplied by the BMW retail outlet in Berlin and the Central Stock of Parts in Dingolfing.

Since the beginning of 1990, BMW dealers in southwest Germany can be supplied from the stock of parts and accessories of BMW France, in Strasbourg, without customs formalities. Since the beginning of 1991, the stock of BMW Belgium, in Bornem near Antwerp, is also responsible for supplying the Netherlands.

The systems to supply the overseas markets were further improved. They ensure the high availability of parts despite the long distances involved. Rarely-needed parts are supplied directly from the Central Stock of Parts. They reach all BMW dealers in the USA, for example, within 48 hours.

Brisk business with used cars, cross-frontier service for bulk customers

In the old "Länder" of the Federal Republic alone, BMW dealers and retail outlets sold 137,000 used cars, 10% more than the previous year. By making large investments, particularly in new centres for used cars, BMW took account of the increasing importance of this line of business. BMW dealer guarantees for used cars help BMW cars retain their value throughout their life.

The BMW Exclusive Data Bank for used cars is also exemplary. It offers customers, free of charge, an overview of all the used cars of interest to them, available throughout the Federal Republic.

Sales to bulk customers, such as car hire services, and industrial and public motor pools, were more internationally oriented, and complemented by further services in the year under review.

BMW dealer organization: Customer satisfaction takes priority

The BMW sales organization is supported by 4,600 independent, predominantly medium-sized, authorized dealers throughout the world. With continuing high investment, the dealers again prepared for additional tasks in 1990. In Europe alone, more than DM 600 million were invested in new equipment and systems.

Customer satisfaction with the services of the dealer organization is examined regularly in worldwide surveys. The results serve to further develop the businesses, and as a qualitative gauge

for assessing the service. In Germany, this is part of a new bonus system with which BMW rewards dealers for the best possible customer service. BMW is the first car manufacturer to do this. The first findings have already been incorporated into the training and upgrading programmes for employees with customer contact.

BMW system of linked plants proved more efficient than ever

Investments of some DM 8.5 billion have been made, in the last five years, to extend BMW plants and adjust them to state-of-the-art manufacturing technology and logistics. At the same time, the entire range of BMW cars has been completely updated.

In 1990, total output of some 520,000 cars exceeded the previous year's by 2%, although the production systems had to be refitted for two new models. As production capacities were fully utilized, this was only possible with additional capacities at the Regensburg plant and special shifts at the Dingolfing plant.

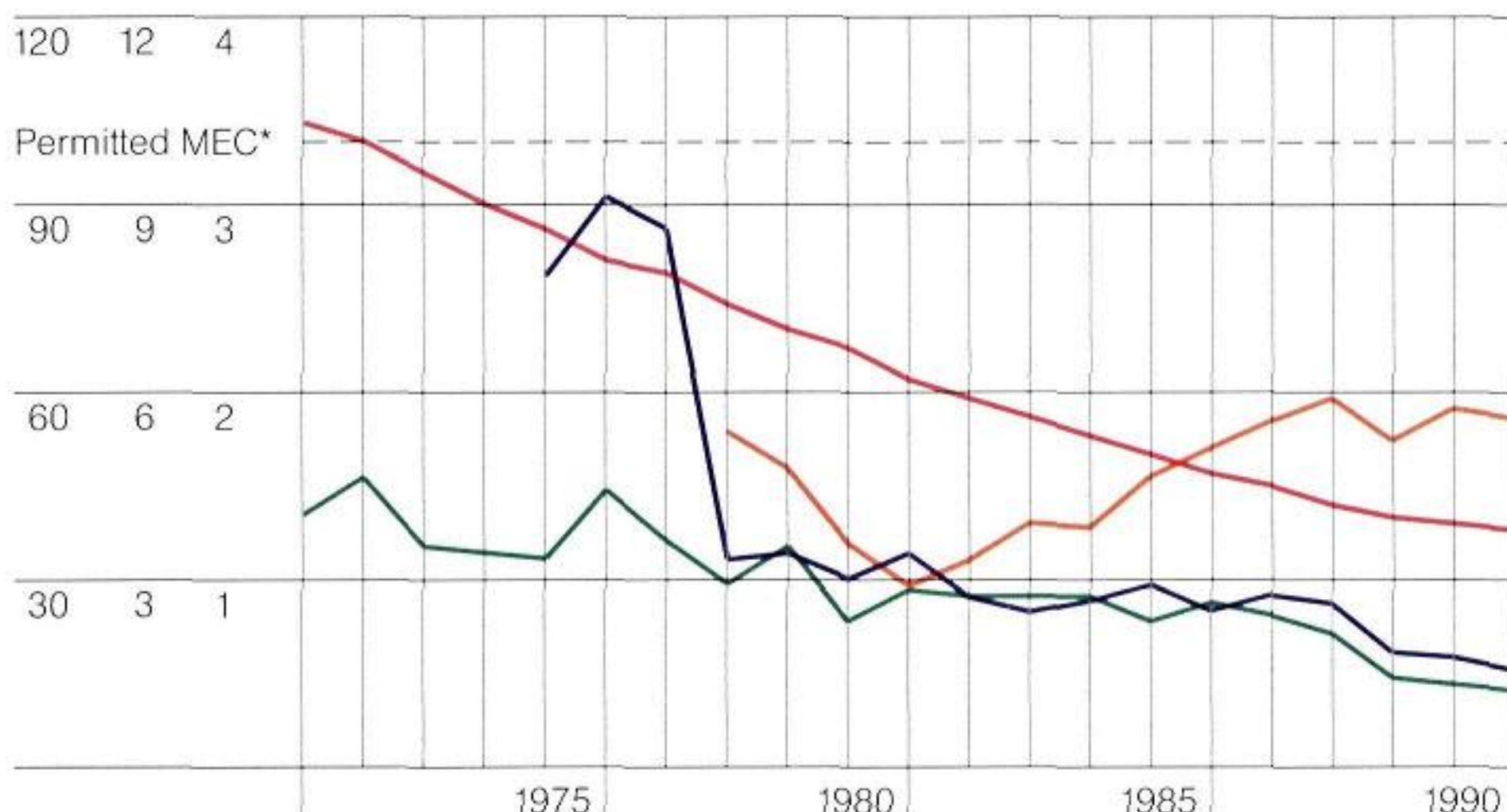
The projects to extend and restructure the components plants in Landshut and Berlin, and the engine plant at Steyr, Austria, were largely completed. They have already proved successful during the start-up of the new 3 Series, for which new plant became operational at all production locations.

With large-series production and flexible manufacturing systems, BMW can offer a particularly wide range of models. The division of labour in the system of linked plants promotes the

Development of Emissions in Munich

Year's average values, 1970 to 1990

NO₂
SO₂ CO HC



* Permitted Maximum Emission Concentration (MEC)

NO₂: 24-hour average value 100 µg/cu.m.
(year's average value not defined)

SO₂: Year's average value 100 µg/cu.m.

CO: Year's average value 10 mg/cu.m.

HC: No maximum level defined

NO₂ in µg/cu.m.

SO₂ in µg/cu.m.

CO in mg/cu.m.

HC in mg/cu.m.

Source: Bavarian State Office for Environmental Protection

uniform utilization of plant capacity and has cost advantages due to favourable batch sizes.

Extensive training and upgrading programmes for employees, and BMW's "Lernstatt", the scheme for solving problems on the spot, ensure the high quality of production. New forms of work organization, such as increased work in groups, and the performance of some maintenance, quality assurance and logistical tasks during production, have already proved successful in pilot projects.

Demands for environmentally-compatible manufacturing methods, and the sparing use of natural resources, have been an essential part of technical planning at BMW for some 20 years.

For example, the BMW plant in Munich has used environment-friendly natural gas since 1969. This pollutes the air less than other fuels.

Thus, BMW has contributed to the reduction of sulphur dioxide in Munich's air from a year's average of 130 micrograms per cubic metre in 1965 to 20 micrograms per cubic metre in 1990. Sulphur dioxide is one of the major causes of smog.

Project group ensured that the production of the new 3 Series started on schedule

An interdisciplinary project group coordinated, at an early date, the series development, logistics and production planning of the new 3 Series. This is the second BMW model, after the 8 Series coupé, to be developed and prepared for series production at the Research and Engineering Centre. At the pilot plant of the Research and Engineering Centre, each stage of production was elaborated by experienced foremen and skilled manpower from the production plants, together with the development and planning engineers. The employees prepared for series production in training groups.

More than 6,000 parts and components for the new 3 Series car were developed and tested. The logistical systems required for "just-in-time" delivery were established, in cooperation with some 400 suppliers from 14 countries.

Once these preparations had been made, pre-series production was moved smoothly from the pilot plant to the Munich and Regensburg plants.

Plant capacities fully utilized

At the Munich plant, the extreme flexibility of the Bodywork Hall permitted the manufacture of two generations of the 3 Series car on one production system. In the eight years until the end of 1990, almost 1.5 million of the previous 3 Series cars were made there. The Munich plant has a capacity of about 800 cars a day.

From September 1990, the new 6-cylinder engine with four-valve technology was produced in Munich as well as at the Steyr plant.

The move of the foundry to Lands-hut was completed. Most of the employees followed their job to the new location.

Production capacity at the Dingolfing plant was extended, with special measures, beyond the total designed capacity. This plant attended to the start-up of the technically ultra-sophisticated 12-cylinder coupé, the 850i, with its target of impeccable quality.

Total car output at the Dingolfing group of plants rose to 260,000 units, the highest-ever level for one year. The production of body and chassis components for the new 3 Series began mid-year.

In 1990, the development of the Regensburg plant into an independent car plant was associated with three major challenges: the Bodywork Hall with its completely new production concept became operational, second-shift working was introduced, and production of the new 3 Series started up.

Daily output had increased to 420 cars by the end of 1990 due to the introduction of second-shift working. With the new schedule of working hours for the Regensburg plant, which includes Saturday as a regular working day, plant operating time is about one-third longer than with the usual second-shift schedules.

The production of bodywork for BMW Convertibles began at the new BMW plant in Wackersdorf in Septem-



Six spot-welding robots weld together the individual parts of a car body. Different versions of the new 3 Series car can be produced at this flexible work station.

ber 1990, after an unusually short time for construction and installation. The plant has a current capacity of 120 cars a day.

After the reversal of the trend on the international motorcycle market, the motorcycle plant in Berlin again worked to its capacity limit of 150 units a day. Total output increased by 23%, over the previous year, to 31,600 motorcycles.

In the autumn of 1990, the updated Enduro machines, R80 GS and R100 GS, were introduced. The K75 RT completes the range of series-produced motorcycles.

High investments in the components plants

At the Landshut plant, the reorganization of the manufacturing sectors Mechanical Production, Plastics and Foundry, was completed in the year under review. The plant is one of the most important suppliers for BMW car production.

The plant has also gained importance for the Company's technological progress, due to investments of almost DM 250 million in the new, highly-mechanized light metal foundry, the Plastics Research Centre, and a pilot plant for the dismantling of scrapped cars.

Investments of DM 50 million were made to extend the car parts manufacturing facilities of the Berlin components plant for the production of chassis parts for the new 3 Series car.

New methods for closer cooperation between BMW and its suppliers

The Company's earnings power depends largely on the degree to which high-quality materials and components can be purchased at favourable prices. Therefore, BMW exhausted the possibilities of purchasing markets throughout the world. The scope and scale of BMW-produced components decreased further in the year under review.

For all components, it was important to shorten development times and establish logistical systems with which the deliveries can be coordinated directly with the production processes at the BMW plants.

To this end, BMW used new methods of cost, time and quality management and improved project organization. The suppliers of systems and sub-assemblies are included, at an early stage, in this process. As part of long-term cooperation, they attend to the development, production and "just-in-time" delivery of units and components.

Simultaneous engineering methods have already proved successful in numerous projects. Now, many stages of development, planning and coordination, which used to follow one another, can be carried out simultaneously. The interlinked structures of the BMW Research and Engineering Centre support this mode of work.

The new forms of cooperation also make considerable demands on the suppliers' efficiency, and on their willingness to assume responsibility. These prerequisites exist, to a particu-

larly high degree, among German and other European suppliers.

Logistics to satisfy individual customer requirements

The logistical chain – from placing an order, through production control to the delivery of cars and parts – was further optimized in the year under review. As a result, BMW can respond, even more flexibly than hitherto, to changes in market requirements.

With new systems of order management, orders from the dealer organization and marketing companies can, in future, be passed directly to the logistics centre for processing. This accelerates the entire order run-through from the conclusion of the contract to the handing-over of the car to the customer.

Subsidiaries of BMW AG are responsible for special tasks within the framework of the automobile business. In Eisenach, a plant is being constructed for the production of large tools. BMW diesel engines come from Steyr in Austria. In Munich, independent development teams work on innovations for automobile manufacturing.

BMW Fahrzeugtechnik GmbH, Eisenach

Since the autumn of 1990, BMW has been constructing a plant near Eisenach, in Thuringia, for the production of large tools. The plant will become operational at the beginning of 1992.

All BMW cars were manufactured in Eisenach until 1942. Today, the Bavarian car plants provide sufficient scope for production.

As early as the spring of 1990, the Company had acquired the rights of use for 67,000 sq. m. of land on the outskirts of the town. The first sod was turned at the beginning of October 1990.

With the rapid construction of this plant, BMW is contributing, quickly and effectively, to the development of competitive industries in the new "Länder".

The region has a plentiful supply of skilled manpower in the metal-working crafts. Since last autumn, new employees from around Eisenach have been prepared, at BMW, for their future work. At the same time, the first apprentices from Thuringia began their three-and-a-half years of training, at the Dingolfing plant, as toolmakers, industrial mechanics or model-makers. As soon as the new buildings in Eisenach are completed, the young people will continue their training there. A second group of apprentices will begin their training from September 1991.

The training division of the Dingolfing plant is "twinning" with the vocational training school in Eisenach in order to support, with its experience, attractive training opportunities at the new BMW location.

BMW Motoren Gesellschaft m. b. H., Steyr, Austria

In 1990, the BMW Motoren Gesellschaft m. b. H. produced, for the first time, more than 300,000 engines in one year. Since the beginning of 1990, output has been about 1,400 engines a day. The range includes 6-cylinder diesel engines, and 4- and 6-cylinder petrol engines with two- and four-valve technology.

The company has its own special development centre for diesel engines. It also attends to the sale of BMW engines to companies throughout the world, and to purchases of the BMW Group in Austria.

Since 1979, BMW has invested a total of DM 1.6 billion in this plant. Thus, the BMW engine plant at Steyr was one of the largest investment projects in Austria in the last couple of decades. At the end of 1990, the company employed 2,100 people.

Together with the marketing company BMW Austria Gesellschaft m. b. H. in Salzburg, with sales of DM 2 billion, BMW is among the ten largest industrial companies in Austria.



Instructors pass on their knowledge to participants in the driving courses offered by BMW Motorsport GmbH. During winter training, participants learn, by practical experience, to have a better command of the car in unusual weather and road situations.

In the linked system of man, car and road, drivers' expertise and awareness of responsibility are becoming increasingly important. BMW cars are characterized by a very high standard of safety.

BMW Motorsport GmbH, Munich

The company is involved in motor sport with cars based on existing models. It also develops and produces high-performance cars and engines of the BMW M Series.

Since 1987, the racing version of the M3 has been used by BMW Motorsport GmbH and by customer teams from all over the world in international and national championships. It is, at present, the most successful touring car in motor sport.

In 1990, the BMW M Schnitzer Team gained the most victories in the German Touring Car Championship with the BMW M3. This model was also successful in rallies.

The company sets great store by the promoting of private drivers, to whom attractive offers can be made with Group N chassis for 318is and M3 cars. This group of drivers has been supported for many years by the BMW Sports Cup.

Strong demand for the BMW M5, produced with a great deal of hand work, was largely responsible for the pleasing course of business; more than 3,000 units were delivered in 1990. Thus, the production capacities of BMW Motorsport GmbH were fully utilized. As a result, the production of a small series of about 150 M3 Convertibles a year was moved to facilities at the Regensburg plant. The M3 saloons were produced by BMW AG at the Munich plant.

For 14 years, BMW's driver training courses have provided drivers with the expertise and skills they need for a better command of the car and conditions.

Thus, knowledge gained in motor sport is passed on to drivers in the interest of higher standards of safe driving.

The number of participants increased again in 1990. In addition to private people, companies increasingly take advantage of the training courses for their employees.

BMW Technik GmbH, Munich

With this subsidiary BMW has, since 1985, an independent company that develops innovative system solutions in all fields of automotive engineering. It complements the development divisions of the BMW Group with its own work on alternative concepts and promising new technologies, and also in the wider environment of automobile manufacturing.

The company's activities also include the assessment of social and economic developments for automobile manufacturing, and possible applications of new forms of work organization.

Possible solutions to complex problems are to be found rapidly through the cooperation, in small working groups, of specialists from different fields. The 110 or so employees work largely independently of the demands of series production. They cooperate closely with BMW and other development partners.

All essential development functions, including a design studio, workshops, engine test stands and an acoustic wind tunnel, are united in the company's own building to the northwest of Munich. Projects include detailed solu-

tions, components and prototypes, ready for driving, which can result in production in small series, as in the case of the Z1 roadster.

An example of new components is the tyre-pressure control system for cars, presented at the Hanover Fair in the year under review.

With the anti-lock braking system and catalytic converter technology, BMW was the first manufacturer to transfer trendsetting components from car to motorcycle manufacturing. In 1990, the production capacities for BMW motorcycles were again fully utilized. Demand rose noticeably on European markets in particular. More than 30,000 motorcycles were delivered worldwide.

Trend reversal on the world market for motorcycles

In 1990, the long-awaited reversal of a trend took place on the motorcycle markets. Worldwide demand increased again for the first time in years, having shrunk steadily by almost half since the record year of 1981. Sales rose by 3.4% to 850,000 units.

Demand was particularly satisfactory in Europe. In Germany, France, Belgium and the Netherlands, double-digit growth rates were achieved. Even in the USA, where sales had, until recently, declined by 20% a year, new registrations remained at the previous year's level.

In the old "Länder" of the Federal Republic, still the most important sales market for BMW, registrations rose by 13% to 96,700 motorcycles.

While the share of small motorcycles declined on practically all markets in 1990, demand for machines above 500 cc continued to rise. Every second purchaser opted for a motorcycle in this segment.

BMW motorcycle business exceeded expectations

In the course of the generally brisk development of the market, expectations for the BMW motorcycle business were clearly exceeded in the year under review. Rising sales were recorded in almost all the major markets.

Registrations of new BMW motorcycles totalled 31,000 units, 10.2% more than the previous year. Thus, BMW was able to expand its market position. Demand was stimulated in particular by

the new K100 machines fitted with four-valve engines. Sales to authorities achieved a record level with the introduction of the K75 RT. In this market segment, a total of 4,500 motorcycles was sold in 40 countries.

Demand developed particularly well in Europe; more than three out of four BMW motorcycles were sold here. In the western part of Germany, registrations of new BMW motorcycles rose by 16% to 9,500 units in the year under review.

BMW motorcycles are sold by BMW Motorrad GmbH + Co. with its headquarters in Munich.

BMW, the pacesetter for riding safety and environmental protection

In the spring of 1988, BMW was the world's first manufacturer to introduce the anti-lock braking system as a special option in the K100 models, underscoring its leading position in the field of riding safety. Since spring 1990, the K75 and, therefore, all K models are available with the anti-lock braking system as an option. In 1990, the Company was still the only manufacturer to supply this system which is so vital for motorcycling safety.

BMW also did pioneering work for environmental protection. In September 1990, a controlled three-way catalytic converter for the K1 and K100 RS machines made its debut at the International Bicycle and Motorcycle Show in Cologne. The Digital Motor Electronics, used in this system, are essential for the effective purification of exhaust emissions. Further technologies to reduce

emissions are available for the entire range, as part of the BMW environmental programme for motorcycles.

The second key area of model policy was the updating of the successful GS models. Exactly ten years ago, BMW started the trend towards large touring Enduro machines with the R80G/S. Since autumn 1990, the K75 RT completes the range of K75 models.

Sales of motorcycle and riders' accessories are becoming increasingly important. They achieved a new record of almost DM 50 million and thus contributed substantially to the total sales of the motorcycle segment, which amounted to about DM 500 million. Demand for the new "Systemhelm III" was particularly strong; more than 50,000 of these helmets were sold.

Motorcycling continues to be a popular leisure-time activity. However, increasing numbers of riders are also using their motorcycles as an alternative means of transport in congested urban areas. Motorcycles do not take up as much space as cars and are easier to manoeuvre.

The upturn on the motorcycle markets is expected to continue because of the favourable development of the used motorcycle business and increasing replacement demand.



As early as spring 1990, BMW was the first western manufacturer of motorcycles to be represented by seven service stations in the new "Länder" of Germany. Bernd Hinkel was the first with his business in Dresden. The employees of these twenty-odd businesses are trained in Munich on the maintenance of BMW machines.



New group companies complement and extend the Company's core business in the fields of aeronautical engineering, electronics, sales financing and services. In 1990, the establishment and development of business went according to plan.

BMW Rolls-Royce GmbH, Oberursel

BMW manufactured aircraft engines from 1916 to 1965. The Company took up this tradition again in the year under review. Together with Rolls-Royce plc., London, the Company founded BMW Rolls-Royce GmbH as of July 1, 1990. Its headquarters are at Oberursel in the Taunus, the region between the Lahn, Rhine, and Main rivers. BMW holds a 50.5% interest in the company.

Rolls-Royce plc. is one of the world's three leading manufacturers of gas turbines for aircraft. The new company has already begun to develop a family of aircraft engines for a new generation of short-haul aircraft.

The first aircraft engine to be developed is a basic engine with the designation BR 700. Versions developing between 12,000 and 22,000 pounds thrust will be derived from this engine, following the modular concept. The new engines will have both markedly lower levels of exhaust emissions than required and lower fuel consumption, be quieter and require less maintenance than comparable products.

These engines are designed for fairly large executive aircraft, with 15 to 20 seats, short-haul aircraft with 75 to 100 seats, and aircraft for passenger services with up to 130 seats. Foreseeable demand suggests that growth rates will be above average in this market segment.

The Oberursel plant currently has some 1,000 employees. The former production range of gas turbines and components is gradually being extended to include components for the ranges of

aircraft engines of Rolls-Royce plc. and other manufacturers. In the medium term, another location is planned as business activities develop.

KONTRON Elektronik GmbH, Eching

1990 was a year of restructuring and adjustment for KONTRON Elektronik GmbH in Eching near Munich. The range was generally streamlined, and particularly competitive product lines were developed further.

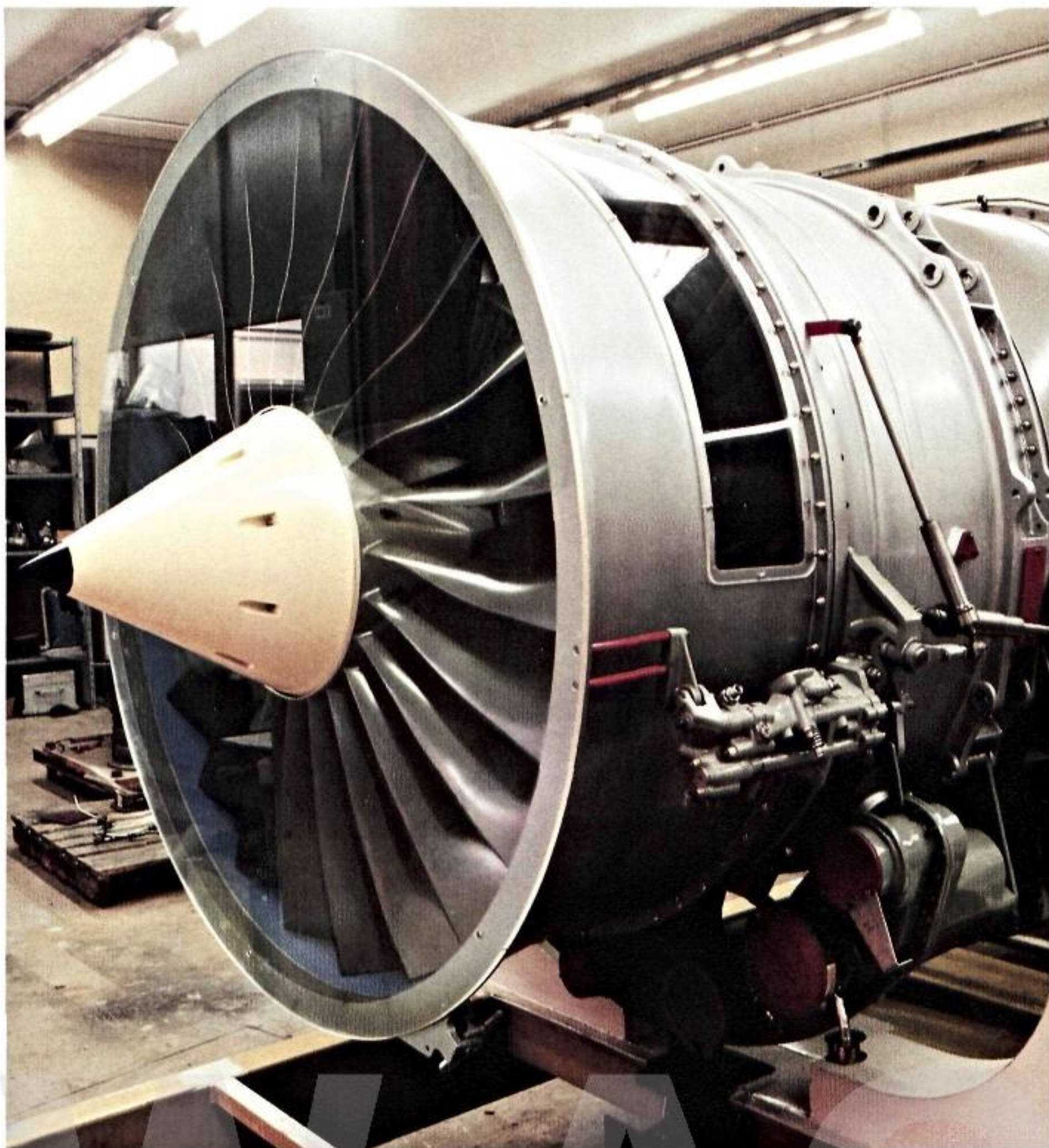
The company, with some 1,100 employees, develops, produces and sells high-quality electronics systems, assemblies, components and software for industrial, technical and scientific requirements. It focuses in particular on industrial computers, measuring technology, image processing for medical technology and materials analysis.

In individual market segments, the company achieves shares of up to 20% due to concentration on special products. This applies, for example, to the market for image analysis equipment in the Federal Republic of Germany.

The company's main markets are in Western Europe. With a total volume of some DM 320 billion, this region accounts for almost 30% of the world market for electronic equipment.

At the end of 1990, KONTRON Elektronik was represented on the German market by nine retail outlets. It also has marketing companies in France, Great Britain, Italy, Switzerland and, since August 1990, Spain. Altogether its own companies cover 85% of the Western European electronics market. In a further 25 countries throughout the

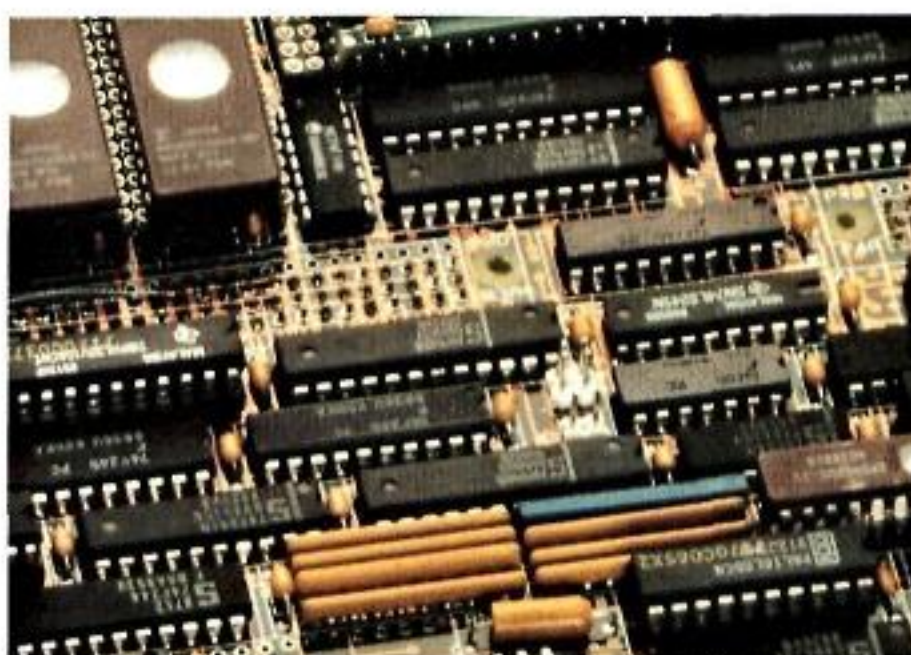
In September 1990, BMW Rolls-Royce presented the company and its range to a wide public at the International Air Show in Farnborough, Great Britain, (small picture below). Until the mid-90s, the company will develop a family of engines for short-haul aircraft derived from a basic aircraft engine, the BR 700 (picture on right).



Customer service has top priority in all fields of business of KONTRON Elektronik GmbH. In the picture on the left, a service technician tests the function of the equipment.

The portable industrial computer, IP Lite (picture below), was launched onto the markets in May 1990. It is the most compact computer in its capacity class.

KONTRON Elektronik was one of the first companies to introduce high-capacity computer assemblies (picture in centre below) for the microprocessors 80386 and 80486, and the RISC processor i860.



world, agencies attend to the sales and customer service for KONTRON electronics products. The sales network is being developed.

The portable computer, IP Lite, was launched onto the markets in the year under review. It is the world's most compact industrial computer in its capacity class.

KONTRON electronics technology is used increasingly for BMW products. For example, the company is involved in the development of a new service tester for the BMW customer service organization.

Sales financing

In 14 countries BMW offers, through subsidiaries and associated companies, and through cooperation with local banking partners, financing programmes for customers and dealers, which are tailored to the requirements of the respective markets.

1990 was characterized by the further development of these activities in major foreign markets. These include the establishment of BMW financing companies in the Netherlands and in South Africa, and a cooperation agreement in Spain. BMW (Schweiz) went into the leasing business. In Japan, the financing business was extended to include customers.

In 1990, some 240,000 contracts were concluded for cars and motorcycles worldwide with a volume of DM 10 billion. Customer financing accounts for about 35%, and the financing of dealers' stocks for about 65% of these contracts. About 16% of all purchasers

of new BMW cars and motorcycles took advantage of the BMW companies' financing programmes in the year under review.

Leasing and financing became more important as part of the comprehensive range of services offered to BMW customers. This applies in particular to Full Service Leasing, which covers servicing, repairs, tyre replacement and insurances, for a fixed monthly instalment.

Authorized BMW dealers are offered financing for new and used cars and motorcycles, as well as for parts, accessories and workshop installations. In 1990, authorized dealers financed almost 30% of their sales through BMW companies.

Bavaria Wirtschaftsagentur GmbH, Munich



The company attends to all the insurance interests of the BMW Group. It helps the BMW companies to determine insurance risks and arranges the necessary insurances. It also ensures that all group companies take the necessary measures to prevent losses.

Catering to the insurance requirements of private clients, particularly BMW employees, and of industrial clients, gained in importance in 1990.

Insurance and reinsurance are offered by the Bavaria Insurance Company Ltd. and the BL Reinsurance Company Ltd., respectively, both based in Dublin in the Republic of Ireland. These two companies are subsidiaries of the Bavaria Wirtschaftsagentur GmbH.

The Bavaria-Lloyd Reisebüro GmbH, in which the Bavaria Wirtschaftsagentur holds a 51% interest, provides business travel services and arranges various events for the BMW Group. It increasingly offers these and tourist services to non-BMW clients.

Once again, the turnover and profits of all these companies developed extremely satisfactorily.



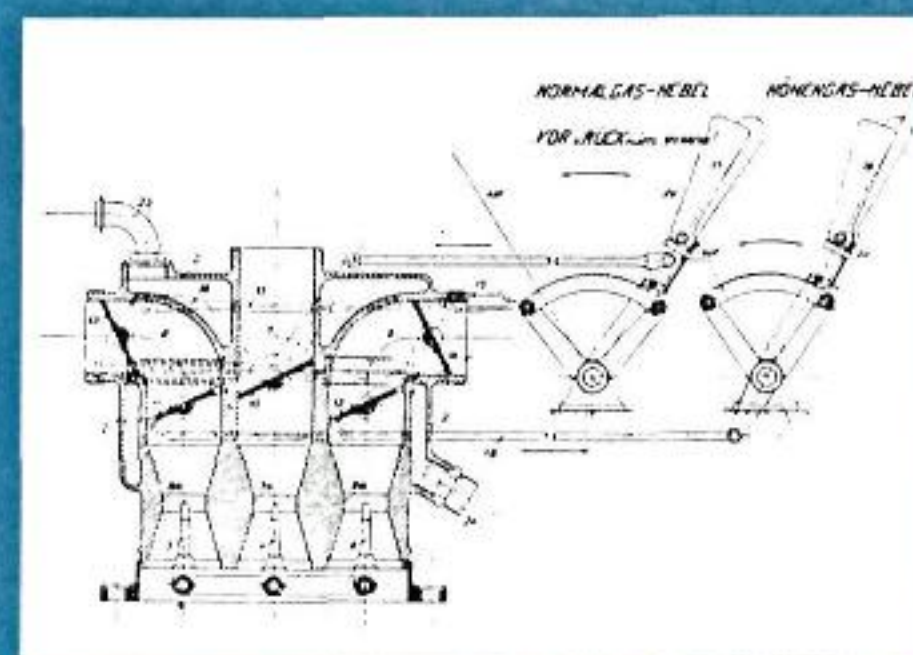
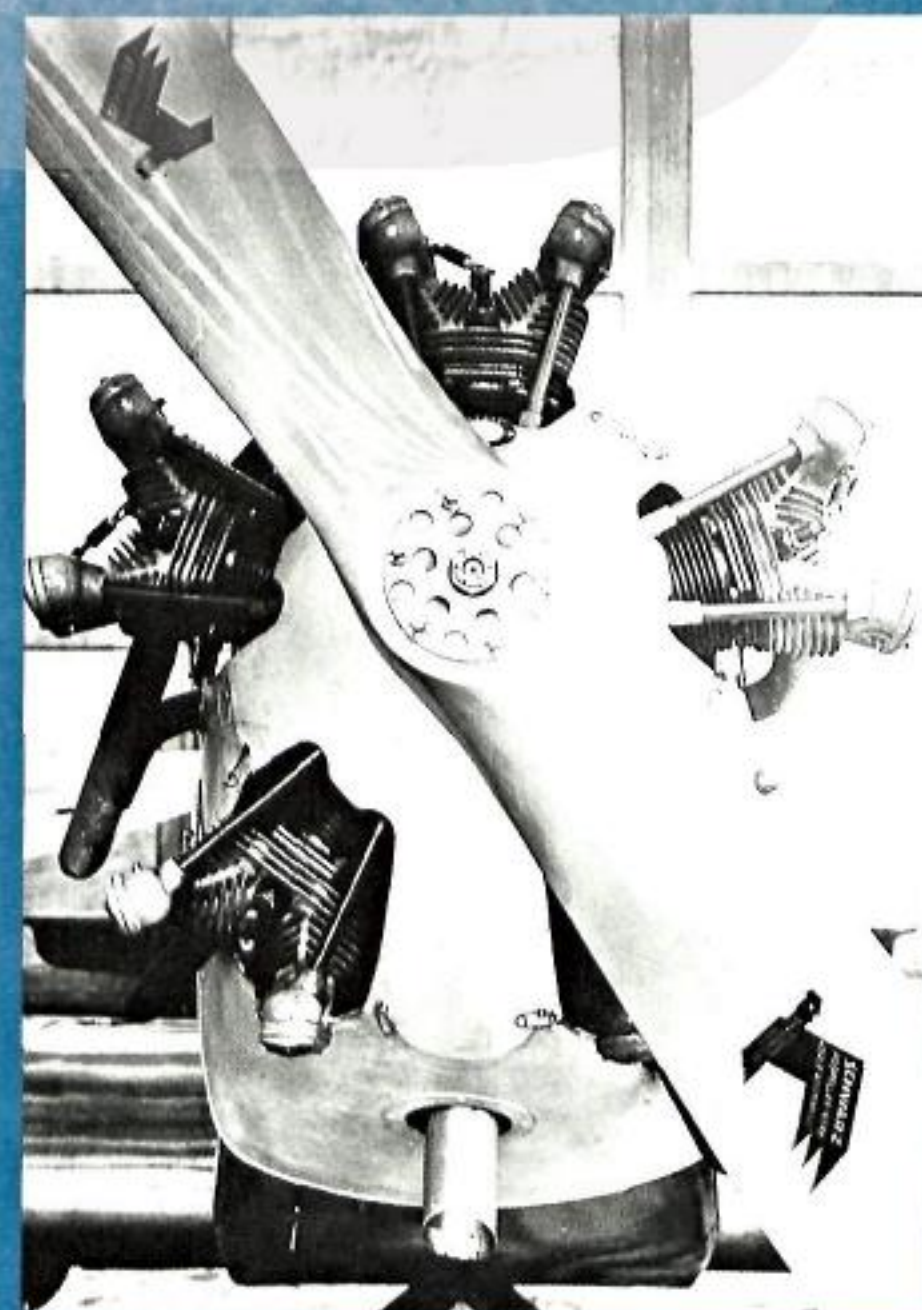
BMW: **The first 75 years**

The Bayerische Motoren Werke (Bavarian Motor Works) were founded in 1916. In 1991, the Company celebrates its 75th anniversary.

Aircraft engines provide an historic link between BMW's past and its present. They were manufactured at the beginning of the Company's history and, since 1990, are again being developed at BMW Rolls-Royce.

Motorcycles were the alternative for BMW when flying was restricted in Germany in the early 1920s. The basic concept of the first BMW motorcycle is still valid to this day.

BMW started to make cars at the end of the 1920s. Its sporting successes gave rise to a legend. The specialist of yesteryear became an international brand for automobiles, motorcycles and engines.



Flying: The adventure that links continents

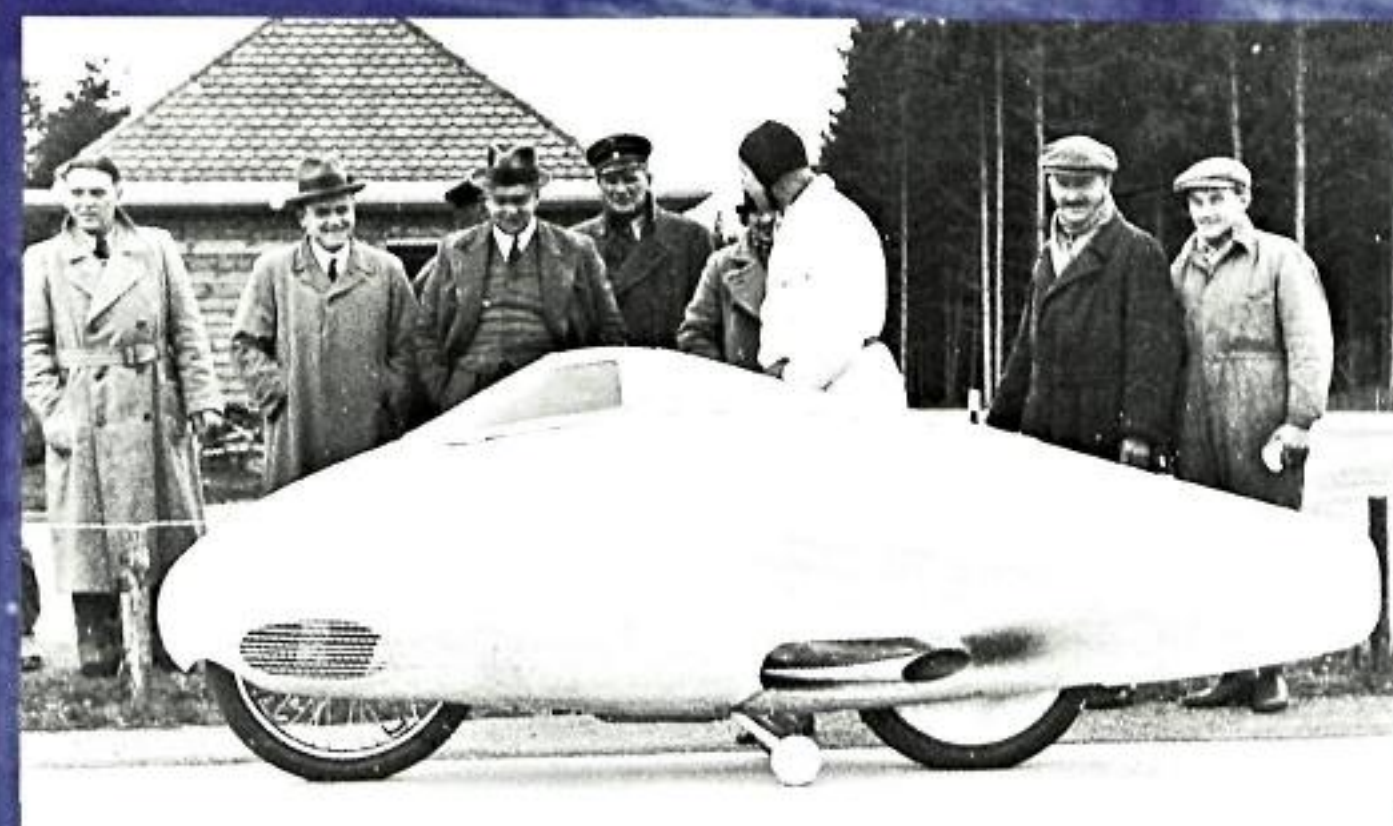
The success story began with a new altitude record: BMW was barely three years old when, in 1919, the pilot Franz Zeno Diemer took off from the Oberwiesfeld, Munich's airfield then located next to the factory, and reached an altitude of 9,760 metres. He did so in an aircraft powered by a BMW IV high-altitude engine. During the 1920s, BMW air-



craft engines helped to link continents. In 1924, for example, the flight from Zurich to Persia took 41 hours. In 1927, aircraft with BMW engines set 29 of the 87 world records. The engines included an 85 litre, 28-cylinder double-row radial engine developing 4000 bhp, and one of the world's first series-built jet engines.

BMW continued to construct aircraft engines alongside cars and motorcycles until the mid-1960s. This field then became the core of the present MTU Motoren- und Turbinen-Union München GmbH.

In 1990, the Company came full circle: Together with Rolls-Royce plc., one of the three largest manufacturers of aircraft engines in the world, BMW founded a company that develops aircraft engines in Germany.



Ernst Henne: The fastest man on a motorcycle

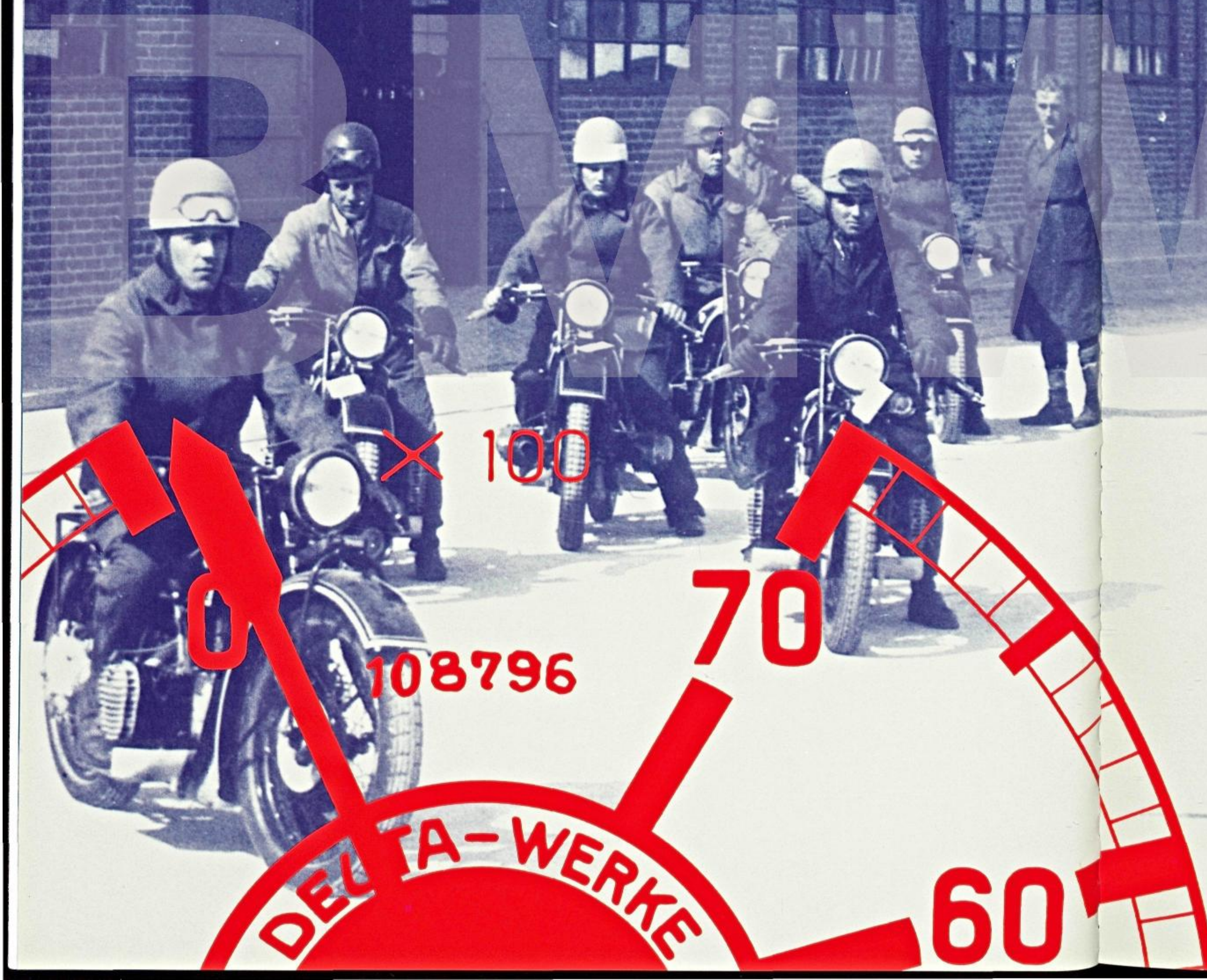
Motorcycles held a special fascination in the 1920s, both for sports and as a means of transport. BMW built its own machines from 1923. They had a flat twin engine and shaft drive in a double tube frame. This principle of the R32, the first BMW motorcycle, also became the determining feature of the racing machines. By 1929, BMW made the



fastest motorcycle in the world. As streamlining improved, Ernst Henne – first of all with an aerodynamic helmet and later with a complete aerodynamic fairing for this motorcycle, like a racing car – set several world records, alternating with British riders, up to 1937. Indeed, his last record remained unbroken until the 1950s.

These successes were followed by sidecar world championships. From 1954 to 1974 the BMW combinations won 21 times in succession. In the 1980s, BMW riders won the world's most punishing long-distance event, the Paris-Dakar Rally, four times.

Since the late 1960s all BMW motorcycles have been produced in Berlin-Spandau, where aircraft engines were once made.



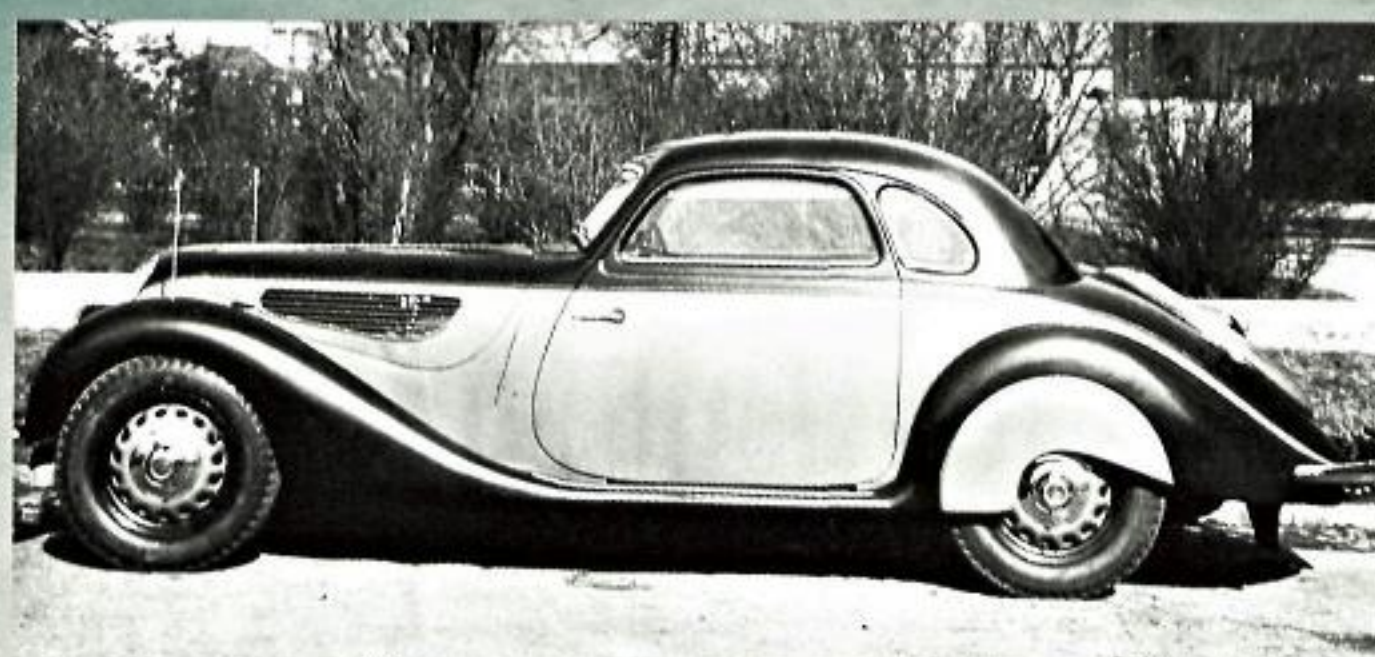
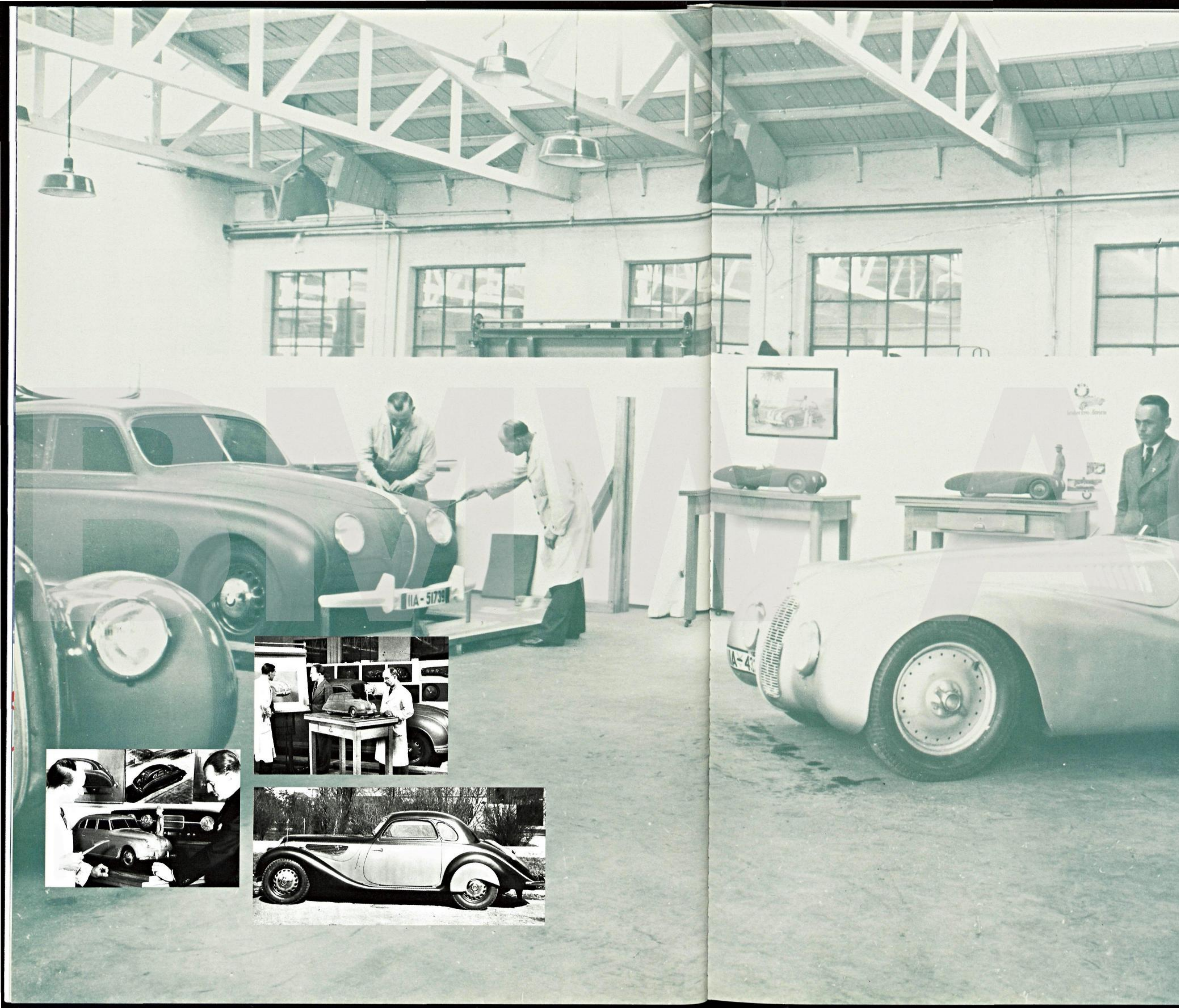
Mille Miglia: BMW 328 won the thousand miles from Brescia to Rome

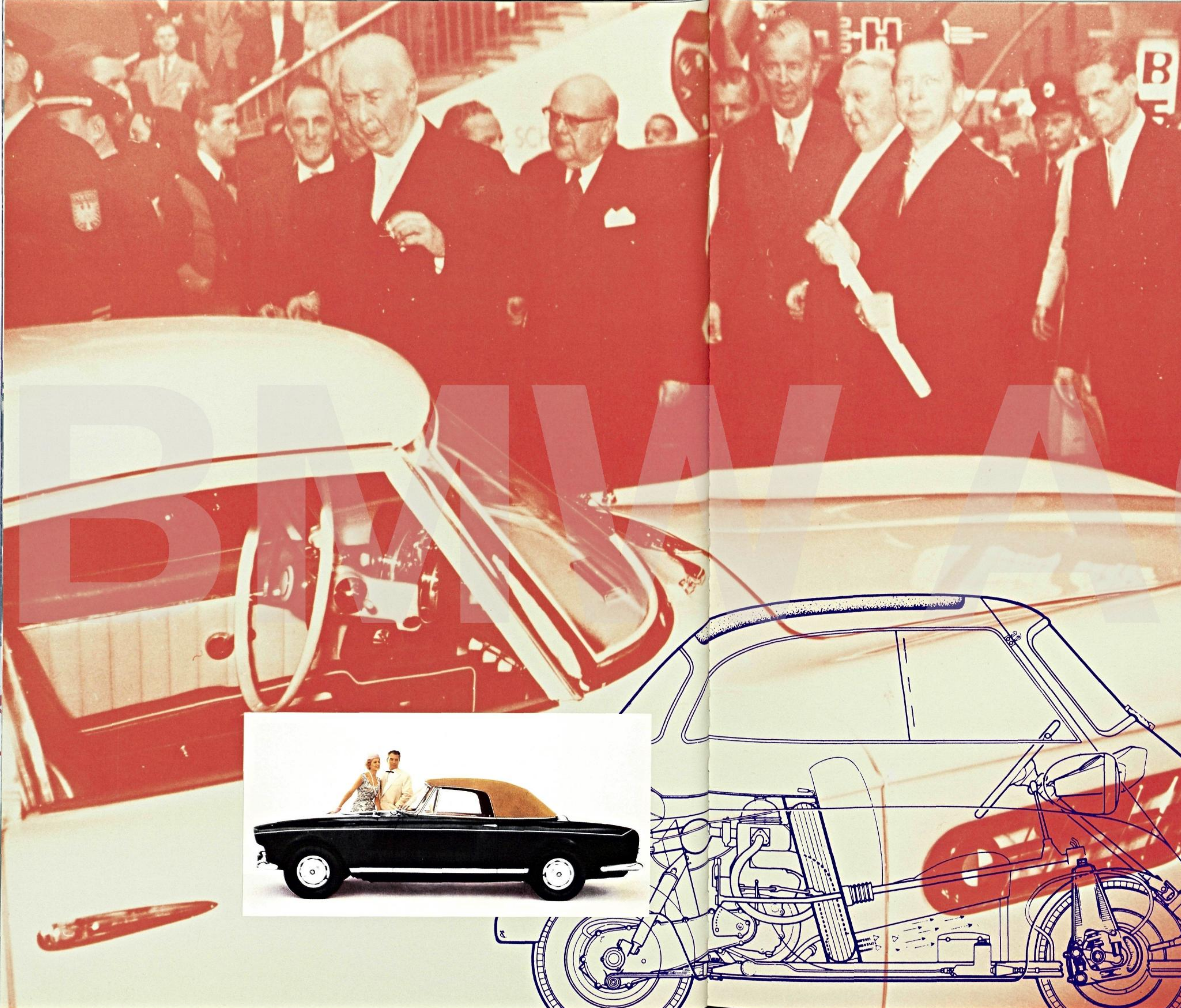
The "Mille Miglia" had long been a traditional race when BMW participated for the first time in 1938 with its 328 sports car. In 1940, five cars fitted with special bodies were "driven" over the Brenner Pass to Italy. The bodies were made of a particularly lightweight special alloy of aluminium and magnesium. The engines



had an output of 135 bhp. In Brescia, word went round that BMW had already won the thousand miles in Munich. With an average of 166.723 kmph, Hanstein and Bäumer were the overall winners of all categories.

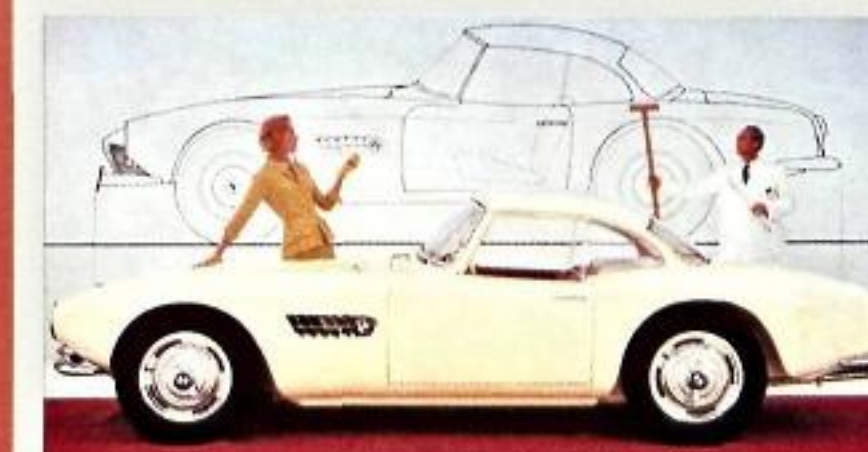
The Mille Miglia cars were designed in accordance with the latest findings on streamlined shapes. Towards the end of the 1930s aerodynamic tests changed the appearance of cars – and perhaps more at BMW than elsewhere. Technology was combined with design. The wind tunnel for testing the aerodynamics of a full-scale object was not yet in common use. Instead, the drawing board and road tests continued to be the norm. Nevertheless, several trend-setting cars emerged during the war years. Until then, all BMW automobiles had been manufactured in Eisenach, Thuringia.





Contrast range: Luxury saloons and Isetta "bubble cars"

The BMW 507 of the 1950s was a classic roadster. It was even admired by Theodor Heuss, the then President of the Federal Republic. Only 252 examples of this model, and 413 of its "brother", the BMW 503, were produced. At more than DM 25,000 they were too expensive for the average car owner. In 1955, these two 8-cylinder automobiles were

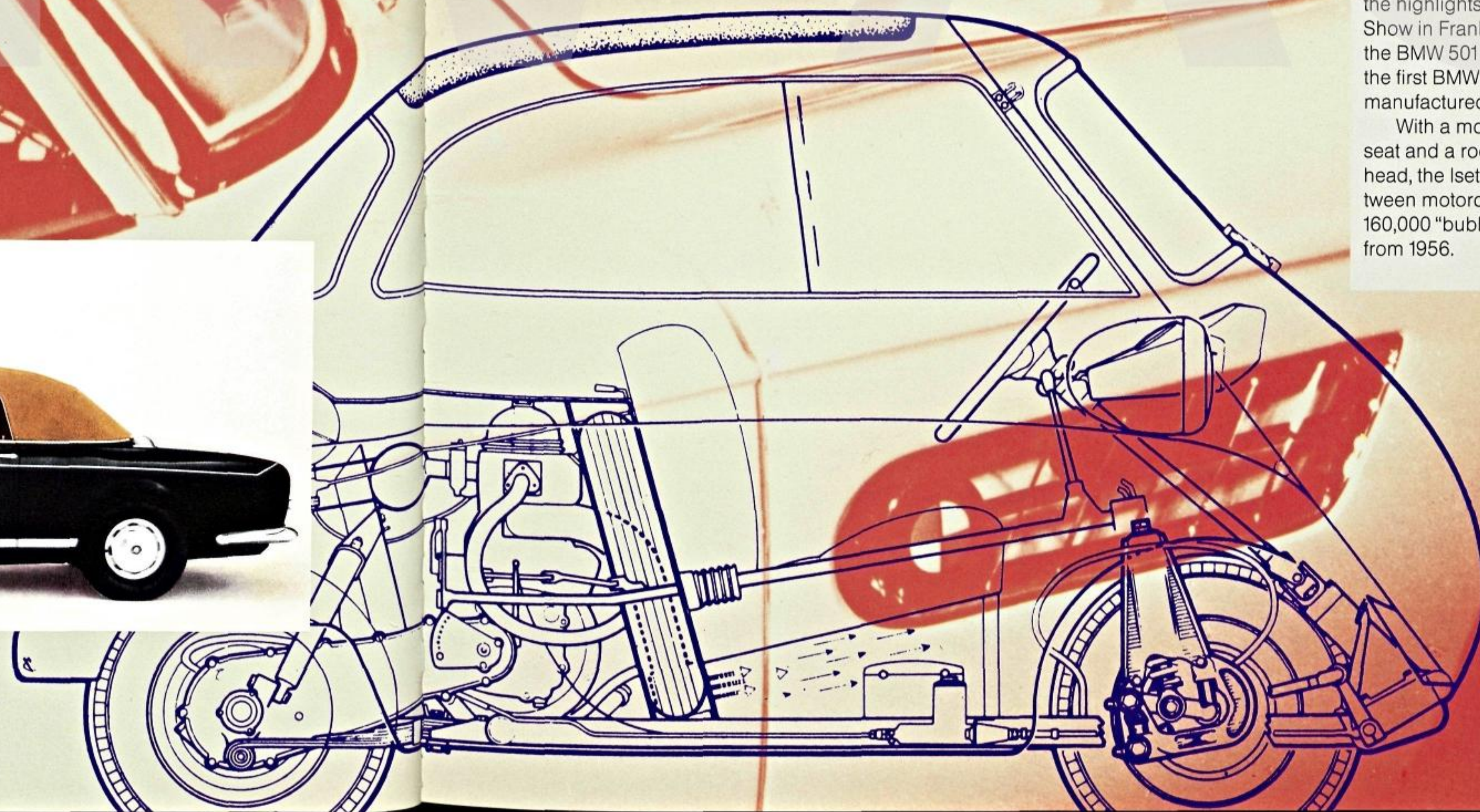


Die großen europäischen Achtzylinder



the highlights at the International Motor Show in Frankfurt. Both were based on the BMW 501 and 502 luxury saloons, the first BMW cars to be developed and manufactured in Munich.

With a motorcycle engine under the seat and a roof over the occupants' head, the Isetta bridged the gap between motorcycle and car. More than 160,000 "bubble cars" were produced from 1956.



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Am 7. März 1974

Lokalbaukommission

Im Auftrag:

Fant

The "four cylinder": BMW becomes an international Group

At the beginning of the 70s the build-
ings for the 1972 Olympic Games were
constructed on Munich's former airfield
at Oberwiesenfeld. Next to it, at the
same time, a tower in the shape of four
cylinders was built. This was to house
the headquarters of the BMW Group.
2,000 people work in this 22-storeyed
building. The shell of the BMW Museum

BMW
1602
1802
2002
2002 tii
1802 touring
2002 touring
2002 tii touring



forms an architectural contrast. The
70s and 80s were also an economic
success for BMW: in two decades the
workforce trebled, and sales grew
15-fold. Car production rose from
160,000 units a year to more than half a
million – all of far higher value than in
1970. By way of comparison: during
the same period, the West German car
industry increased its workforce by one-
third, sales six-fold and production by half.

By the mid-1980s, 50,000 people
were employed by BMW companies. In
1986, investment for the first time
exceeded two billion D-marks. In 1990,
the workforce increased to more than
70,000 employees. Fifteen BMW market-
ing companies and about one hundred
importers provide services for custom-
ers throughout the world.



Flagship: The "best car in the world"
When the readers of "auto, motor und sport", one of Europe's largest automobile journals, voted for the world's best cars, the BMW 3, 5, and 7 Series led their categories for three successive years. The 8 Series coupé lives up to this reputation. Moreover, the Company has an excellent profile among German businessmen.

The exclusive 6 Series coupés were

750i 750iL



built during the late 70s and 80s. From 1977, the Company produced the large 7 Series saloons. These were the first cars to be equipped with Digital Motor Electronics. From mid-1980, the BMW 745i completed the top end of the range. In 1987, a new top product was introduced, the 12-cylinder 750i/iL. This was joined by a second top model in 1990: the 850i coupé. Since their introduction in 1986, the new cars of the 7 Series have been the most successful luxury saloons in Europe.

Today, five million BMW cars are on the road in more than one hundred countries throughout the world.



BMW today: A world brand with a special profile

At the end of the 1980s, production and sales exceeded the milestone of half a million cars a year. With sales of DM 27 billion, BMW is among the twelve largest industrial companies in the Federal Republic of Germany. The Company also ranks high among the world's leading manufacturers of luxury saloons. And, unlike so many in this industry, BMW has earned profits every year for the past three decades.

The white-and-blue emblem that symbolizes a rotating propeller still stands for "sheer driving pleasure". At the threshold to the 1990s, BMW embraced new activities. Initiatives to guide traffic flows, preserve resources and introduce alternative propulsion concepts all aim at providing traffic systems that are compatible with the environment.

Even after 75 years of colourful history, BMW remains an engineering company. Its competence lies in the technology of motion, its strength in mobility.

BMW AG



With the 02 Series, the predecessor of the 3 Series, the Company founded a category of compact, high-performance automobiles. They established, in a special manner, the sporting reputation of the marque. To date, 4.5 million 3 Series cars have been delivered to customers throughout the world. The new models continue their predecessors' success.

New 3 Series achieves large-car standards

The youngest generation of the 3 Series BMW made its public debut in mid-November 1990. It includes numerous new technologies and fittings previously introduced in the large BMW saloons and coupés.

The new cars meet the standards laid down for top-segment automobiles, particularly as regards safety, quality and the range of fittings.

A new market segment develops

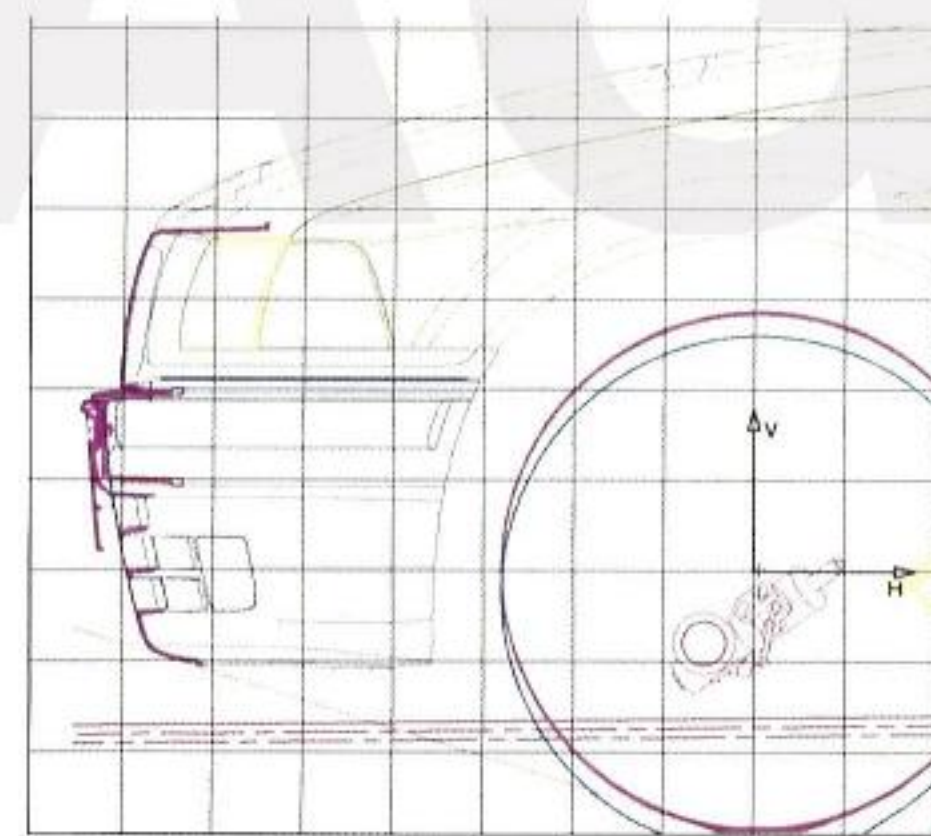
In 1966, when the Company was fifty years old, BMW established a completely new market segment with the introduction of the 1600-2 at the Salon International de l'Automobile in Geneva. With this compact, high-performance automobile, BMW met with a rapidly growing demand on many of the world's markets.

From the very start, its concept – as for all BMW cars – was geared to the satisfaction of individual customer requirements. It has stimulated further development of the car.

The success of the small BMW was the basis for the Company's rise to a world marque. In the course of 25 years, some 4.5 million cars of the 02 and the two 3 Series were produced. During this period, their share of BMW's annual output was between 50 % and 60 %.

The 02 Series – cars for connoisseurs

For 35 years, names such as the BMW Dixi, BMW 319 and BMW 700 stood for small BMW cars. From the mid-60s, the BMW 1600-2, and the entire 02 Series, set new standards: sophisticated tech-



CAD (Computer Aided Design) drawing of the front of the new 3 Series BMW car.

nology in an elegant two-door car with sufficient room for four people.

A 4-cylinder in-line engine with 85 bhp gave this car a performance hitherto reserved for sports cars.

A wide range of cars was developed from the basic model. In addition to a choice of engines, BMW already offered, at that time, such striking versions as the Touring and the Convertible.

The technical opportunities were developed into the BMW 2002 turbo, developing 170 bhp. The marque's sporting reputation was increased by successes in motor sport, such as victories in the European Touring Car Championships of 1968 and 1969.

The 3 Series car – a new dimension

While up to 100,000 cars of the 02 Series were produced yearly, annual

By the end of 1990, some three million people throughout the world were driving a 3 Series BMW, twice as many as ten years earlier.

Good conditions for the new cars

The 3 Series has maintained its special status to this day. It forms the backbone of BMW's automobile business. Other manufacturers subsequently have offered cars in this segment, but the "origi-

fully the entire potential for improvement, a completely new body and a new chassis, among other things, were developed.

Production started on schedule, due to the wholehearted cooperation of employees from all areas of the Company, and intensive pre-production preparations at the pilot plant of the Research and Engineering Centre.

At the end of 1990, as many as 8,000 new 3 Series cars had already left the production plants. During the course of the new year, daily output will be increased steadily at both the Munich and Regensburg plants.

Safety technology and individual design

The new 3 Series is larger, notably in the passenger compartment. This is of particular benefit to back-seat passengers. Even with its new proportions, the car remains compact and is immediately recognizable as a "typical BMW".

The bodywork is more rigid. This results in both excellent handling and maximum protection for the occupants.

The safety concept, established in the larger BMW saloons and coupés, has now been incorporated into the 3 Series. As a result, in the Federal Republic of Germany, the new models are classed as lower risks in accident insurance.

Minor collisions at speeds of up to 4 kmph cause no damage, and at speeds of up to 15 kmph only minimal damage which is simple to repair. At higher speeds, new engine mounts ensure that repairs to that section are relatively



Four generations of the small BMW;

from the 1600-2 of 1965 to the latest model presented at the end of 1990.

output of 3 Series cars rose to more than 300,000 units.

Since the introduction of the first generation of 3 Series cars, in 1975, the range of models has been supplemented by additional body and engine versions. Increasingly great store was set by comfort and design. These were joined by strict requirements relating to safety and environmental protection. Today, this series offers the greatest

nal" has lost none of its attractiveness.

Thus, in 1991, the readers of "auto, motor und sport", one of Europe's largest automobile journals, voted the 3 Series "the world's best car" in its category, for the third successive year.

First assessments of the new 3 Series car by the trade press, and the large numbers of incoming orders, support our belief that the fourth generation of these cars will continue to be successful.

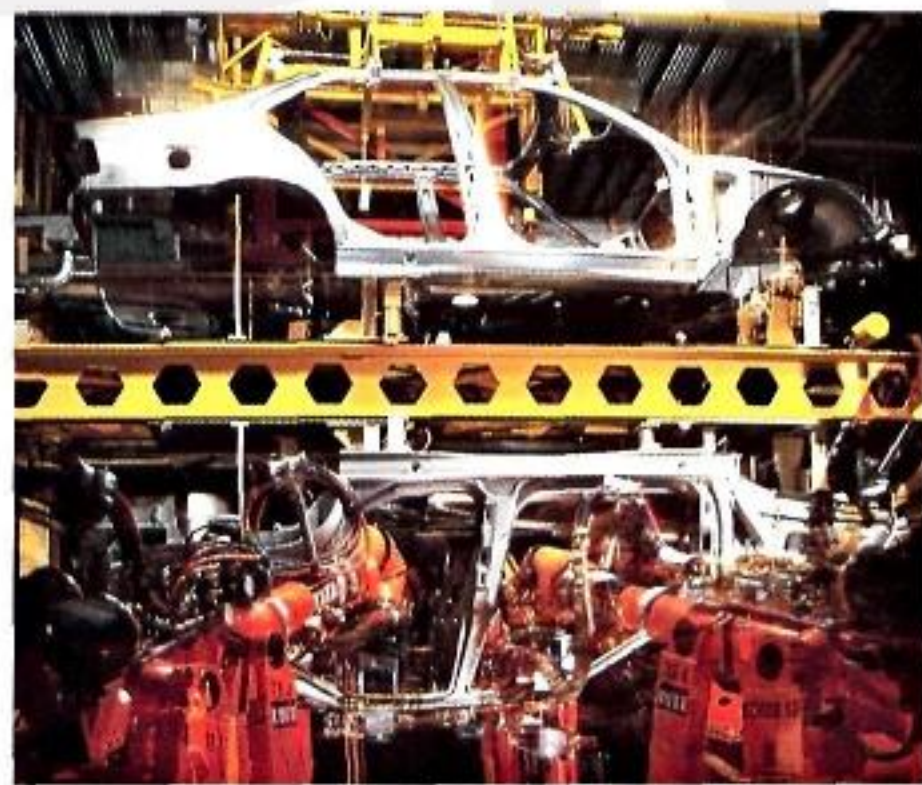
The development of the car markets offers favourable conditions. Some 5 million cars are sold in the top segments each year; every tenth is a BMW. In view of the foreseeable development of incomes at present, demand will continue to grow in this segment of the market.

The widely differing groups of purchasers of BMW cars worldwide have one thing in common: a wish for individuality. Therefore, BMW has created the conditions in which to satisfy these requirements flexibly and in accordance with individual markets.

The development of the new model

The aim of scientists and engineers was to develop an individual car that helps drivers, as far as possible, to be in command of all situations because of BMW's typical coordination of engine, chassis and bodywork.

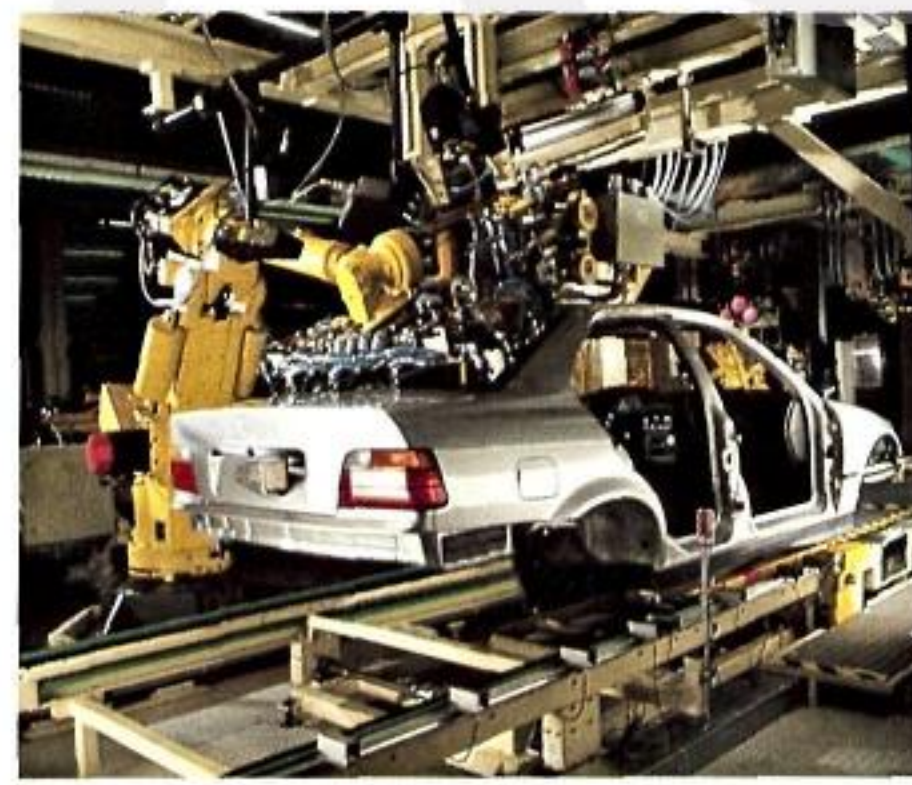
In addition to the dynamic performance and characteristic design expected of the small BMW, in particular safety, reliability and environmental compatibility were high on the list of essential requirements. In order to meet



At a highly-automated production station, bodies of the new 3 Series car arrive and depart on an overhead system.

variety of models in its segment.

So far, the range of models comprises two- and four-door saloons, as well as Convertibles, touring versions, the sporting M3, and the Z1 roadster. The range of engines includes 4- and 6-cylinder petrol engines with two- and four-valve technology from 1.5 to 2.7 litres, and diesel and turbo-charged diesel engines. There is also a choice between two- and four-wheel drive.



Robots bond, with high precision, the front and rear windows flush to the bodywork.

inexpensive. Even at impact speeds of up to 55 kmph, the passenger compartment suffers no deformation. The mechanical pre-load mechanism for both front seat belts, as standard fitting, is completely new. On impact, the shoulder and lap belts are tightened securely by means of a pre-loaded spring, further reducing the risk of injury. This additional safety system will also be incorporated into other BMW model ranges.

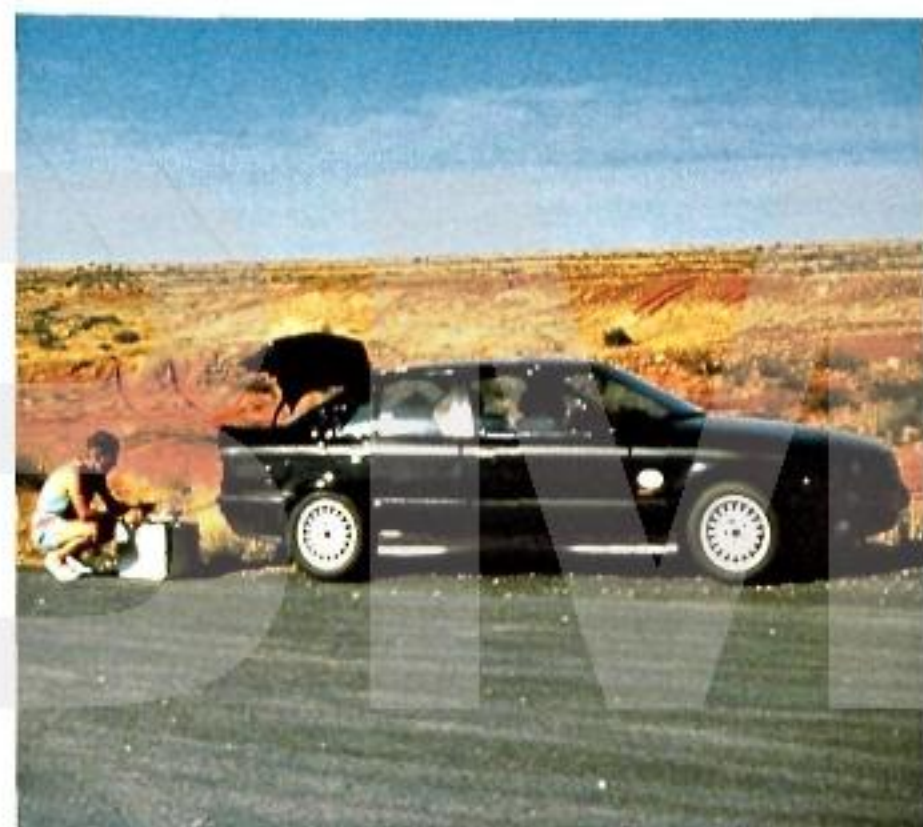
The new models are characterized by markedly lower fuel consumption, and more components that can be recycled for future use.

Further progress with chassis and engine

One of the most important technical innovations is the new rear axle geometry, the principle of which gave the Z1 roadster such outstanding handling. Together with the improved spring-strut front axle, longer wheelbase and broader track, 15-inch wheels and ideal weight distribution, the chassis gives excellent standards of safety and comfort.

The cars are powered by the 4- and 6-cylinder engines introduced in the last three years. New 3 Series cars are fitted, as standard, with an electronically controlled three-way catalytic converter, in common with all BMW automobiles since 1987. The new engines are characterized equally by their environmental compatibility and their excellent smooth running.

In the new five-gear transmission, the 5th gear is designed as a direct gear.



Tests in extreme climates help to ensure the reliability of the new cars under all conditions.

This increases the efficiency of power transmission. BMW offers electronic control for automatic transmission in all series. Thus, drivers have a choice of three driving programmes. The 6-cylinder models can be fitted with a new five-gear automatic transmission that reduces markedly fuel consumption, as well as improving performance.

High-quality cars pave the way for new technologies

BMW cars hold a leading position in the major fields of automotive engineering. The Company has contributed substantially to the introduction of electronic controls, safe chassis and body designs, and processes and materials that help protect the environment.

The new 3 Series shows clearly how trendsetting technology, first introduced in the top car segment, can gradually

be made available to other customers. With the spread of new technical solutions, BMW has contributed for many years to the improved safety and environmental compatibility of road traffic.

In November 1990, BMW dealers and journalists from all over the world had an opportunity to judge the new cars for themselves. Their assessment was unanimously and unequivocally



The sub-assemblies, such as engine, transmission and suspension, are integrated into the bodywork in less than a minute.

positive. More significantly, the customers have already decided. Many ordered their new 3 Series BMW before the first cars went on public display.

The face of the new BMW 3 Series.





The BMW Research and Engineering Centre in Munich officially became operational in spring 1990. With an investment of DM 1.14 billion and an eight-year period of construction, facilities of about 1 million cubic metres have been built on an area of more than 100,000 square metres. 4,500 scientists, engineers, specialized staff and assistants are currently working at the Centre.

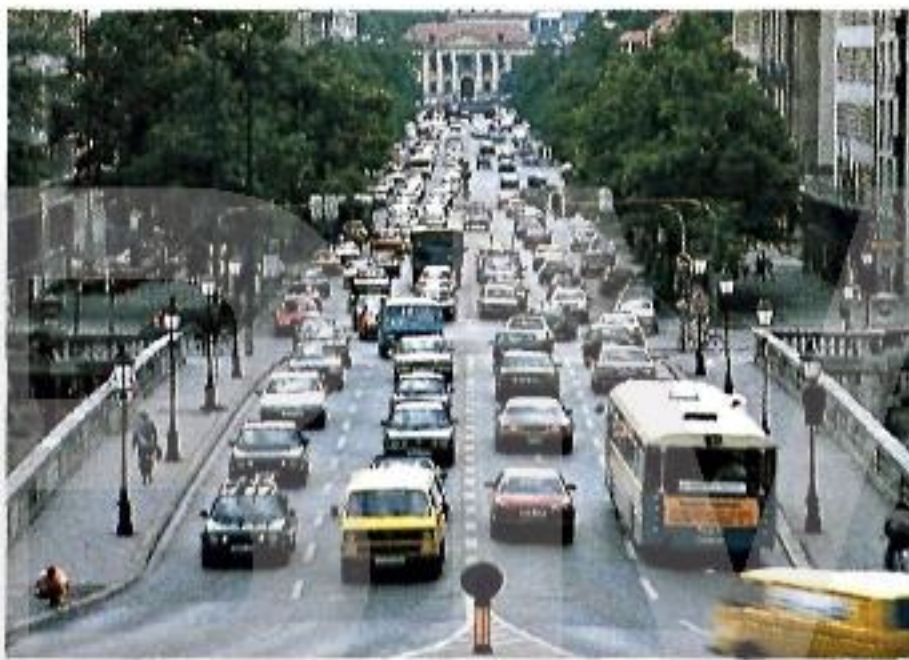
All fields, directly involved in the development of new vehicles, have been united under one roof. This permits new forms of work organization. Short distances and interdisciplinary cooperation between research,

development, production preparation, purchasing and logistics encourage the efficiency of the entire development process.

In May 1990, the 850i coupé made its international press debut in the Research and Engineering Centre. The second car developed at this Centre is the new generation of the 3 Series. The fact that both models went into series production in the same year indicates the high level of efficiency of the technical departments at the Research and Engineering Centre and in the plants.



The mobility of people and goods is one of the essentials of society. In the future, this mobility can only be safeguarded if all transport systems work together. On the initiative of BMW, possible forms of cooperation are already being tested.



Munich, Prinzregentenstrasse.

Mobility is essential

For most people, the car is a daily necessity for living, working, schooling and shopping. Without a car, many people would be unable to make full use of their leisure. Foreign travel would be more difficult. Furthermore, goods have to be transported quickly, safely and economically.

Whenever and wherever individual mobility is required, the car has a special role to play. In passenger transport, for example, it accounts for about 80 % of the traffic in the western part of Germany.

However, the worldwide success of the car leads regularly to road congestion. Traffic holdups, and bottlenecks at peak hours, are not primarily the result of the large numbers of vehicles, but rather a visible sign of poor organization.

Proposals that aim at reducing the number of cars through administrative intervention, without offering suitable alternatives, fail to take account of man's need for mobility. Private and public transport each have their specific advantages. Both transport systems belong together.

Regulating traffic as an overall system

Decisive progress could be achieved already at comparatively low cost through improved information to road users, control of traffic flow, and close cooperation between private and public transport.

For this, the individual transport systems, by road, rail, water and air, must be interlinked in an overall system.

At the same time, gaps in the road network must be closed, bottlenecks eliminated, poorly developed areas opened up, and the links within Europe improved. Moreover, the attraction of both urban and inter-city rail services should be enhanced to create a competitive alternative to the road.

However, the switch of transport services from road to rail is greatly limited by the available capacities. For example, if only 20 % of journeys up to 50 km switched from cars to public transport, passenger volume on trains and buses would increase by 120 %. In view of the overcrowded buses, urban railway and underground services, such prospects are unrealistic in the short term.

Overall traffic organization also includes the more equal distribution of transport demand through more flexible working and opening hours in industry, the retail trade, authorities and educational institutions. A new booking schedule in hotels would reduce noticeably the weekend traffic peaks.

In contrast, changes in urban structures or supraregional economic relations, aiming to reduce transport

Test area for a cooperative traffic system in the north of Munich between the Central Station and the new Munich Airport

-  Urban railway and underground, controlled by the operating control system
-  Motorways with altering traffic signs
-  Flashing beacons
-  Flow control
-  Control of traffic signals depending on traffic volume, with priority for public transport
-  Park-and-Ride centres
-  Dynamic parking information
-  Traffic Control Centre, Central Data Base Management System



demand, can only ease the situation in the very long term.

Fundamental research at European level

In order to make road traffic flow more freely, and to improve its safety and environmental compatibility, fourteen European car manufacturers and more than 50 scientific institutions from all over Europe began, in October 1986, to cooperate in a joint research project.

The industrial initiative PROMETHEUS focuses on the entire system of road traffic with its interactions between driver, vehicle, road and other road users. It is integrated into the European research project EUREKA. In this project, several hundred scientists and engineers are systematically bringing together applications of microelectronics, information, communications and vehicle technology, and linking them with the infrastructure.

The project DRIVE, supported by the European Commission, complements and extends PROMETHEUS in areas which cannot be covered by industry alone. BMW is participating in both projects.



Urban railway of Munich City Transport (MVG).



Computer centre for traffic guidance and control.

First tests in the north of Munich

Based on the findings of the European research projects, BMW seized the initiative in 1987 and indicated concrete solutions for the urgent traffic problems. In a pilot project, that can be applied to all congested urban areas, the traffic in the north of Munich is to be improved in cooperation with more than 50 partners – transport services, authorities, industrial firms and the Technische Universität, Munich.

In 1990, the city and region participated, with this project, in the POLIS initiative of the EC, in which the traffic problems of large European cities are to be solved by a comparable pattern.

Not only commuters, but also large numbers of travellers and lorries drive through Greater Munich each day. Thus, the city is particularly suited for demonstrating new technical and organizational solutions.

Interlinking existing information systems

The project was divided into two stages: collective traffic control in the short term and individual traffic guidance in the medium term.

First of all, the information already available on the road situation, the extent to which public transport and car park capacities are filled, timetables, and emissions of noxious substances, are being collected and evaluated by a central data base management system.

The input of this data base includes, inter alia, measurements taken on motorways, data from the police, the fire brigade and transport services, as well as the emergency and air monitoring services.

A control centre will then guide collectively the entire volume of traffic with the techniques available today, and provide road users and transport services with up-to-the-minute information on the road situation. Traffic flow can be substantially improved, simply by more frequent adjustment of the traffic lights to take account of traffic volumes.

Easing traffic flow through better information and control

The road user will be provided with important traffic information before starting a journey. Initially, this will be by means of an extended traffic radio service and VDUs which will be set up at public information points, such as railway stations and airports, but also in offices and private housing.

During the journey, guidance systems controlled by the volume of traffic will also inform drivers, unfamiliar with the locality, of the best route through the city, to garages with parking space, or to Park-and-Ride centres at urban railway and underground stations on the outskirts of the city or in the region. Recommendations will depend on the volume of traffic in the city and the extent to which public transport is filled.

Signals and dynamic indicator boards can regulate speeds on the access roads and the flow to the city centre. The technology required has been developed largely by the automobile and electronics industry.

Altering traffic signs which, in the case of Munich, begin long before the northern outskirts of the city, and a traffic computer centre in Munich-Freimann are already being constructed.

Park-and-Ride centres for convenience

In addition to the improved control of road traffic, public transport will also be better integrated into the overall system. If the interaction of road and rail is to be successful, attractive "junctions" must be developed.

The acceptance and economic feasibility of Park-and-Ride centres can be increased, for example, by service stations, shops and restaurants. BMW has offered to open the covered car park of its Research and Engineering Centre to all road users, free of charge, at weekends. Not only is it near an underground station but, with space for 3,150 cars, it is the largest private car park in Europe.

At a later stage, which can begin in 1994 at the earliest, the systems that work collectively are to be supplemented and extended by information systems for individual use. These include a highly-developed radio data system with which route-related traffic data can be called up individually by car drivers. The necessary technologies are either already on the market or currently being developed.

The BMW project aims to show that all road users can cooperate with one another with the means currently available. The experiences gained with the technology, economic efficiency and acceptance of the cooperative traffic system in Munich and its surroundings

An overall information system is planned to guide goods transport on the road. BMW is contributing its special experience with logistics to the development of this system. Satellite-assisted systems are also opening up new possibilities.

However, the restrictive rules and regulations of the transport market still stand in the way of efficient goods transport. For example, the transport of third-party goods by plant-operated long-distance traffic is prohibited. BMW is in favour of liberalizing the rules and regulations of the transport market.

Combined transport systems have been successful at BMW for years

BMW has worked for years on transport systems for vehicles, materials and spare parts, with the aim of shifting increasingly goods transport from road to rail.

Since 1988, regional transport companies have collected consignments from BMW suppliers in the area and assembled them, each day, into complete container trains which supply the Bavarian plants overnight. This com-

Propulsion systems and energies of the future

Since cars will continue to account for the largest proportion of traffic, BMW is working on alternative technologies, some of which will be only generally available in the distant future.

Since the early 1980s, the Company has been developing a car engine run on liquid hydrogen. BMW cars with electric motors have already proved successful in first practical tests in city traffic. Development and tests are being intensified.



The new Munich Airport at Erding.



Planning journeys at public information points.



Cooperation between road and rail in the transport of materials for BMW plants.

can be applied to other congested urban areas.

Empty journeys still common in freight transport

Freight transport could also be improved to make the most of existing infrastructure.

In the western part of Germany, for example, about one-third of lorries travel empty; more than 40% of railway wagons also travel empty due to poor coordination.

On the initiative of BMW, therefore, a working group was set up with the railway in 1990. Its task is to organize, along with other car manufacturers, traffic flows so that the capacities of trains used wholly for car transport are always fully utilized in both directions.

Combined transport system has already proved successful for consignments from North-Rhine/Westphalia and Frankfurt am Main.

Similar links are being established for northern Germany, France and northern Italy. Engines from the BMW plant at Steyr, in Austria, have been delivered overnight for eight years.

In order to help ease traffic in built-up areas, BMW arranges increasingly for consignments of materials to be transported, whenever possible, at times of lower traffic densities.

Advantage is already being taken of the possibilities of cross-frontier distribution systems, offered by the Common Market, for supplying the European markets with vehicles and parts. Using new concepts, quantities of goods are collected and transported long distances by trains reserved entirely for that purpose.

BMW engineers are working on the extensive recycling of scrapped cars. This saves natural resources. In 1990, pilot facilities became operational at the Landshut plant. Together with other manufacturers, and the raw materials and supplier industries, a Europe-wide concept is being elaborated.

German manufacturers elaborate proposals for solutions

In January 1990, on the occasion of the Detroit Motor Show, BMW exhorted the international car industry to cooperate more closely in solving the task of the future: recycling. Meanwhile, German manufacturers have formed a working group to create, and put into practice, joint concepts for the comprehensive recycling of scrapped cars.

Talks have begun with the raw materials and supplier industries on an interdisciplinary and international concept. They are also being conducted within the framework of the Confederation of the European Automobile Industry which has meanwhile adopted the German initiative.

While good progress has already been achieved in the development of dismantling and reprocessing techniques, logistics and the marketing of recycled products currently stand in the foreground.

Maximum use of scrapped cars as a source of raw materials

For years, about 75 % of a car's weight, primarily metal materials, has been reprocessed either in the steel industry or the remelting sector. The remaining 25 % is mainly a mixture of plastics, rubber, textiles, glass and operating fluids which cannot be re-used at present.

BMW is, therefore, working with other car manufacturers, the steel, mineral oil and chemicals industries, shredder and car scrap-yards, on new methods and techniques to further increase the volume of components

and materials that can be re-used from scrapped cars.

If the present obstacles, such as the large variety of materials or inadequate reprocessing methods, can be overcome, it will be technically possible to recycle as much as 95 % of a scrapped car in the medium to long term.

Recycling – already well-advanced at BMW

The Company already has several years of experience in the reprocessing of components and materials. In 1987, BMW was the first car manufacturer to take back catalytic converters from old cars. In cooperation with the "cat" manufacturers, metal parts and the costly precious metals, platinum and rhodium, are recovered.

At BMW's Munich plant, recycling methods are also used for electronic components.

As early as 1965, BMW began with the repair of old units and components. In 1990, at the Landshut plant thousands of engines, rear axle transmissions, starters, dynamos and water pumps were reprocessed, using high-grade recycling methods, and, after thorough quality tests, offered as Genuine BMW Parts. These parts carry the usual BMW guarantee. The entire range includes 1,700 items.

Scrapped parts and plastic materials left over from production are reprocessed at the Landshut plant and used for the manufacture of new parts. These include injection-moulded parts for the luggage compartment trim in the new 3 Series cars.

Type of material	Material	Recycled proportion in % (approx. values)
Ferrous metals	Steel	85
	Cast iron	85
Non-ferrous metals	Aluminium	90
	Copper	60
	Lead	90
	Zinc	25
Polymers	Plastics Rubber	5–10 low
Others	Glass, textiles, operating fluids, etc.	low

The recycling of materials includes the reprocessing and re-use of components and materials, and chemical recycling. Thermal disposal and energy processing are not included in the data. BMW is making special efforts to develop recycling for polymers and glass which, at present, can only be re-used to a limited extent.

On average, about 75 % of the weight of the materials of scrapped cars can be re-used. Higher percentages are already achieved at the BMW plants through separation according to types, particularly of plastics.

Environmental protection has been included in technical planning at the BMW car plants since the early 1970s. In the meantime, up to 80 % of the weight of the residual materials can be used as a result of careful sorting.

The widespread use of energy-conservation and water-saving methods is a clear indication of the progress that has been made in the field of recycling technology. For example, fresh water is treated up to six times during the production sequence at BMW plants.

Pilot facilities at Landshut

As early as 1988, BMW aimed at separating and re-using as completely as possible, or reprocessing with a minimum impact on the environment, the individual parts of scrapped vehicles, using industrial dismantling techniques.

The Company made a major step forward in 1990. At one of its own production plants, in Landshut, test facilities for the dismantling of scrapped cars became operational. The logistical and technical conditions for operation are particularly favourable because of the facilities' proximity to rebuilt parts production, the recycling of catalytic converters, and the BMW Plastics Research Centre.

The experience gained is being used to develop dismantling techniques for specific types of car, and logistical structures. This work will provide the basis for determining which parts can be reprocessed both technically and economically.

In a pilot phase lasting two years, old and new cars are dismantled in four

work stations after all the fluids have been removed.

The findings of this pilot project, stored in a central data bank, will be incorporated directly into the research and production technology of new generations of cars.

Focus on plastics

Special attention is being paid to the reprocessing of plastics, although plastics from cars account for only about 7 % of total plastics waste. Today, a medium-sized car generally contains about 20 different plastics, making up about 10 % of the car's total weight.

Composite structures made of plastics and metals, and mixtures of different plastics, may be highly suitable for a large number of applications, but at present can only be separated by very high expenditure. In contrast, parts which can be dismantled easily and are made of a single type of plastic, such as the bumpers and tanks of BMW cars, can be dealt with economically.

The German manufacturers have already agreed to use uniform designations for plastics in order to facilitate later sorting. This is the only way that scrapped parts can be reprocessed into high-quality products. The Confederation of the European Automobile Industry has meanwhile adopted the German proposals and is appealing for their worldwide introduction.

In the case of plastics, the Company also favours high-grade recycling in the form of repair concepts, material separation and conversion techniques, rather than by thermal processing.

Only joint solutions have prospects of success

BMW supports inter-company cooperation in the solution of today's problems. Each partner from industry, universities and research institutes should elaborate the best possible methods within his field of competence for integration into an overall concept.

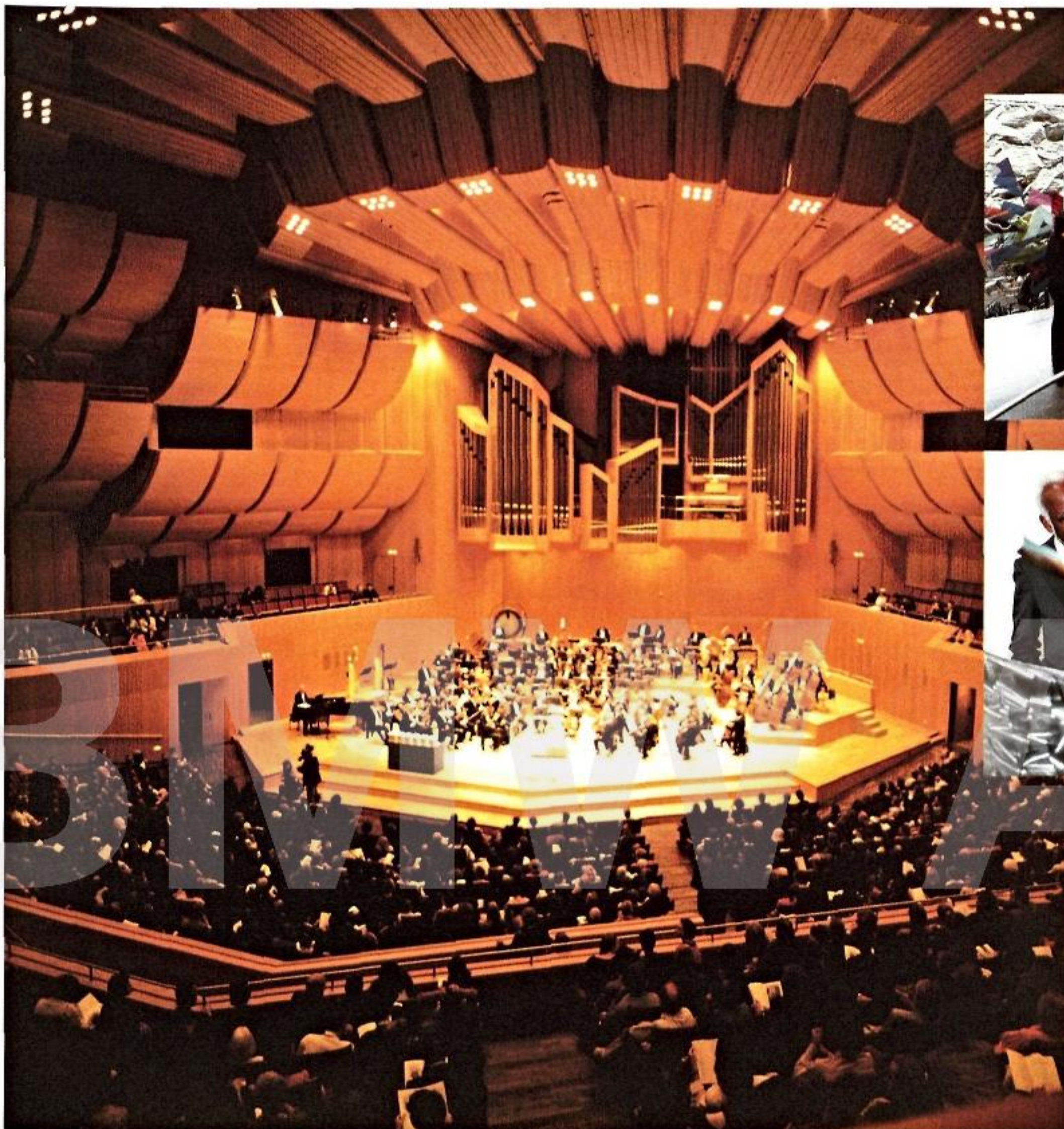
In addition to the central reprocessing of scrapped cars, decentralized concepts are being examined with the participation of medium-sized firms.

The existing facilities and experience of the car scrap-yards are essential for the development of logistical structures.





Cultural commitment is part of BMW's corporate philosophy. This includes dealing with new and avant-garde trends in society, art and technology.



The Munich Biennale of New Music Theatre took place, for the second time, in 1990. Once again, it was held under the artistic direction of Hans Werner Henze. BMW supports this international festival with, among other things, five Music Theatre Prizes for outstanding achievements in the fields of opera scores, stage production, scenery, musical direction and, in costume theatre, for the best composition and realization.

The prizes were awarded by an international jury. Lord Harewood was Honorary Chairman. The seven jury members included Violeta Dinescu from Romania, Nikolai Korndorf from the USSR and Mark-Anthony Turnage from Great Britain.

At the same time as the Biennale, BMW held a programme of events in its own pavilion on the Lenbachplatz in Munich. The range extended from panel discussions on the "Sponsoring of Culture and Artistic Freedom", through workshops and "sound sculptures" to an exhibition of unusual musical instruments. The visitors often became involved in the interplay of technology and music.



The Company's success depends increasingly on the skills, commitment and creativity of its workforce. Therefore, constant further education is essential. BMW has increased its education activities year by year. "Teach Yourself Centres", and other forms of imparting knowledge, enable the individual to determine the learning process.

Increasing demands on employees

Increasingly short cycles for technical innovations accelerate the development of new working methods and production processes. As a result, work structures and cooperation in the Company also change. Interdisciplinary forms of organization and increased team work are becoming essential.

In addition to vocational qualifications, employees are expected increasingly to have a sense of responsibility and entrepreneurial skills. Therefore, investments in plants and systems go hand in hand with comprehensive education and training schemes.

The Group's international orientation, worldwide competition, and the development of the general economic and social conditions, present managerial staff in particular with new tasks. BMW meets this challenge by increasing its education and training schemes and by the international exchange of personnel.

These schemes do not aim solely at imparting professional skills, but also at promoting in-company cooperation and employees' leadership qualities. In addition, employees should be enabled to comprehend more quickly technical and social developments, and to put them to practical use in the Company. In 1990, demand increased for education and training schemes in which the learning process can be individually controlled.

Brisk demand for education and training schemes

A comprehensive range of education and training schemes contributes to the Company's attraction as an employer. In the last few years BMW has increased considerably the number of such schemes. As a result, the number of participants in upgrading and further education programmes has doubled in the last five years. At the BMW companies in Germany alone, almost 60,000 employees took part in the year under review.

Employees spent more than one million hours on company education and training in 1990; about 170,000 hours during their leisure time.

The Company invested more than DM 120 million worldwide in the qualification of its workforce in the year under review. This amount corresponds to the annual budget of a small German university. It does not include the continued payment of wages and salaries during training.

Education and training at BMW is divided into initial vocational training, upgrading during working hours and further education during leisure time.

Technical training at the core of company upgrading schemes

Training is important, but it is not enough to ensure lasting career success. In technical disciplines in particular, the contents of university curricula are often outdated within a few years. Furthermore, the knowledge, taught as separate subjects at universities and technical colleges, has to be harnessed to the needs of the Company.

Therefore, the staff's knowledge and skills are updated and increased regularly. BMW has created appropriate conditions with upgrading schemes geared to requirements and specific tasks.

While computer-integrated systems were being introduced in the plants, electronic data processing advanced in the offices. Initially, this involved practicing the application of computer technology at the workplace. Now, emphasis is on the optimum application of these systems. In the year under review, 7,300 employees took part in courses on new information technologies.

New forms of cooperation gain ground

Increasingly complex activities in the Company can be solved efficiently only with interdisciplinary working methods. Team work in project groups is becoming increasingly important for both specialized and managerial staff. Methods of project management are, therefore, just as important a part of education and training schemes as technologies for problem-solving and presentation.

Initial vocational training at a high level

Company education and training begins with initial vocational training for young people. Half the education and training schemes at BMW are devoted to this field. Despite the trend towards a decline in applications, demand for apprenticeships exceeded markedly the number of places available in 1990.

At the end of 1990, some 3,000 young people were receiving training in the Group. BMW offers training in five commercial and 25 industrial-technical occupations. More than 100 full-time and about 850 part-time instructors are employed to provide this training.

In 1989, the training courses for industrial metal-working and electrical jobs were reorganized, with the cooperation of BMW experts, in order to make them more practical. Experience gained so far confirms the attraction of the new job descriptions for applicants and Company. Industrial-technical training includes the performance of some planning and minor production tasks.

There is a special training programme for high-school leavers. Participants acquire their knowledge during daily work and evening classes over a three-year course. Upon completion of training, these young people gain employment as specially skilled manpower.

As part of the BMW Trainee Programme, selected university graduates are offered one-year professional training. More than 200 trainees have taken advantage of the programme since it began in 1972. Most of them now hold responsible posts at BMW.



The "Lernstatt", introduced at BMW 17 years ago, continued to be a practical form of cooperation at the plants. Participants in "Lernstatt" groups can develop, on the spot, their own solutions to problems in keeping with requirements.

This form of company training has proved particularly successful for safeguarding the BMW standard of quality.


Employees in the production plants are also trained for the application of new technologies and for the performance of maintenance functions.

Managerial staff as entrepreneurs within the Company

The unremitting decentralization of management responsibilities changes the demands made on managerial staff.

The guiding principle for BMW managerial staff is to be an entrepreneur within the Company, assuming responsibility for achievements and success in his field of work, and thus contributing decisively to the long-term positive development of the Company.

Since BMW gains a large proportion of its young managerial staff from its own ranks, management training is of particular importance. It serves to spread a BMW "management culture" throughout the Group. At each level of management, training has been coordinated to suit respective tasks. These courses drew 2,400 participants in the year under review.



In mid-January 1991, the annual fair for university contacts of the student initiative AIESEC brought BMW and a number of other firms to the Ludwig Maximilian University in Munich.

Increasing numbers of students want information, in good time, about trainee and student programmes in industry, practice-related subjects for theses, and career programmes at companies. BMW has supported this initiative for many years by participating in contact and trade fairs.

In 1990, the universities in Aachen, Karlsruhe, Munich and Regensburg, as well as the trade fairs CeBIT, Hanover Industry Fair, and Systec, hosted the information events. At international level, BMW participated, for the first time, in the Euromanagers' Forum in Brussels.

On such occasions, students are given insight into the many career opportunities at BMW.



Special lectures, corporate presentations, rounds of discussions and personal advice provide many opportunities for obtaining information and establishing contacts between students and the Company's personnel officers.





Managerial staff discuss current questions of the Company's development in numerous forums at the plants and in the divisions. In 1990, a special Technical Forum was created to discuss the state of the art and the future development of automotive engineering.

BMW offers future foremen training in leadership, geared to the special demands of the first managerial level in production. After receiving several weeks' training, the young employees are allowed to perform specific tasks in their future field of work. Assignments, lasting several days, to neighbouring departments deepen their knowledge of interdisciplinary work sequences and provide insight into different leadership situations.

New methods of imparting knowledge

Since the demands of company education and training are increasing in terms of scope and quality, new, flexible methods of imparting knowledge are increasingly being applied.

Thus, a growing proportion of training is with computer-assisted learning programmes directly at the workplace, or in "Teach Yourself Centres".

The application of new knowledge at the workplace is safeguarded and deepened by a comprehensive network of advisers in the various specialized fields. They help to recognize and eliminate, in good time, sources of error in work sequences and technical systems.

With this method of imparting knowledge, it is possible to disseminate new findings and skills throughout the Company both quickly and permanently.

In the year under review, the technical conditions were created for transmitting education and training programmes via satellite television. The accelerated spread of knowledge thus achieved ensures a uniformly high level of information and qualifications at all group companies.

Further education during leisure time

In view of ever-decreasing effective working hours, more and more employees are prepared to use their leisure time for personal education schemes. BMW offers a varied programme. Within three years, the number of participants in evening and weekend courses rose from 4,000 to some 11,000.

The further education programme covers many different fields. Employees can take advantage of a range of subjects from language training through the latest findings in science and technology to intensive courses on individual development and life style.

In cooperation with the Open University of Hagen, the first study centre of its kind was opened in Southern Germany. Meanwhile, some 400 BMW employees have taken part in correspondence courses. Their aim is to obtain recognized qualifications in technical and commercial studies during their leisure time.

Company education and training schemes increasingly important

Since modern technical plant and methods for car production are, basically, accessible to all competitors, the Company's future success will depend to a special degree on the skills, commitment and creativity of its employees.

The high proportion of BMW employees with professional qualifications provides an excellent basis for future success. More than two-thirds of the commercial employees have recognized vocational qualifications. One in three of the 18,500 employees at BMW has a university degree or technical college qualifications.

The future increasing demand for qualified employees will contrast with the stagnating or even decreasing supply. Already, engineers and skilled manpower with certain "bottleneck qualifications" are much sought after on the labour market.

Therefore, the constant further education of the employees is essential for the Company's success. Since company education and training also meets employees' wishes for personal advancement, it serves the aims of employees and Company alike.



Income from normal business in the BMW Group rose to DM 1.7 billion. The cash flow covered investment in fixed assets by 135 %. Greater use was made of the international money and capital markets.

Group's net income for the year markedly increased again

In 1990, the sales of the BMW Group rose to DM 27.2 billion, 2.5 % more than in the previous year. Stronger growth was prevented by declining exchange rates for the US and the Canadian dollar, and for the Japanese yen.

The share of expenditure on materials in the total value of production decreased from 57.4 % to 57.0 %. The 13.0 % increase in expenditure on personnel to DM 5.3 billion is due to rises in collectively and individually agreed wages and salaries, higher pension fund provisions, and the growth of the workforce in the Group. Expenditure on personnel for the workforces of the KONTRON companies and the BMW Bank GmbH was included for the first time.

Depreciation increased by 14.8 % to DM 1.8 billion as a result of higher investment in fixed assets.

Interest income improved markedly, with the BMW Bank GmbH and other sales financing companies, included for the first time, accounting for DM 124 million. Interest income improved further because of higher interest rates and a larger portfolio of marketable securities and notes in current assets.

Expenditure on interest from the financing of the leasing business rose with the increasing number of leased products and as a result of higher interest for refinancing.

Income from normal business improved by 6.6 % to DM 1,664 million. Group taxes declined as a result of tax cuts in major purchasing countries.

Thus, the Group's net income for the year amounts to DM 696 million (compared with DM 558 million in 1989); an increase of 24.7 %.

Balance sheet ratios continue to be sound

Tangible fixed assets accounted for 28.2 %, and current assets for the production and worldwide marketing of BMW cars and motorcycles, and components produced by KONTRON Elektronik GmbH, for 22.9 % of the group assets of DM 22.5 billion. Assets from sales financing accounted for 28.0 %, and financial assets, marketable securities, notes and liquid funds for 20.9 % of the group assets.

Additions to tangible fixed assets of DM 2.1 billion were balanced by depreciation and retirement of fixed assets of DM 1.9 billion. Inventories and trade receivables increased both in keeping with the growth in sales of BMW cars and as a result of the inclusion, for the first time, of the KONTRON companies among the consolidated companies. The shares in BMW Rolls-Royce GmbH, Oberursel, increased financial assets.

26.0 % of the group assets were financed by shareholders' equity amounting to DM 5.9 billion. Together with registered dividend right certificates, provisions and deferred items totalling DM 7.7 billion, 60.2 % of the group assets are covered. Long- and short-term liabilities amounting to DM 8.9 billion account for 39.8 % of the balance sheet total.

The subscribed capital and capital reserve increased with the issue of

shares to employees, and the profit reserves rose as a result of transfers from the year's net income, by a total of DM 0.5 billion. DM 1.6 billion of the shareholders' equity comes from capital contributions, DM 4.3 billion was earned in the Group. Shareholders' equity covered 87.4 % of fixed assets.

Provisions increased by DM 0.3 billion, amounting to DM 6.5 billion. Regular business accounted for DM 4.4 billion of the liabilities. Sales financing accounted for DM 5.5 billion of the liabilities, the increase of DM 1.0 billion being due to the growth in corresponding assets.

Cash flow increased by more than DM 500 million

The cash flow financed completely investment in fixed and financial assets. The cash flow of DM 2.8 billion, generated in 1990, exceeded substantially investment in fixed assets and the acquisition of investments totalling DM 2.2 billion.

Group Statement of Sources and Application of Funds

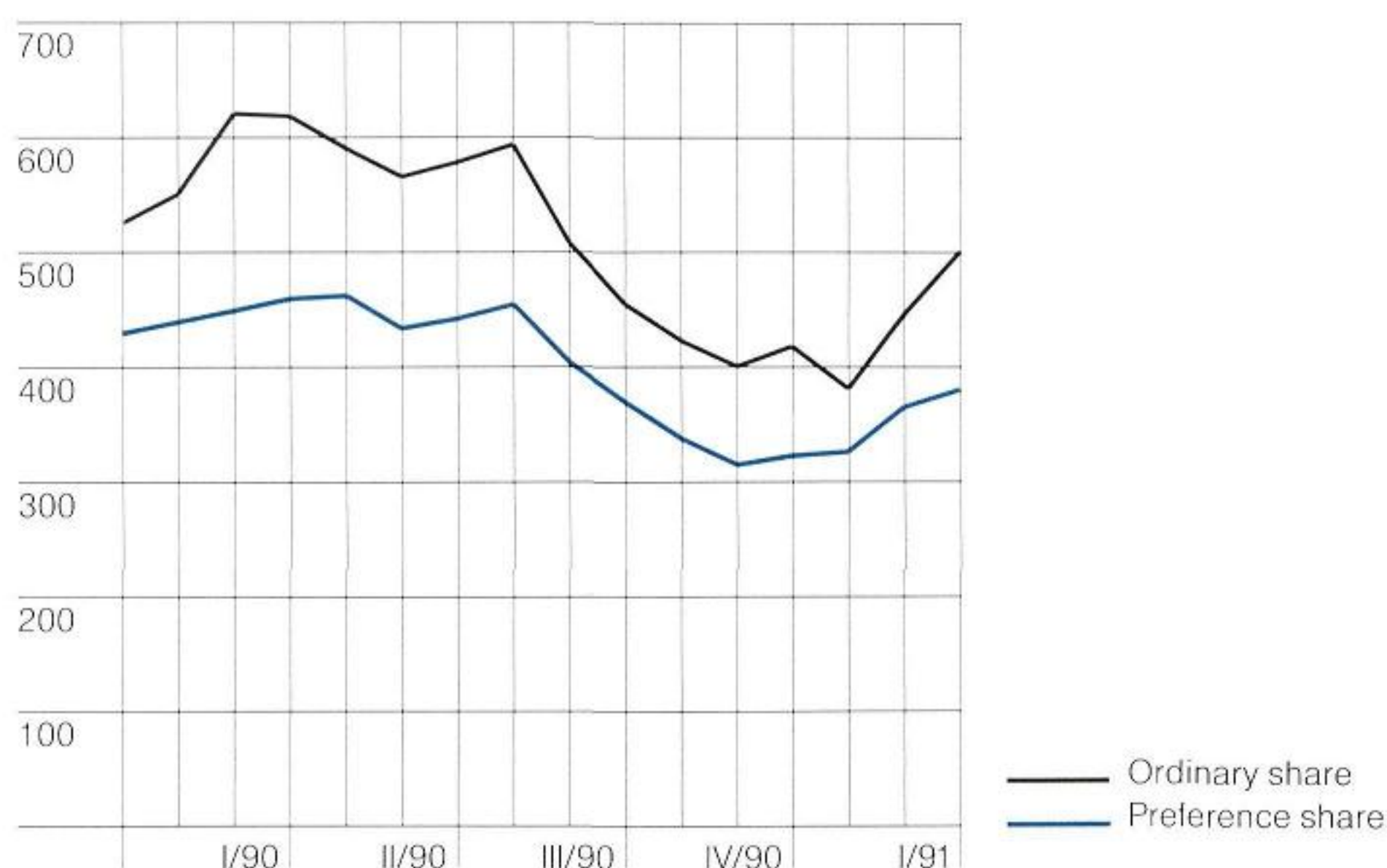
in DM million

1990

Year's net income			+ 696
Depreciation and retirement of intangible assets and tangible fixed assets			+ 1,893
Increase in pension fund provisions			+ 191
Internally generated financing (cash flow)			+2,780
Increase in capital contributions			+ 29
Increase in liabilities from sales financing			+ 712
Decrease in bank dues			- 46
Increase in other liabilities			+ 60
External financing			+ 755
Additions to intangible assets and tangible fixed assets			- 2,066
Increase in financial assets			- 165
Increase in assets from sales financing			- 1,012
Increase in inventories			- 155
Increase in trade receivables			- 227
Change in other balance sheet items			+ 123
Application of funds			- 3,502
Change in liquidity			+ 33
Development of liquidity	31.12.1990	31.12.1989	
Marketable securities and notes	2,138	2,084	+ 54
Liquid funds	2,206	2,227	- 21
	4,344	4,311	+ 33

Development of the BMW Share Price

Monthly average in DM



Financial policy

The dynamic development of the BMW Group requires flexible instruments to finance the various business activities. Special attention is paid to the management of the Group's internal resources and liabilities.

In view of the liability function of the shareholders' equity, the allocation of capital to the individual subsidiaries depends on the structure of their assets. Thus, low-risk and liquid assets, such as in the sales financing and service businesses, are not subject to the same criteria for the capital resources available as production companies with a high proportion of fixed assets. National and statutory peculiarities, as well as profitability, are also considered. The subsidiaries' capital is, basically, made available from earned income and is thus linked to the Group's reserves.

Borrowings are procured economically through the international money and capital markets. Project-related financing plays an increasingly important role.

The growing liberalization of the financial markets is giving rise to many financing possibilities that are geared to specific requirements. In spring 1990, for example, a credit line of DM 1.4 billion US dollars was set up for the BMW Group with the cooperation of 36 banks represented worldwide. This credit line is available to all BMW companies, in the long term and under the same conditions, as a financing reserve.

Long-term borrowings are procured primarily by bond issues on the capital markets. With suitable instruments to

hedge interest and currency rate risks, these funds are structured in line with the Group's requirements as to terms and currencies.

The international financial market also offers individual types of financing in the short and medium term. These include the securitization of receivables from sales financing, and the sale of receivables from the leasing business. These assets have a high degree of liquidity.

The BMW financing companies play a key role in borrowing funds and in providing group companies with financial resources. In this context, the capital of the BMW Coordination Center N.V. in Belgium was increased by BFr 6.1 billion to BFr 6.5 billion in the year under review.

At the end of 1990, holdings of liquid funds, marketable securities and notes amounted to about DM 4.3 billion. At more than 9%, the yields of long-term securities were higher in 1990 than they had been since 1982. This interest level was secured for a medium to long period by increased purchases of fixed-interest securities with medium to long terms for the investment of the BMW Group's liquid funds.

Stock exchange quotation and market capitalization

The BMW share is listed on all German stock exchanges. It is also admitted to official trading on the stock exchange in Austria and Switzerland.

Calls and puts for BMW shares have been traded on the newly opened German Futures Exchange (DTB) since January 1990.

With market capitalization of about DM 8 billion, based on the share price in mid-March 1991, BMW is among the 15 largest companies limited by shares under German law on the German Share Index (DAX).

Development of the BMW share price

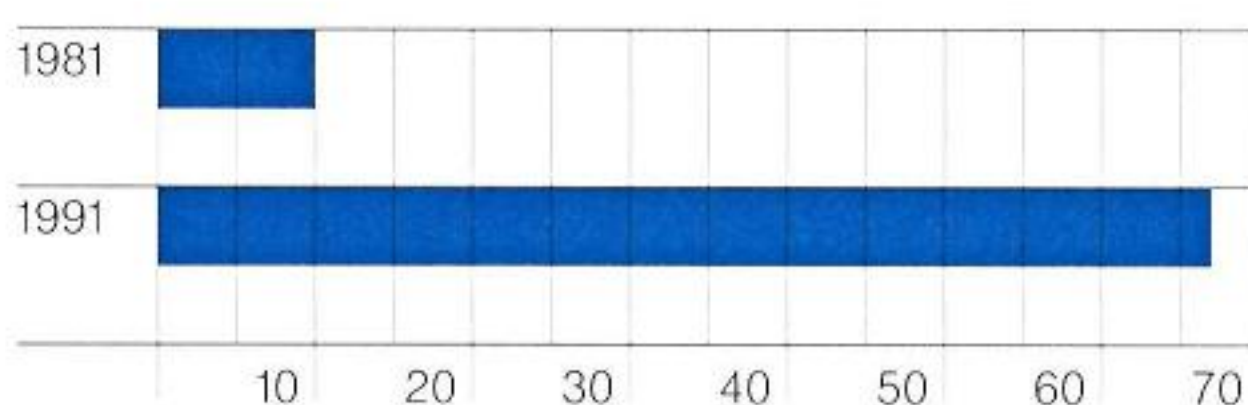
BMW shares were also affected by the strong price fluctuations on the stock exchanges in the year under review.

Drawn into the bullish upward trend during the first quarter, the BMW ordinary share peaked at DM 658 in mid-February 1990. In the second half of the year, mainly as a result of the Gulf crisis, share prices dropped sharply on the stock exchanges. This also affected BMW shares.

On the last day of trading in 1990, BMW shares were quoted at almost their lowest price for the year. After the turn of the year, BMW shares recovered to reach about DM 510 in mid-March 1991, until then the highest price achieved by the ordinary share in the new year. With a price increase of about 30%, the share developed markedly better than the overall market trend during this period.

Increase in Value of an Investment in BMW Shares

in thousand DM



Amount invested on 2.1.1981: DM 10,000
 Value of portfolio on 15.3.1991: DM 67,000

High dividends

BMW has pursued a shareholder-friendly dividend policy for years. Dividend payments are high.

The Board of Management and the Supervisory Board propose to the Annual General Meeting that a dividend of DM 12.50 be paid per ordinary share and DM 13.50 per preference share for the 1990 business year. Total dividend payments of DM 198.9 million will thus be DM 5.9 million higher than in the previous year. Judging by the share price at the end of the year and taking account of the tax credit, the ordinary share has a dividend yield of about 5 % (compared with 3.5 % in 1989) and the preference share one of about 6.5 % (compared with 4.6 % in 1989).

High yield for long-term investment in BMW shares

Long-term investment in BMW shares is extremely profitable. For example, DM 10,000 invested at the beginning of 1981 had increased to DM 67,000 by mid-March 1991. This corresponds to an average yield of about 21 % per annum.

In this example, it is assumed that the dividends, including the corporation income tax credit and proceeds from subscription rights, were reinvested regularly in BMW shares.

The share price was about DM 155 at the beginning of 1981; in mid-March 1991 the ordinary share was about DM 510 and the preference share about DM 390.

BMW shares

	Ordinary share		Preference share	
	1990	1989	1990	1989
Number of shares in thousands	15,000	15,000	874	812
Key data per share¹⁾ in DM				
Dividend	12.50	12.50	13.50 ²⁾	13.50 ²⁾
Tax credit	7.03	7.03	7.59	7.59
Net income for the year	43.92	36.22	43.92	36.22
Cash flow	175	147	175	147
Shareholders' equity	370	349	370	349
Stock exchange quotation in DM				
Year end	387	563	325	457
High	658	639	485	512
Low	377	485	290	398

¹⁾ Average number of shares outstanding in thousands
 1990: 15,843; 1989: 15,406

²⁾ Entitled to half the dividend payment in the year of issue.

BMW AG

Consolidated Balance Sheet

at December 31, 1990
in DM thousand

Assets	Notes	31.12.1990 DM thousand	31.12.1989 DM thousand
Intangible assets	(1)	4,942	7,922
Tangible fixed assets		6,338,913	6,162,915
Financial assets	(2)	363,128	198,024
Fixed Assets		6,706,983	6,368,861
Inventories	(3)	2,543,979	2,389,478
Leased products		2,775,903	2,468,389
Receivables from sales financing		3,529,877	2,825,691
Assets from sales financing	(4)	6,305,780	5,294,080
Trade receivables	(5)	1,414,453	1,187,495
Other receivables and miscellaneous assets	(5)	869,166	818,011
Marketable securities and notes	(6)	2,137,637	2,084,001
Liquid funds	(7)	2,206,143	2,227,422
Current Assets		15,477,158	14,000,487
Prepaid Expenses and Deferred Taxes	(8)	317,191	319,442
		22,501,332	20,688,790
Shareholders' Equity and Liabilities	Notes	31.12.1990 DM thousand	31.12.1989 DM thousand
Subscribed capital	(9)	793,690	790,600
Capital reserve	(9)	774,793	749,332
Profit reserves	(10)	4,037,434	3,593,441
Net income available for distribution		198,879	192,981
Investment of other shareholders	(11)	54,806	44,312
Shareholders' Equity	(12)	5,859,602	5,370,666
Registered Dividend Right Certificates		104,534	105,717
Pension fund provisions		1,295,844	1,104,975
Other provisions		5,212,474	5,061,522
Provisions	(13)	6,508,318	6,166,497
Bonds		1,500,368	1,607,562
Due to banks		603,971	543,114
Trade payables		1,463,438	1,334,761
Other liabilities		857,049	925,160
Liabilities	(14)	4,424,826	4,410,597
Liabilities from sales financing		4,533,196	3,821,154
Deferred income from leasing financing		969,292	728,365
Liabilities from Sales Financing	(15)	5,502,488	4,549,519
Deferred Income		101,564	85,794
		22,501,332	20,688,790

Consolidated Statement of Income

for the 1990 business year
in DM thousand

	Notes	1990 DM thousand	1989 DM thousand
Net Sales	(16)	27,177,615	26,515,351
Increase in product inventories and other company-produced additions to tangible fixed assets	(17)	462,167	124,257
Total Value of Production		27,639,782	26,639,608
Other operating income	(18)	986,124	775,420
Expenditure on materials	(19)	15,749,312	15,280,148
Expenditure on personnel	(20)	5,313,123	4,700,120
Depreciation on intangible assets and on fixed assets	(21)	1,777,981	1,548,800
Other operating expenditure	(22)	4,261,297	4,346,140
Income from investment in subsidiaries and associated companies	(23)	3,920	7,192
Interest income	(24)	319,079	146,116
Interest expenditure from leasing financing	(25)	183,664	131,938
Income from normal business		1,663,528	1,561,190
Taxes on income and profits	(26)	831,669	889,430
Other taxes		135,996	113,698
Year's Net Income	(27)	695,863	558,062

Development of Intangible,
Tangible Fixed and Financial Assets
of the Group

	Gross value 1.1.1990 DM thousand	Additions DM thousand	Retirements DM thousand
Intangible Assets	32,783	4,150	8,716
Real estate, equivalent rights and buildings, including buildings on land not owned	3,929,820	212,579	27,876
Technical plants and machinery	9,516,794	1,166,842	292,815
Other plants, fixtures, furniture and office equipment	1,327,292	334,377	145,415
Advance payments and construction in progress	731,415	347,832	75,730
Fixed Assets	15,505,321	2,061,630	541,836
Investment in subsidiaries	90,143	238,889	84,166
Loans to subsidiaries	18,874	9,425	18,554
Investment in associated companies	25,249	1,421	2,000
Investment	44,188	9,718	-
Loans to companies in which an interest is held	33,333	3,581	1,588
Other loans	12,547	14,284	3,770
Financial Assets	224,334	277,318	110,078
Intangible, Tangible Fixed and Financial Assets	15,762,438	2,343,098	660,630

Transfers DM thousand	Gross value 31.12.1990 DM thousand	Accumulated depreciation DM thousand	Net value 31.12.1990 DM thousand	Net value 31.12.1989 DM thousand	Depreciation of the business year DM thousand
-	28,217	23,275	4,942	7,922	6,934
181,717	4,296,240	1,420,483	2,875,757	2,705,613	200,431
397,145	10,787,966	8,161,986	2,625,980	2,319,072	1,256,579
23,028	1,539,282	1,103,733	435,549	406,815	314,037
- 601,890	401,627	-	401,627	731,415	-
-	17,025,115	10,686,202	6,338,913	6,162,915	1,771,047
-	244,866	-	244,866	90,143	-
-	9,745	-	9,745	18,874	-
-	24,670	-	24,670	25,249	-
-	53,906	26,462	27,444	19,868	2,142
-	35,326	65	35,261	33,263	-
-	23,061	1,919	21,142	10,627	10
-	391,574	28,446	363,128	198,024	2,152
-	17,444,906	10,737,923	6,706,983	6,368,861	1,780,133

Consolidated Companies

In addition to BMW AG, basically all the subsidiaries in the Federal Republic of Germany and abroad are included among the consolidated companies in accordance with the requirements of the Law on Balance Sheet Principles.

The consolidated companies comprise BMW AG, 14 subsidiaries in the Federal Republic and 36 subsidiaries abroad.

Compared with the previous year, 4 subsidiaries in the Federal Republic and 3 subsidiaries abroad are included, for the first time, in the consolidated financial statements. One subsidiary abroad is no longer included. 18 subsidiaries in the Federal Republic and 23 subsidiaries abroad are not included because of their small significance to the Group's financial and earnings position.

BMW Rolls-Royce GmbH, Oberursel, was not included in accordance with Section 296 Para. 1 No. 2 HGB (Commercial Code).

One associated company in the Federal Republic is included in the consolidated financial statements using the equity method. 11 associated companies are not included because of their small significance.

A list of the investments held by the BMW Group is deposited with the Commercial Register of the Munich Local Court (HRB 42243).

Principles of Consolidation

The capital is consolidated according to the book value method by offsetting the acquisition cost with the group share in the shareholders' equity of the consolidated subsidiaries at the time of purchase or initial consolidation. The resultant difference is offset against profit reserves.

The same principles are applied for showing associated companies in the balance sheet according to the equity method.

Receivables, liabilities, sales, expenditure, income and earnings between group companies are eliminated.

Currency Conversion

The intangible, tangible fixed and financial assets arising from the financial statements of subsidiaries, prepared in foreign currencies, are valued with historical exchange rates in the consolidated financial statements. Other balance sheet items are converted into D-marks at the exchange rate on the balance sheet date.

Like the intangible, tangible fixed and financial assets, depreciation and write-ups are converted at historical exchange rates, the other expenditure and income items at the year's average exchange rate. The year's income is converted at the exchange rate on the balance sheet date.

Currency differences arising from the conversion of balance sheet items are offset against the shareholders' equity without affecting net income. If they result from the use of different exchange rates in the statement of income, they are shown in other operating expenditure.

Receivables and liabilities denominated in a foreign currency are valued at the buying rate in the individual financial statements of BMW AG and the subsidiaries. Exchange losses on the balance sheet date are taken into account. If the exchange rate for receivables and liabilities denominated in a foreign currency at subsidiaries abroad is covered by forward exchange contracts, valuation is at the respective covered rate.

Principles of Balance Sheet Preparation and Valuation

For the sake of clarity, individual items have been grouped together in the consolidated balance sheet and are shown separately in the notes. Separate items are added to the consolidated financial statements to show the effects of sales financing.

The financial statements of BMW AG and the subsidiaries in the Federal Republic of Germany and abroad are drawn up in accordance with uniform principles of balance sheet preparation and valuation. In order to ensure uniform valuation in the Group, tax depreciation and special reserves in the individual financial statements of the consolidated companies, based only on tax provisions, are not shown in the con-

solidated financial statements. In the financial statements of associated companies, those valuations are maintained that deviate only slightly from the uniform principles for the Group.

Intangible assets acquired against payment are valued at their acquisition cost, taking account of linear depreciation.

Fixed assets are valued at their acquisition or manufacturing cost less depreciation. Fixed assets subject to wear, with a useful life of more than three years, are depreciated by the declining balance method. The declining balance is replaced by the straight-line method as soon as this leads to higher depreciation. Additions to assets of minor value are fully written off in the year of acquisition.

Office and factory buildings, and distribution facilities which are part of the buildings, are depreciated in 8 to 50 years, technical plants and machinery in 3 to 10 years, other plants, fixtures, furniture and office equipment predominantly in 5 years. For machinery used in multiple-shift operations depreciation rates are increased to take account of the additional utilization.

Major investments in associated companies are shown with their proportionate net assets (equity method) in accordance with the book value method. The changes in book values are shown as additions or retirements in the development of intangible, tangible fixed and financial assets. Investment in subsidiaries and associated companies that are not consolidated is shown at its acquisition cost or lower current values. Loans are shown at their discounted net present value.

Raw materials, supplies and merchandise are valued by taking account of the lower of cost or market value. Work in process and finished products are valued at their direct material and production cost. The inventories bought from consolidated companies include production-related shares of production overheads. Write-downs are made to cover risks arising from prolonged storage or technical obsolescence of inventories. All leased products are depreciated by the declining balance method. This is replaced by the straight-line method as soon as this leads to higher depreciation.

All risks identifiable on receivables and other assets are provided for by appropriate write-offs. Non-interest-bearing or low-interest-bearing receivables with a term exceeding one year are shown at their discounted value.

Marketable securities and notes are valued at their acquisition cost or lower values on the balance sheet date.

Pension provisions are calculated with the going-concern value according to actuarial principles with an interest rate of 5%. The other provisions are made to take account of all identifiable risks. Provisions are also made for expenditure.

Deferred taxes are calculated for timing differences between the commercial balance sheet result and the taxable income of the consolidated companies. Prepaid deferred taxes are set off against accrued deferred tax expenses. An active balance from prepaid deferred taxes of the individual financial statements is not shown. Deferred taxes arising from consolidation are shown in accordance with the legal requirements.

(1) Intangible Assets

Intangible assets primarily cover licences and similar rights, and software.

(2) Financial Assets

Additions to investment in subsidiaries relate primarily to the purchase of shares in BMW Rolls-Royce GmbH, Oberursel. Retirements from investment in subsidiaries result primarily from inclusion, for the first time, in the consolidated financial statements.

The shares in softlab gmbh für system-entwicklung und edv-anwendung, Munich, are shown under investment in associated companies.

(3) Inventories

	31.12.1990 DM thousand	31.12.1989 DM thousand
Raw materials and supplies	461,040	399,289
Work in process	226,371	204,514
Finished products and merchandise	1,926,044	1,929,315
Advance payments	7,246	2,027
	2,620,701	2,535,145
Advance payments received	76,722	145,667
	2,543,979	2,389,478

(4) Assets from Sales Financing

	31.12.1990 DM thousand	31.12.1989 DM thousand
Leased products	2,775,903	2,468,389
Receivables from sales financing		
Customer loan receivables	3,438,720	2,782,446
– thereof with a remaining term of more than one year: DM 1,483,765 thousand (DM 875,434 thousand in 1989) –		
Other receivables	91,157	43,245
– thereof with a remaining term of more than one year: DM 392 thousand (– DM thousand in 1989) –		
	3,529,877	2,825,691
	6,305,780	5,294,080

(5) Receivables and Miscellaneous Assets

	31.12.1990 DM thousand	31.12.1989 DM thousand
Trade receivables	1,414,453	1,187,495
- thereof with a remaining term of more than one year: DM 22,313 thousand (DM 1,605 thousand in 1989) -		
Other receivables and miscellaneous assets		
Receivables from subsidiaries	81,842	73,541
- thereof with a remaining term of more than one year: DM 20,246 thousand (- DM thousand in 1989) -		
Receivables from companies in which an interest is held	25,516	12,326
- thereof with a remaining term of more than one year: DM 5,952 thousand (DM 11,506 thousand in 1989) -		
Miscellaneous assets	761,808	732,144
- thereof with a remaining term of more than one year: DM 61,809 thousand (DM 94,262 thousand in 1989) -		
	869,166	818,011
	2,283,619	2,005,506

Miscellaneous assets include registered securities, shareholder rights,

loans, claims from grants for tool costs, tax refund claims and deferred interest.

(6) Marketable Securities and Notes

	31.12.1990 DM thousand	31.12.1989 DM thousand
Other securities	1,819,251	1,454,709
Notes	318,386	629,292
	2,137,637	2,084,001

Other securities are nearly all fixed-interest marketable securities and shares in investment funds.

(7) Liquid Funds

These are cash at banks, cash on hand and deposits with the Federal Reserve Bank and in postal giro accounts.

(8) Prepaid Expenses and Deferred Taxes

	31.12.1990 DM thousand	31.12.1989 DM thousand
Prepaid expenses	38,460	37,426
Deferred taxes	278,731	282,016
	317,191	319,442

(9) Subscribed Capital and Capital Reserve

The subscribed capital of BMW AG, amounting to DM 793.7 million, comprises 7,190,000 ordinary shares with a nominal value of DM 50, 225,000 ordinary shares with a nominal value of DM 100, 368,000 ordinary shares with a nominal value of DM 1,000 and 873,800 non-voting preference shares with a nominal value of DM 50. The preference shares participate and bear an extra dividend of DM 1 per preference share. All shares are bearer shares.

The subscribed capital increased as a result of the issue of non-voting preference shares to employees, amounting to DM 3.1 million. Thus, the authorized capital amounted to DM 8.8 million on the balance sheet date.

The premium from the capital increase amounted to DM 25.5 million and was transferred to the capital reserve.

(10) Profit Reserves

The profit reserves contain the legal reserves of DM 1.7 million, the other profit reserves of BMW AG and the

reserves formed from the income of the consolidated companies.

(11) Investment of Other Shareholders

This item includes third-party investment in the shareholders' equity of the subsidiaries included. It contains pri-

marily minority investment in BMW Credit Corp., Barrington, Ill.

(12) Shareholders' Equity

DM thousand

Development of shareholders' equity:

Balance on December 31, 1989	5,370,666
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Dividend of BMW AG for 1989	- 192,981
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Increase in subscribed capital	+ 3,090
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Transfer to capital reserve	+ 25,461
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Change in profit reserves

- Transfer from the year's net income	+ 492,514
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- Offsetting of goodwill	- 59,001
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- Other changes	+ 10,480
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	+ 443,993
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Net income available for distribution	+ 198,879
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Change in investment of other shareholders	+ 10,494
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- thereof from the year's net income: DM 4,470 thousand -	
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Balance on December 31, 1990	5,859,602
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Other changes in the profit reserves include the conversion of financial statements in foreign currency denomina-

tions and the changes arising from the consolidation of capital.

(13) Provisions

	31.12.1990 DM thousand	31.12.1989 DM thousand
Pension fund provisions	1,295,844	1,104,975
Provisions for taxes	588,802	710,612
Other provisions	4,623,672	4,350,910
	6,508,318	6,166,497

The pension fund provisions are related mainly to future rights of employees of BMW AG to old age pension payments. The pension liabilities are covered entirely by provisions. The other provisions include in particular product warranty worldwide, risks arising from litigation proceedings and guarantees,

obligations arising in the personnel and social sector, and risks arising from forward loss contracts. Provisions have also been made for maintenance work that has been scheduled in the business year and has to be carried out in the following year, and for large-scale repairs and other expenditures.

(14) Liabilities

	31.12.1990			31.12.1989
	DM thousand	thereof remaining term up to 1 year DM thousand	over 5 years DM thousand	DM thousand
Bonds	1,500,368	227,056	926,166	1,607,562
Due to banks	603,971	279,368	115,924	543,114
Trade payables	1,463,438	1,463,438	-	1,334,761
Other liabilities				
Advance payments received for orders	30,540	30,540	-	33,119
Liabilities from the acceptance of bills and the issue of promissory notes	35,075	35,075	-	38,970
Liabilities to subsidiaries	41,779	35,644	-	36,893
Liabilities to companies in which an interest is held	114	114	-	-
Liabilities to the BMW Benevolent Fund	59,774	-	59,774	59,889
Miscellaneous liabilities	689,767	619,002	39,811	756,289
- thereof for taxes	(272,548)	(272,548)	-	(235,235)
- thereof for social security	(58,424)	(58,424)	-	(49,981)
	857,049	720,375	99,585	925,160
	4,424,826	2,690,237	1,141,675	4,410,597

**(15) Liabilities from
Sales Financing**

	31.12.1990		31.12.1989	
	thereof remaining term			
	up to		over	
	1 year		5 years	
	DM	DM	DM	DM
	thousand	thousand	thousand	thousand
Liabilities from sales financing				
Bonds	52,290	–	52,290	–
Due to banks	4,303,895	2,996,564	286,087	3,657,139
– thereof secured by mortgages	(115,007)	–	–	(95,334)
Trade payables	47,636	47,636	–	45,845
Other liabilities	129,375	99,858	–	118,170
	4,533,196	3,144,058	338,377	3,821,154
Deferred income from leasing financing	969,292	–	–	728,365
	5,502,488	3,144,058	338,377	4,549,519

The liabilities from sales financing serve to refinance the leased products and the receivables from sales financing.

Deferred income from leasing financing comprises payments from ongoing leasing contracts that are not yet due.

Liability

	31.12.1990	31.12.1989
	DM thousand	DM thousand
Guarantees	8,326	1,264
Warranties	16,568	19,395

Other Financial Obligations

According to maturity dates, the cash value of the obligations arising from rent and leasing contracts is as follows:

	31.12.1990
	DM thousand
due 1991	235,956
due 1992 – 1995	510,719
due after 1995	579,780

DM 2 million thereof are liabilities to subsidiaries.

The order liability for investments amounts to DM 1,145 million.

Notes

The Consolidated Statement of Income

(16) Net Sales

	1990 DM thousand	1989 DM thousand
Automobiles	20,885,802	20,855,144
Motorcycles	384,575	337,651
Leasing	1,924,615	1,661,981
Other sales	3,982,623	3,660,575
	27,177,615	26,515,351
Federal Republic of Germany	10,452,795	9,183,929
Europe excluding the Federal Republic of Germany	8,571,985	8,525,006
North America, Asia, Africa, Australia and other markets	8,152,835	8,806,416
	27,177,615	26,515,351

(17) Increase in Product Inventories and Other Company-produced Additions to Tangible Fixed Assets

	1990 DM thousand	1989 DM thousand
Increase in product inventories	341,325	33,062
Other company-produced additions to tangible fixed assets	120,842	91,195
	462,167	124,257

(18) Other Operating Income

Other operating income comprises investment grants, release of provisions and foreign exchange earnings.

(19) Expenditure on Materials

	1990 DM thousand	1989 DM thousand
Expenditure on raw materials, supplies and merchandise purchased	15,473,071	14,893,882
Expenditure on services purchased	276,241	386,266
	15,749,312	15,280,148

Expenditure on raw materials, supplies and purchased goods increased mainly as a result of sales expansion and models of higher value.

(20) Expenditure on Personnel

	1990 DM thousand	1989 DM thousand
Wages and salaries	4,429,913	3,969,096
Social security contributions, cost of pension plans and related benefits	883,210	731,024
– thereof for pension plans: DM 230,979 thousand (DM 129,055 thousand in 1989) –		
	5,313,123	4,700,120
Workforce on yearly average:	1990	1989
Wage earners	40,994	39,011
Salaried employees	24,798	23,434
	65,792	62,445

(21) Depreciation on Intangible Assets and on Fixed Assets

Depreciation on intangible assets and on fixed assets covers scheduled commercial balance sheet depreciation.

(22) Other Operating Expenditure

Other operating expenditure includes principally expenses for administration and distribution, warranties, freight, maintenance and repairs, advertising, insurance premiums and rents.

(23) Income from Investment in Subsidiaries and Associated Companies

	1990 DM thousand	1989 DM thousand
Income from investment	517	942
– thereof from subsidiaries: DM 355 thousand (DM 361 thousand in 1989) –		
Gains from profit and loss transfer agreements	4,922	3,370
Gains from associated companies	1,421	4,383
Expenditure on loss transfer	798	923
Depreciation on investment	2,142	580
	3,920	7,192

Depreciation on investment and depreciation on loans and on marketable securities of the current assets shown in interest income amount to a total of DM 44,716 thousand (DM 36,454 thousand in 1989).

(24) Interest Income

	1990 DM thousand	1989 DM thousand
Income from other marketable securities and loans of the financial assets	449	143
Other interest and similar income	781,668	595,918
– thereof from subsidiaries: DM 4,161 thousand (DM 8,546 thousand in 1989) –		
Interest and similar expenditure	420,464	414,071
– thereof to subsidiaries: DM 5,660 thousand (DM 2,851 thousand in 1989) –		
Depreciation on loans and on marketable securities and notes of the current assets	42,574	35,874
	319,079	146,116

Interest and similar expenditure,
together with interest expenditure from
leasing financing, amounted to DM
604.1 million (DM 546.0 million in 1989).

**(25) Interest Expenditure from
Leasing Financing**

Interest expenditure from the financing
of the leasing business is offset by cor-
responding gains which are contained
in the leasing instalments and shown in
the net sales.

**(26) Taxes on Income
and Profits**

Taxes on profits are corporation income
and trade earnings tax in the Federal
Republic of Germany and comparable
earnings-linked taxes abroad. They are
calculated according to the tax laws

that apply to the individual companies.
This item also includes deferred taxes
to take account of timing differences
arising from consolidation.

(27) Year's Net Income

	1990 DM thousand	1989 DM thousand
Year's net income	695,863	558,062
Allocation of the year's net income:		
Profit due to other shareholders	6,812	8,281
Losses attributable to other shareholders	2,342	7,295
Transfer to profit reserves	492,514	364,095
Net income available for distribution	198,879	192,981

Total Remuneration of the Supervisory Board and of the Board of Management

Subject to the approval of the proposed dividend at the Annual General Meeting, the remuneration of serving members of the Board of Management for the 1990 business year amounted to DM 13.1 million and that of former members of the Board of Management and their surviving dependents to DM 1.2 million. Total remuneration of the Supervisory Board for 1990 amounted to DM 1.5 million.

Reserves of DM 12.3 million have been made for all pension liabilities to former members of the Board of Management and their surviving dependents.

The members of the Supervisory Board and of the Board of Management are listed on page 9.

Munich, March 1991

Bayerische Motoren Werke
Aktiengesellschaft

The Board of Management

Auditors' Certificate

The Consolidated Financial Statements, which we have audited in accordance with professional standards, comply with the German legal provisions. With due regard to the generally accepted accounting principles, the Consolidated Financial Statements give a true and fair view of the Group's assets, liabilities, financial position and profit or loss. The Economic Review of the Group is consistent with the Consolidated Financial Statements.

Munich, March 6, 1991

KPMG Deutsche Treuhand-Gesellschaft
Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft

Schnicke Kilgert
Wirtschaftsprüfer Wirtschaftsprüfer
(independent auditors)

BMW AG

The Financial Statements of BMW AG, of which only the balance sheet and the statement of income are given here, have been provided with the unrestricted confirmatory audit certificate of KPMG Deutsche Treuhand-Gesellschaft AG Wirtschaftsprüfungsgesellschaft, are published in the Federal Gazette and deposited with the Commercial Register of the Munich Local Court. They are available from BMW AG, P.O.B. 40 02 40, D-8000 Munich 40.

Balance Sheet of BMW AG

at December 31, 1990
in DM thousand

Assets	31.12.1990 DM thousand	31.12.1989 DM thousand
Intangible assets	1,781	7,467
Tangible fixed assets	3,861,317	3,638,171
Financial assets	962,011	626,654
Fixed Assets	4,825,109	4,272,292
Inventories	1,255,866	1,018,386
Trade receivables	391,186	341,444
Receivables from subsidiaries	1,427,890	1,412,672
Other receivables and miscellaneous assets	661,742	821,112
Marketable securities and notes	1,428,839	1,129,273
Liquid funds	849,570	1,136,937
Current Assets	6,015,093	5,859,824
Prepaid Expenses	3,736	690
	10,843,938	10,132,806
Shareholders' Equity and Liabilities	31.12.1990 DM thousand	31.12.1989 DM thousand
Subscribed capital	793,690	790,600
Capital reserve	774,793	749,332
Profit reserves	2,317,539	2,118,660
Net income available for distribution	198,879	192,981
Shareholders' Equity	4,084,901	3,851,573
Registered Dividend Right Certificates	104,534	105,717
Pension fund provisions	1,236,310	1,066,569
Other provisions	3,719,545	3,733,382
Provisions	4,955,855	4,799,951
Due to banks	118,658	96,388
Trade payables	1,154,902	1,023,634
Liabilities to subsidiaries	159,370	29,919
Other liabilities	265,718	225,624
Liabilities	1,698,648	1,375,565
	10,843,938	10,132,806

Statement of Income of BMW AG

for the 1990 business year
in DM thousand

	1990 DM thousand	1989 DM thousand
Net Sales	22,147,126	20,957,814
Change in product inventories and other company-produced additions to tangible fixed assets	277,007	80,223
Total Value of Production	22,424,133	21,038,037
Other operating income	538,805	423,478
Expenditure on materials	13,723,108	12,727,647
Expenditure on personnel	4,594,755	4,126,617
Depreciation on intangible assets and on fixed assets	1,441,052	1,233,325
Other operating expenditure	2,632,845	2,677,119
Income from investment in subsidiaries and associated companies	82,769	80,136
Interest income	223,590	196,558
Income from normal business	877,537	973,501
Taxes on income and profits	389,371	509,405
Other taxes	90,408	78,134
Year's Net Income	397,758	385,962
Transfer to profit reserves	198,879	192,981
Net Income Available for Distribution	198,879	192,981

Major subsidiaries and associated companies of BMW AG at December 31, 1990

	Shareholders' equity DM thousand	Income DM thousand	Capital investment in %
I. Subsidiaries			
Domestic			
BMW Rolls-Royce GmbH, Oberursel	201,349	124	50.5
BMW Bank GmbH, Munich	105,516	6,836	100
BMW Maschinenfabrik Spandau GmbH, Berlin	85,287	7,502	100
KONTRON GmbH, Eching	41,997	123	100
BMW Leasing GmbH, Munich ¹⁾	31,184	0	100
BMW Ingenieur-Zentrum GmbH + Co., Munich	1,000	0	100
BMW Motorrad GmbH + Co., Munich	141	4,481	100
BMW INTEC Beteiligungs GmbH, Munich ¹⁾	50	0	100
BMW Motorsport GmbH, Munich ¹⁾	50	0	100
KONTRON Elektronik GmbH, Eching ²⁾	50	0	100
Foreign			
BMW Motoren Gesellschaft m.b.H., Steyr, Austria	353,495	93,661	100
BMW Coordination Center N.V., Bornem, Belgium	326,522	13,195	100
BMW (South Africa) (Pty) Ltd., Pretoria, South Africa	148,880	45,550	100
BMW France S.A., Bois d'Arcy, France	139,866	40,648	100
BMW Overseas Enterprises N.V., Willemstad, Curaçao	70,507	26,116	100
BMW Finance N.V., The Hague, Netherlands	39,528	3,843	100
BMW Austria Gesellschaft m.b.H., Salzburg, Austria ³⁾	27,602	0	100
BMW Holding AG, Dielsdorf, Switzerland	22,737	36	100
BMW (Schweiz) AG, Dielsdorf, Switzerland	61,607	13,370	100
BMW Holding B.V., The Hague, Netherlands	327,214	127,269	100
BMW Italia S.p.A., Palazzolo di Sona (Verona), Italy	67,708	52,349	100
BMW Ibérica S.A., Madrid, Spain	55,854	35,034	100
BMW Belgium S.A./N.V., Bornem, Belgium	48,584	20,131	100
BMW Nederland B.V., The Hague, Netherlands	42,292	9,139	100
BMW Canada Inc., Whitby, Canada	17,239	3,877	100
BMW New Zealand Ltd., Auckland, New Zealand	7,783	118	100
BMW (US) Holding Corporation, Wilmington, Del., USA ⁴⁾	605,610	- 17,537	100
BMW (GB) Ltd., Bracknell, Great Britain	429,153	104,005	100
BMW Japan Corp., Tokyo, Japan	300,755	98,511	100
BMW Australia Ltd., Melbourne, Victoria, Australia	72,213	14,299	100
II. Associated companies			
softlab gmbh für systementwicklung und edv-anwendung, Munich	61,675	3,553	40

¹⁾ BMW AG has concluded profit and loss transfer agreements with these companies.

²⁾ KONTRON GmbH, Eching, has concluded a profit and loss transfer agreement with this company.

³⁾ BMW Motoren Gesellschaft m.b.H., Steyr, has concluded a profit and loss transfer agreement with this company.

⁴⁾ Consolidated with BMW's operative US companies.

Agenda of the 71st Annual General Meeting to be held on Thursday, May 16, 1991 at 10 am in the Philharmonie in the "Gasteig", Rosenheimer Strasse 5, 8000 Munich 80.

1.

Presentation of the Annual Accounts at December 31, 1990, the Economic Review and the Report of the Supervisory Board, as well as the Consolidated Financial Statements at December 31, 1990 and the Economic Review of the BMW Group included in the Economic Review.

2.

Resolution on the allocation of profits.

Board of Management and Supervisory Board propose using the balance sheet surplus for the 1990 business year, amounting to DM 198,879,150,

to pay a dividend of DM 12.50 per ordinary share with a nominal value of DM 50 on the common stock with entitlement to full dividend payment for the 1990 business year (DM 750,000,000 in ordinary shares), i.e. DM 187,500,000, and

to pay a dividend of DM 13.50 per preference share with a nominal value of DM 50 on the common stock with entitlement to full dividend payment for the 1990 business year (DM 40,600,000 in preference shares), i.e. DM 10,962,000, and

to pay a dividend of DM 6.75 per preference share with a nominal value of DM 50 on the common stock with entitlement to half the dividend payment for the 1990 business year (DM 3,090,000 in preference shares), i.e. DM 417,150.

3.

Resolution on the formal approval of the actions of the members of the Board of Management.

Board of Management and Supervisory Board propose approving the actions of the members of the Board of Management for the 1990 business year.

4.

Resolution on the formal approval of the actions of the members of the Supervisory Board.

Board of Management and Super-

visory Board propose approving the actions of the members of the Supervisory Board for the 1990 business year.

5.

Choice of auditors for the 1991 business year.

The Supervisory Board proposes to reappoint KPMG Deutsche Treuhand-Gesellschaft Aktiengesellschaft Wirtschaftsprüfungsgesellschaft, Munich, as auditors for the 1991 business year.

6.

Resolution on the increase of common stock from corporate funds, and an amendment to the Articles of Association.

Board of Management and Supervisory Board propose, for adoption, that

a) the common stock be increased, in a ratio of 8 to 1, by DM 99,211,250 from DM 793,690,000 to DM 892,901,250 by transferring an amount of DM 99,211,250 from other profit reserves to the common stock based on the balance sheet at December 31, 1990, by the issue of

DM 93,750,000 in new shares with a nominal value of DM 50, to ordinary shareholders, and by the issue of

DM 5,461,250 in new non-voting preference shares with a nominal value of DM 50, to preference shareholders, with entitlement to full dividend payment for both types of shares from the 1991 business year.

All shares are bearer shares.

b) Section 4 item 1 of the Articles of Association is to be amended in line with the capital increase and reworded as follows:

"The common stock amounts to DM 892,901,250. It is divided into

a) DM 843,750,000 in ordinary shares, divided into 9,065,000 shares with a nominal value of DM 50, 225,000 shares with a nominal value of DM 100, 368,000 shares with a nominal value of DM 1000,

and

b) DM 49,151,250 in non-voting preference shares, divided into 983,025 shares with a nominal value of DM 50.

All shares are bearer shares."

c) Section 24 item 3 of the Articles of Association is to be confirmed in its present form, dispensing with an adjustment to the amount of advance dividends due on the increased preference share capital, as follows:

"The balance sheet profit shall be used in the following order:

- a) to pay any arrears on profit shares on the non-voting preference shares in the order of their creation;
- b) to pay an extra dividend of DM 1 per DM 50 nominal value on the non-voting preference shares;
- c) to pay equally any other profit shares on ordinary and preference shares, in so far as the Annual General Meeting does not resolve on any other use."

7.

Special resolution of the ordinary shareholders.

Board of Management and Supervisory Board propose, to the ordinary shareholders, the adoption of the following special resolution:

The resolutions under 6a) and c) are expressly confirmed in their present form, dispensing with any adjustment dividends due on the increased preference shares as regulated in Section 24 item 3 of the Articles of Association.

		1981	1982
BMW Group			
Sales	DM million	9,545.0	11,620.4
Change	%	+ 17.6	+ 21.7
Workforce at end of year		44,648	47,466
Investment in intangible assets and in fixed assets	DM million	883.4	1,354.8
BMW AG			
Sales	DM million	7,822.1	9,371.6
Change	%	+ 13.4	+ 19.8
Export share	%	55.7	61.1
Production – automobiles	units	351,545	378,769
Production – motorcycles	units	33,120	30,554
Sales – automobiles	units	348,946	377,684
Sales – motorcycles	units	32,452	30,398
Investment in intangible assets and in fixed assets	DM million	815.6	752.5
Additions to investment in sub- sidiaries and associated companies	DM million	66.2	85.4
Depreciation on intangible assets and on fixed assets	DM million	473.1	615.8
Workforce at end of year		39,777	40,738
Wage earners		27,113	27,398
Salaried employees		10,583	11,113
Fixed assets	DM million	2,254.3	2,422.7
Current assets	DM million	1,698.7	2,203.4
Subscribed capital	DM million	500.0	600.0
Reserves	DM million	701.3	851.3
Shareholders' equity	DM million	1,291.3	1,561.3
as % of fixed assets	%	57.3	64.4
Long-term liabilities ¹⁾	DM million	1,183.3	1,154.6
Long-term capital ²⁾	DM million	2,474.6	2,715.9
in % of fixed assets	%	109.8	112.1
Balance sheet total	DM million	3,953.0	4,626.1
Expenditure on materials	DM million	4,142.5	5,045.9
in % of total value of production	%	52.6	53.3
Expenditure on personnel	DM million	2,030.8	2,243.8
in % of total value of production	%	25.8	23.7
Taxes	DM million	247.8	375.7
Year's net income	DM million	145.0	200.0
Dividends	DM million	90.0	110.0
per ordinary share of DM 50 nominal value	DM	9.–	10.–
per preference share of DM 50 nominal value	DM	–	–
per preference share of DM 50 nominal value	DM	–	–
(entitled to dividend payment from July 1, 1990)			

¹⁾ registered dividend right certificates,
pension fund provisions, liabilities to the
BMW Benevolent Fund, liabilities with a
term of more than one year

²⁾ shareholders' equity, long-term liabilities
³⁾ proposal of the management

1983	1984	1985	1986	1987	1988	1989	1990
14,025.7	16,484.1	18,077.9	17,514.8	19,459.7	24,467.2	26,515.4	27,177.6
+ 20.7	+ 17.5	+ 9.7	- 3.1	+ 11.1	+ 25.7	+ 8.4	+ 2.5
50,158	51,931	53,925	58,062	62,794	65,812	66,267	70,948
1,000.5	860.3	1,375.6	2,236.9	2,112.3	1,910.5	1,819.8	2,065.8
11,480.9	12,931.6	14,246.4	14,994.3	17,656.7	19,883.7	20,957.8	22,147.1
+ 22.5	+ 12.6	+ 10.2	+ 5.2	+ 17.8	+ 12.6	+ 5.4	+ 5.7
59.8	61.1	65.0	65.7	65.9	59.8	58.5	55.5
420,994	431,995	445,233	446,438	461,340	484,121	511,476	519,660
28,053	34,001	37,104	32,054	27,508	23,817	25,761	31,589
422,491	434,266	440,732	446,109	459,502	486,592	510,968	513,731
28,291	33,912	36,320	31,731	27,811	24,205	25,549	30,899
800.6	663.8	906.5	1,735.0	1,541.2	1,254.9	1,416.7	1,749.9
4.7	5.4	35.0	86.8	102.2	54.2	92.0	333.3
716.9	707.9	751.6	948.9	1,145.6	1,231.0	1,233.3	1,441.1
43,169	44,692	46,814	50,719	54,861	56,981	57,087	59,544
29,084	29,524	30,170	31,883	34,185	35,524	35,212	37,483
11,778	12,677	13,918	15,822	17,522	18,157	18,457	18,903
2,487.3	2,410.6	2,592.0	3,486.9	3,964.2	4,019.1	4,272.3	4,825.1
2,713.8	3,496.0	3,980.9	4,564.3	4,661.5	5,344.8	5,860.5	6,018.8
600.0	600.0	600.0	750.0	750.0	750.0	790.6	793.7
995.3	1,160.1	1,320.3	2,141.0	2,328.5	2,516.0	2,868.0	3,092.3
1,739.3	1,910.1	2,070.3	3,059.8	3,266.0	3,453.5	3,851.6	4,084.9
69.9	79.2	79.9	87.8	82.4	85.9	90.2	84.7
1,097.4	1,183.0	1,268.4	1,125.9	1,161.1	1,195.7	1,312.5	1,497.6
2,836.7	3,093.1	3,338.7	4,185.7	4,427.1	4,649.2	5,164.1	5,582.5
114.0	128.3	128.8	120.0	111.7	115.7	120.9	115.7
5,201.1	5,906.6	6,572.9	8,051.2	8,625.7	9,363.9	10,132.8	10,843.9
6,221.5	6,915.0	7,890.8	8,606.6	10,260.3	11,880.9	12,727.6	13,723.1
53.9	53.6	55.1	57.1	57.8	59.4	60.5	61.2
2,471.8	2,792.5	2,918.5	3,173.7	3,586.4	4,000.2	4,126.6	4,594.8
21.4	21.7	20.4	21.1	20.2	20.0	19.6	20.5
620.3	692.7	731.5	706.8	551.0	615.5	587.5	479.7
288.0	329.6	300.0	337.5	375.0	375.0	386.0	397.8
144.0	150.0	150.0	168.8	187.5	187.5	193.0	198.9 ³⁾
11.- + 1.-	12.50	12.50	12.50	12.50	12.50	12.50	12.50 ³⁾
-	-	-	-	-	-	6.75	13.50 ³⁾
-	-	-	-	-	-	-	6.75 ³⁾

BMW AG

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