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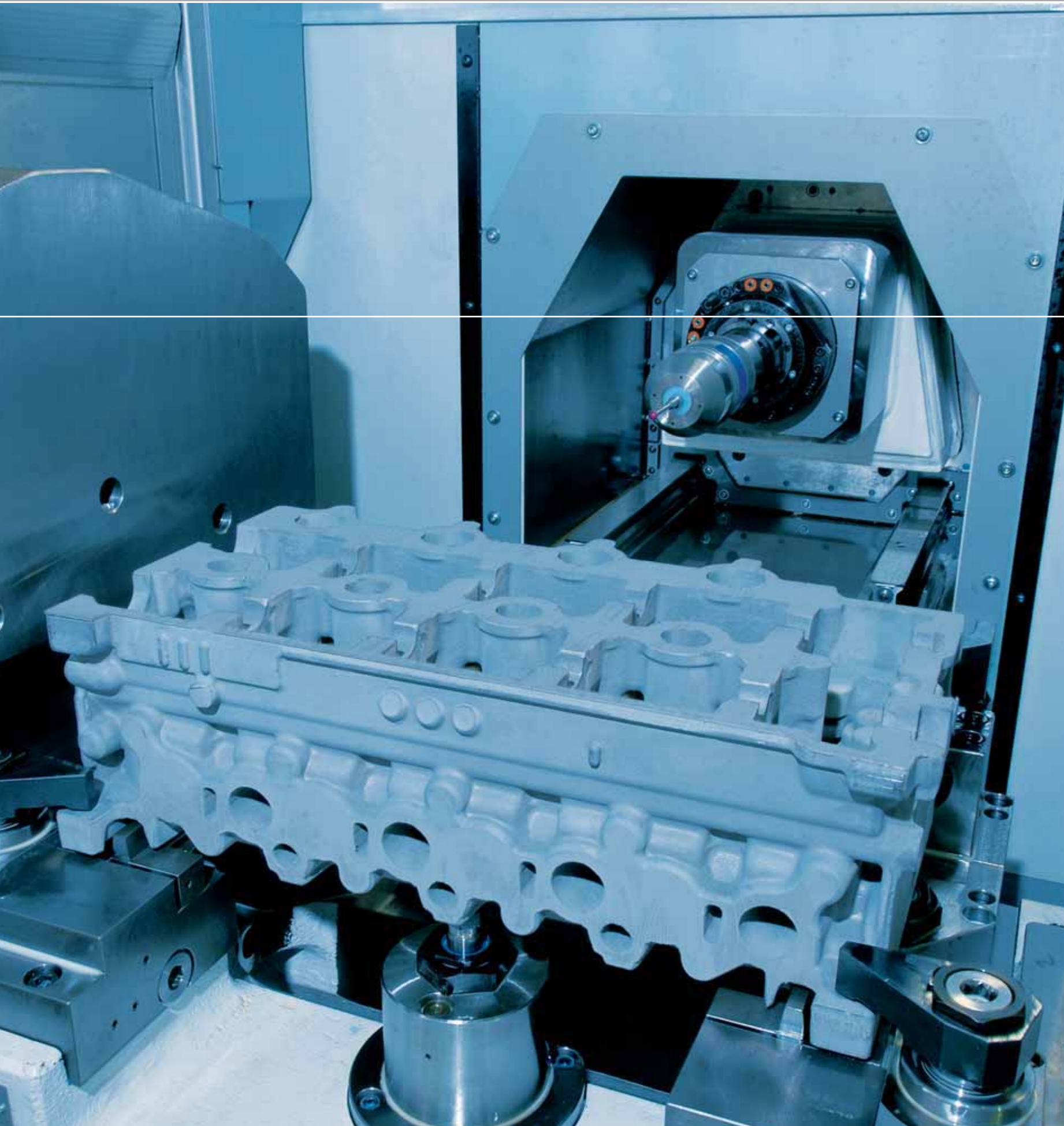
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Welcome to GROB!



In 1926 Dr. h. c. Ernst Grob founded the company "Ernst Grob Werkzeug- und Maschinenfabrik" in Munich. The first serial product was a stationary combustion engine.

Today the GROB GROUP is a company operating world-wide with production sites at the headquarters in Mindelheim (Germany), in São Paulo (Brazil) and Bluffton, Ohio (USA).

The company is represented in Mexico, Great Britain, the P.R. of China (Beijing and Shanghai) and South Korea by its own service and sales offices. In France, Italy, Sweden, Spain, the Czech Republic and Slovakia, GROB is represented by agencies.

GROB's 80-year company history is not only evidence for reliability but for the innovative power of the company.

Today, the GROB-GROUP is much more than a manufacturer of machining centers. Our product range is comprised of stand-alone machines, complex flexible systems, assembly and automated equipment and entire system solutions.

Of course we develop individual solutions for each customer – from the rough part to final assembly.

With this brochure we want to take you on a tour through GROB.

There is a lot to discover – see for yourself!



Dr. h. c. rer. nat. Dipl.-Ing. Burkhard Grob

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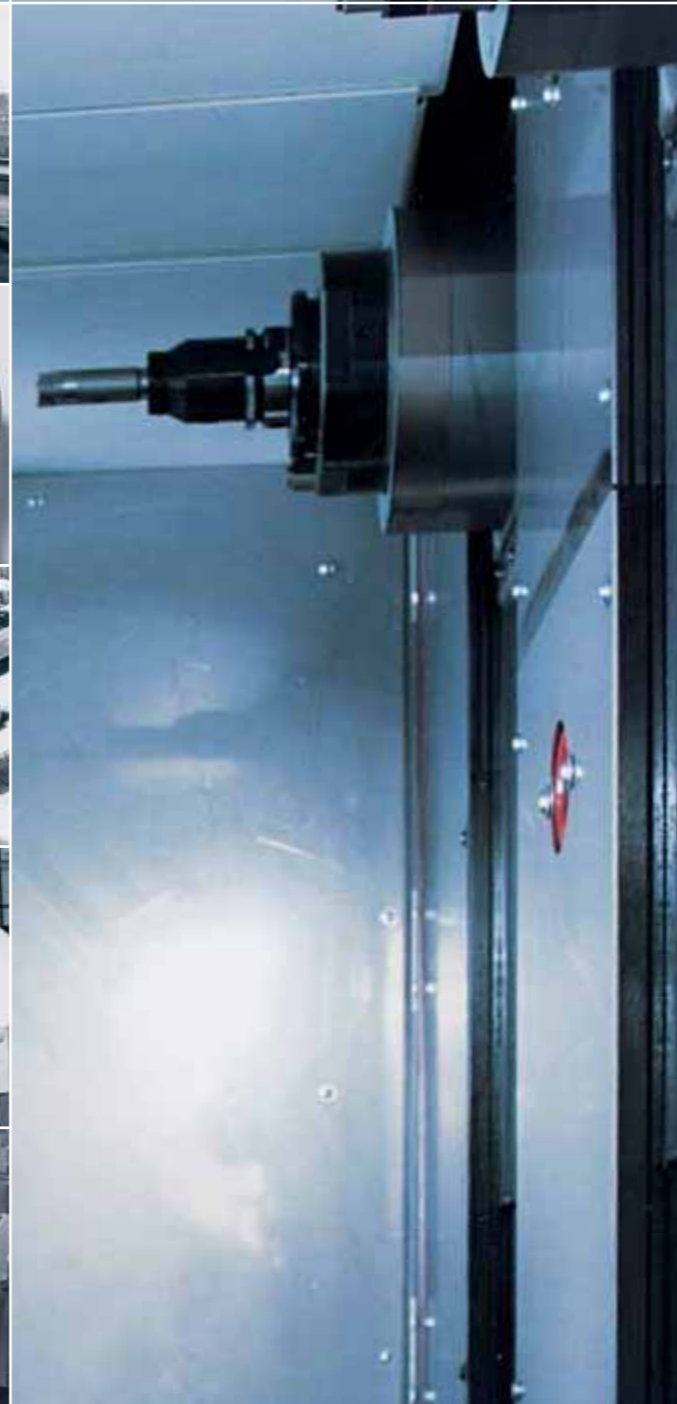
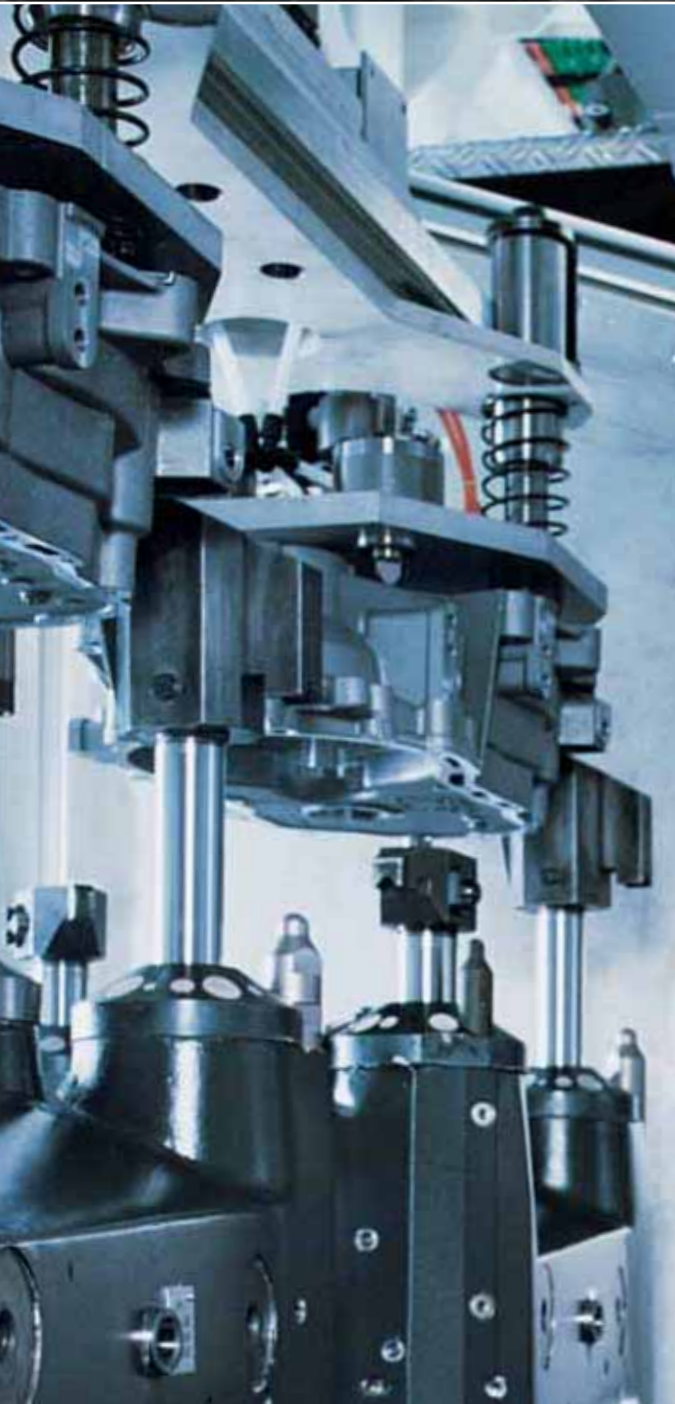
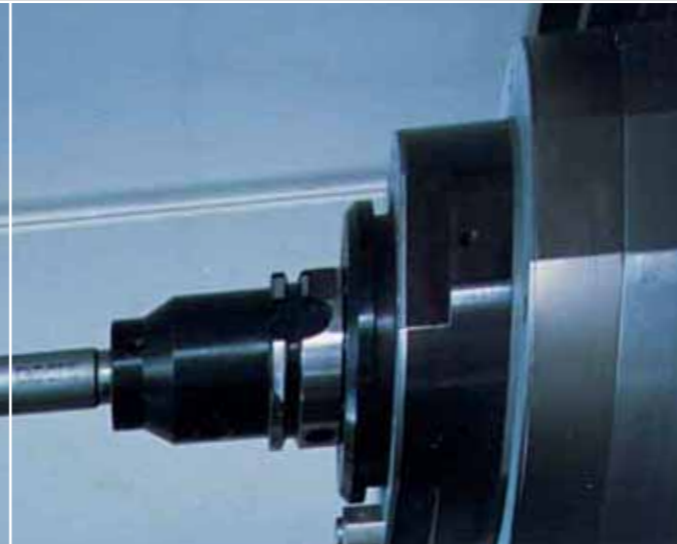
Around the globe.

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HISTORY



This picture was taken on the occasion of Henry Ford's visit to the Deutsche Museum, Munich, in September 1930. Oskar von Miller (2nd from the left), Dr. Ernst Grob (3rd from the left), Henry Ford (4th from the left).



Dr. h. c. rer. nat. Dipl.-Ing. Burkhard Grob
Company owner

GROB yesterday and today.

It all began in 1926 in a factory building in Munich. Today GROB belongs to the global players in the machine tool industry.

- 1926 Founding in Munich by Dr. h. c. Ernst Grob
- 1933 Start of production of equipment and machines for thread milling
- 1939 In-house development of non-cutting, metal forming process leading to the production of thread rolling machines
- 1952 Dr. h. c. rer. nat. Dipl.-Ing. Burkhard Grob, son of the founder, takes on management responsibility of the company. Start of the production of special machine tools
- 1956 Founding of the plant in São Paulo (Brazil)
- 1968 Founding of the second plant in Germany in Mindelheim, production of the first transfer machine
- 1974 Founding of the aircraft division BURKHART GROB FLUGZEUGBAU in Mattsies, near Mindelheim
- 1976 Expansion of the plant in Mindelheim, the plant in Munich is closed
- 1982 First automatic assembly line
- 1983 Founding of sales and service office in Bluffton, Ohio (USA), first machining centers (standard range)
- 1984 Production of the first GROB gantry robot
- 1989 Expansion of the aircraft division in Mattsies in the aerospace division
- 1990 Founding of the GROB sales office in Great Britain
- 1991 The Bluffton, Ohio sales and service office (USA) becomes a plant, beginning of the production
- 1995 Expansion of the plant in Bluffton, Ohio (USA) doubling its original size
- 1999 Second expansion of the plant in Bluffton to approx. 23,000 m² net floor area, expansion of the plant in Mindelheim to approx. 80,000 m² net floor area
- 2000 Founding of the GROB sales and service office in Mexico
- 2003 Founding of the GROB sales and service office in China, expansion of the plant in São Paulo by another 10,000 m² net floor area
- 2004 Market launch of the modular machining centers
- 2005 Founding of the GROB sales offices in Shanghai and South Korea
- 2006 80th anniversary GROB-WERKE
50th anniversary B. GROB DO BRASIL

GROB



Choose GROB and you get everything from one hand.

System solutions are offered by all companies, but not all have the necessary experience. With GROB, you are in good hands.



System solutions from GROB follow a fixed principle: All we do must be understandable to our customers. Therefore, every project step, from an empty plant hall to the final acceptance of the production system, is transparent. That means: We develop a uniform concept, take the responsibility for the coordination of equipment interface and integration, simple procurement and finally a smooth start-up. Your advantage: No matter what problem or question you have – GROB is the right contact for all your concerns.

Comprehensive planning of your equipment according to your special requirements is of great importance to us, allowing GROB to provide you with solutions for complete systems out of one hand.

This includes

- planning and engineering according to special requirements
- the task-specific configuration of the machine
- planning and installation of the automation and assembly systems by GROB
- upon request integration of cleaning, washing, gaging and testing equipment

We use the latest planning methods (Simultaneous Engineering) and planning instruments (Simultaneous Tools).

The basis for the success of our turnkey solutions is our manpower. Due to longtime experience, our personnel is highly qualified and able to find simple and reliable solutions even for very complex requirements.



PLANNING



How is a ready-to-install product developed?

Especially in the fast-moving automobile industry, as well as in other industrial segments, you need a partner to rely on from the beginning. For GROB the production process already starts in the planning stage.

NEUTRAL CONSULTATION

Absolute compliance with delivery dates and highest quality – this is the basis of our success. This goal can only be achieved by a closed cooperation with the customer already in the planning stage.

Your special benefit with GROB: Due to the size of the company and the network between the plants and offices on nearly all continents, we are a competent partner especially for large-scale systems.

Apart from short throughput times you can be assured to have a partner, a continuous concept and no interface difficulties with GROB.



Flexible advise.

GROB's experience is not solely limited to decades in the production of machining systems.

Our wide range of products allow us to provide you with extensive manufacturing solutions. We are flexible to suggest solutions that are optimized to your production requirements and investment phases.

ABSOLUTE RESPONSIBILITY



Comprehensive know-how.

Although all machining centers, transfer machines, part feeding units and automation systems are delivered by GROB, we purchase some peripheral components. Nevertheless, we assume full responsibility for the entire system as our workers know the equipment of our sub-suppliers.



DEVELOPMENT



An eye on the future.

For years, GROB has been influencing the development in the metal-cutting industry with new concepts and innovative solutions. We always want to be one step ahead – so that you are ahead of your competitors.

GROB shipped the first assembly system of aluminium components manufactured in large series in 2003 and has been a leading maker of tools for CGI machining for years.

Because:

- Since coolant supply and treatment are no longer required, costs can be saved.
- The disposal costs are also reduced to a minimum. Less coolant means lower pollution of the environment.
- In addition, the dry machining technology offers the workers better working conditions than conventional metal-cutting technologies.

We have developed a modular system of machining centers suitable for dry machining with optimum chip and dust disposal and high thermal stability.

A further advantage of our technology: The tool life times are not only comparable to those of wet machining, they are in some cases even longer. In addition, we have designed our dry machining concept for easy change-over from dry to wet machining and vice versa.

You see: We invest in research and development for you to always be one step ahead.



DESIGN

The perfect interaction of all elements.

Each machining system is a new challenge for our engineers. They are not prepared to accept standard solutions. After all, they are the ones who provide the basis for the production of your product to the quality requested.

Your product is the result of the perfect interaction of all elements in the machining process.

This means:

- All machining units must perform high-quality metal-cutting work.
- In each process step the ideal machine must be used.
- Handling systems must interact to create an optimized working process of the individual operation steps.
- The system must have an optimal fit into the available space.

Only if the individual operation steps work as a system, you will have the best production result in the end.

The precise design of your complete system is therefore decisive for your quality. Your product is to be produced within the time requested and at a competitive price.

For this reason, almost a fourth of the GROB's employees are engineers. Every day, more than 400 employees are busy optimizing the design of your equipment.



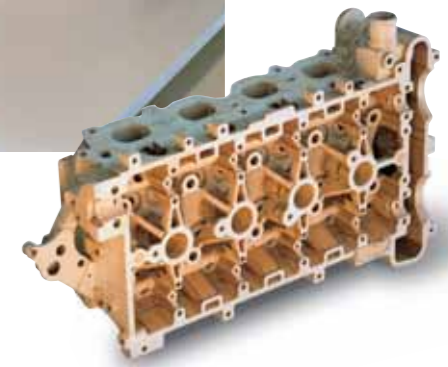
Efficient teamwork.

Many eyes see more. Therefore our engineers work in small teams: This guarantees that a perfectly engineered product is created. Each mistake, however trivial as it may be, causes high costs in later manufacturing and assembly.



Always state-of-the-art.

Your equipment is completely developed and designed in the engineering department. Our engineers always work with the latest hardware and software tools to bring out the best for your product.



1:1 cylinder head model.

Before the first prototype of your product is produced, we create a 1:1 model. Fine-tuning considerably contributes to avoiding mistakes and as a result saves time and costs.



BUILD

Quality cannot be outsourced.

GROB assembles all machines in house. Our workers have years of experience and are able to react with a high degree of flexibility to new requirements.



High vertical integration and in depth employee expertise.

The precision of our machining equipment is based on the linear guideways. The machine base and all high precision machine components are manufactured exclusively on GROB machines. We rely on our high vertical integration and on our employee expertise to provide you with the highest quality product.



ASSEMBLY

In experienced hands.

The assembly of high-precision machining centers requires high-precision work and in depth know-how. The longtime experience of our assembly personnel is indispensable – they can do their job blindfolded.

Merging and distribution.

A stable production process can only be guaranteed if the individual machining steps smoothly merge into one another. GROB automation and transfer systems supply the workpiece exactly to where the next machining step begins.



ASSEMBLY OF MACHINING CENTERS



Quality in series.

To assemble GROB machining components, the longtime experience of our assembly personnel is required. Quality is produced in series here.



The core component.

Especially the spindle assembly is high precision work. All production and assembly steps take place in house – we can rely on perfection.

ASSEMBLY LINES / TRANSFER LINES



Assembly lines.

We develop and build machines for partial or complete assembly, as well as all controls and measurements required for quality assurance.

APPRENTICESHIP TRAINING CENTER



An investment in the future.

Our apprentices make a large contribution to the success of GROB. They are the future on which we build. More than half of our workers made their apprenticeship at GROB. Who could be more suitable to produce and assemble our machines?

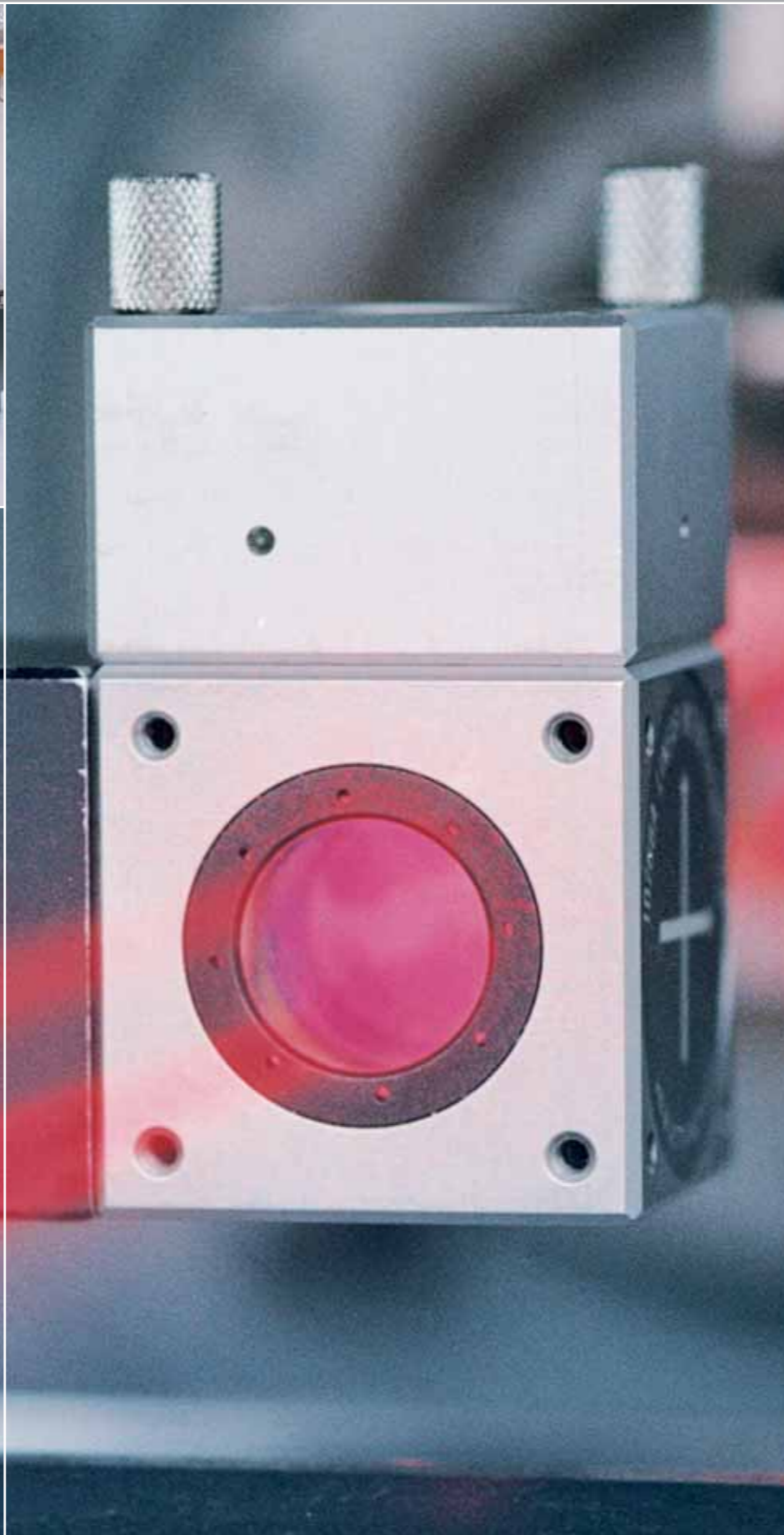
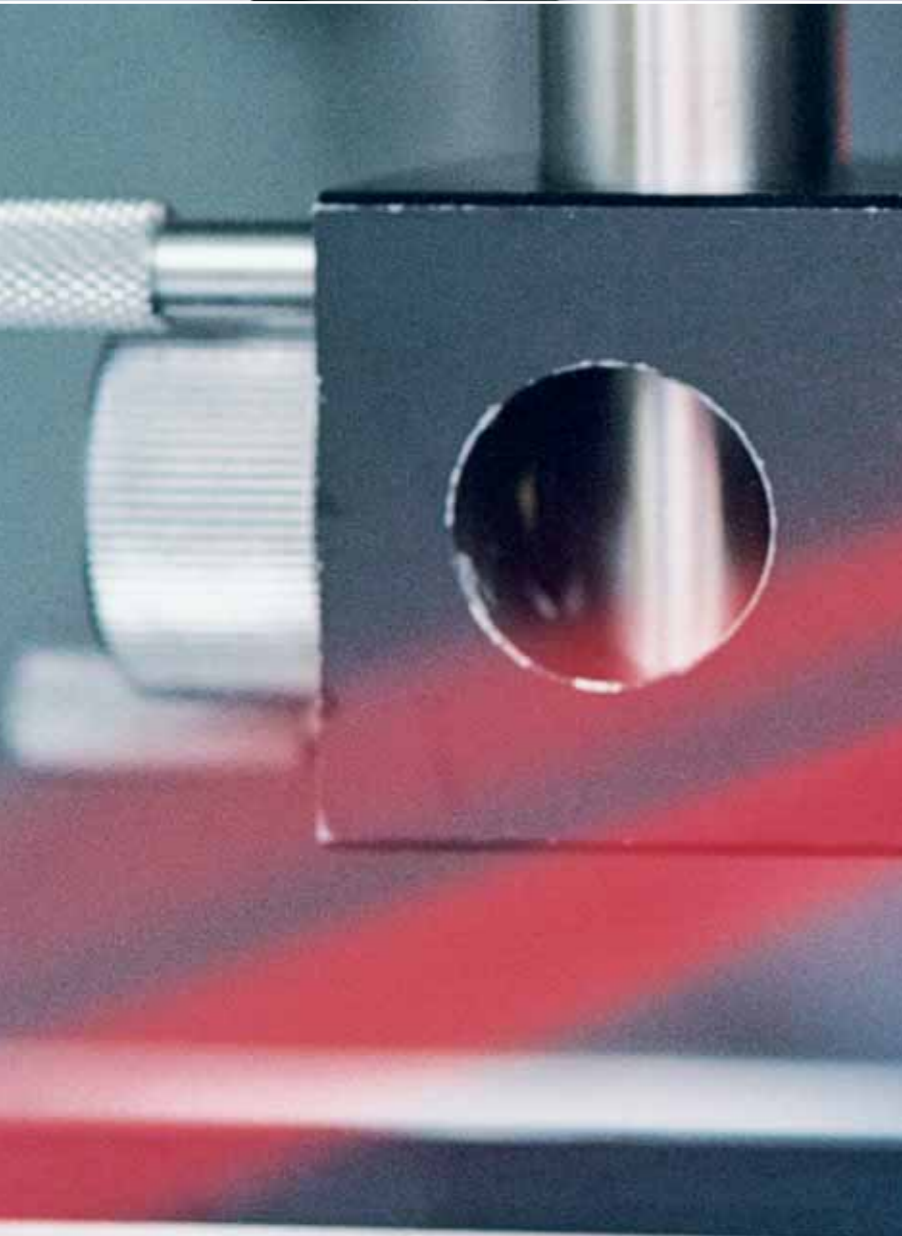
Quality, precision, and start-up according to the schedule of our machines and equipment are, in the true sense of the word, in the hands of our workers producing and assembling them. GROB therefore attaches great importance to a proper and well-rounded apprenticeship program.

The apprentices are actively integrated in the production process from the first day of their apprenticeship on. They learn from the roots the function of each single component and how to produce it with highest quality to be able to work with micron-accuracy later in production.

We furthermore continuously extend the training programs and adjust them to changed requirements. We want our workers always to be familiar with the latest technologies. We always want to be one step ahead – to your advantage.



QUALITY



Our quality is your success.



You must be able to rely on your production concepts. Each failure, each mistake involves unnecessary costs. The quality of our equipment is certified, time and time again.

Availability is based on two factors: on the reaction time of the after sales service and the long-term quality of the products.

We at GROB therefore consider it as requirement and duty to steadily deliver optimum quality. From planning and design to build and start-up at your plant, our production concepts are subject to an efficient quality assurance system. This quality assurance system guarantees that you receive a reliable product in every respect. Durability has always been the best service.

The plants in Mindelheim, São Paulo, and Bluffton are certified according to ISO 9001-2000 (process-oriented quality management), ISO 14001 (environment management) as well as with the "Letter of Full Compliance" (quality management of the American Automobile Industry). In the year 2000 the plant in Mindelheim received the quality certificate of the German Automobile Industry, VDA 6.4. The plants in Mindelheim, São Paulo, and Bluffton are certified according to ISO 9001-2000 (process-oriented quality management) since 2003.

Our customers honor the services rendered by the GROB plants. Amongst others, the GROB-GROUP received the following awards:

BOSCH GMBH	
1997/98	▶ Acknowledgement for quality and excellent performance "Supplier Award"
2001/02	▶ Acknowledgement for quality and excellent performance "Supplier Award"
2003/04	▶ Acknowledgement for quality and excellent performance "Supplier Award"
DAIMLER CHRYSLER AG	
1999	▶ Award for excellent performance ▶ Commodity Award for plant Mindelheim
2000	▶ Gold Award for plant Mindelheim ▶ Award for excellent performance ▶ Gold Award for plant Mindelheim ▶ Commodity Award for plant Bluffton
2002	▶ Award for excellent performance
2004	▶ Global Supplier Award
FORD MOTOR COMP.	
1998	▶ Q1-Award for plant Mindelheim
1999	▶ Q1-Award for plant Bluffton
2002	▶ Q1-2002 Award for plant Mindelheim and Bluffton
2004	▶ Q1-2002 Award for plant Mindelheim
2005	▶ Q1-2002 Award for plant Mindelheim
GENERAL MOTORS CORP.	
1994 bis 1999	▶ Q.S. (T.) P. Award as Supplier of the Year
SHANGHAI GENERAL MOTORS	
2006	▶ Best Supplier Award
JOHN DEERE	
2003	▶ Award for excellent support with the engine project S250
VOLKSWAGEN GROUP	
1993	▶ Value to the Customer Award for plant Mindelheim
1994	▶ Value to the customer Award for plant Mindelheim and São Paulo
1999	▶ Formula Q
2004	▶ Shanghai VW "Supplier Award"

GROB

EXCERPT FROM OUR CUSTOMER LIST

ALLISON
AUDI
BENTLEY
BMW
BOCAR
BOSCH
BUGATTI
CATERPILLAR
CHASSIS
CITROËN
CUMMINS
DAIMLER CHRYSLER
DELPHI DIESEL
DEUTZ
EMBRACO
FAGOR
FAW
FIAT
FORD
GEARBOX
GENERAL MOTORS
GETRAG
GÖRTZ + SCHIELE
HARLEY DAVIDSON
HONDA
HONSEL
HYUNDAI
INTERNATIONAL
J.L. FRENCH
JOHN DEERE
KIA
KRUPP
MACIMEX
OPEL
PEUGEOT
PORSCHE
RENAULT
ROLLS ROYCE
SAAB
SATURN
SEAT
SHANGHAI GM
SKODA
TECUMSEH
TOYOTA
TRITEC
VALTRA
VOLVO
VOLKSWAGEN
VW DALIAN
VW LOU TANG
VW SHANGHAI
WUXI ...

Our references speak for themselves.

As a tier one supplier to the Automotive Industry and the Automotive Sub-Supplier Industry cylinder heads, crank cases, transmission cases, pump housings and connecting rods are our world.

Today, GROB equipment for Powertrain components is used worldwide by nearly all prestigious automobile manufacturers and their sub-suppliers.

Our manufacturing concepts range from heavy duty machining to high precision finish-machining to completely assembled products ready for installation. We furthermore develop and build machines for partial or complete assembly, including the controls and measurements required for quality assurance. Our product spectrum also covers the part production for medium size volumes.

Our core competence is the development, engineering, and build of flexible customer solutions. Flexibility is the new standard at GROB.





GROB world-wide

Available for you around the globe and 24 hours a day – GROB Service

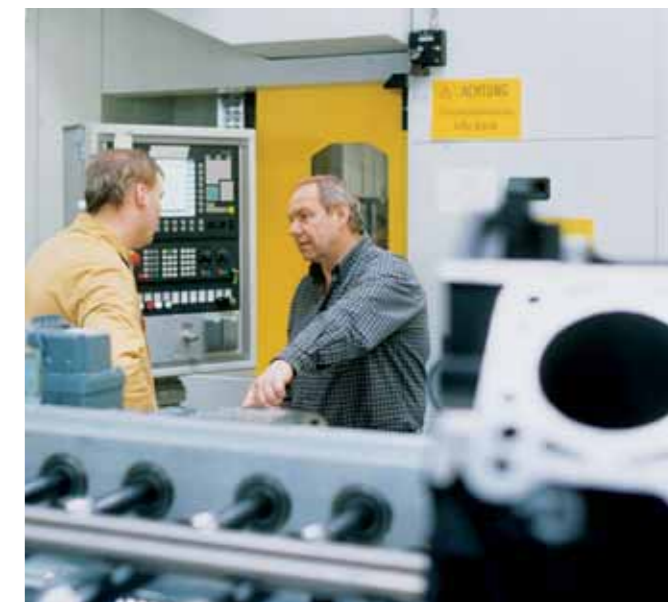
In the year 1956, GROB already started to extend its activities on the Brazilian market. The founding of the plant in São Paulo was followed by the plant in Bluffton, Ohio (USA). Today GROB worldwide operates through three production sites and five sales and service offices.

Although our employees are from USA, Brazil, China, South Korea, Mexico or Great Britain we all speak the same language:

Wherever you are, we are there for you. Challenge us!

Competent and experienced personnel offer you world-wide:

- Comprehensive advice from a customer- and application-oriented organization
- Support at production start-up from project group specialists
- Optimized servicing, maintenance and inspection with targeted preventive measures, right up to Full-Service Contracts
- Targeted modernization or retrofitting. Let us know what you want or give us your ideas.
- Fast diagnostics utilizing modern online service concepts, thus ensuring optimum availability
- Rapid availability of spare parts due to own comprehensive manufacturing facility and high degree of standardization
- Support and experienced guidance on all technical issues readily available from specialists
- Comprehensive training to suit your needs in close cooperation with technical documentation and training departments





GROEB