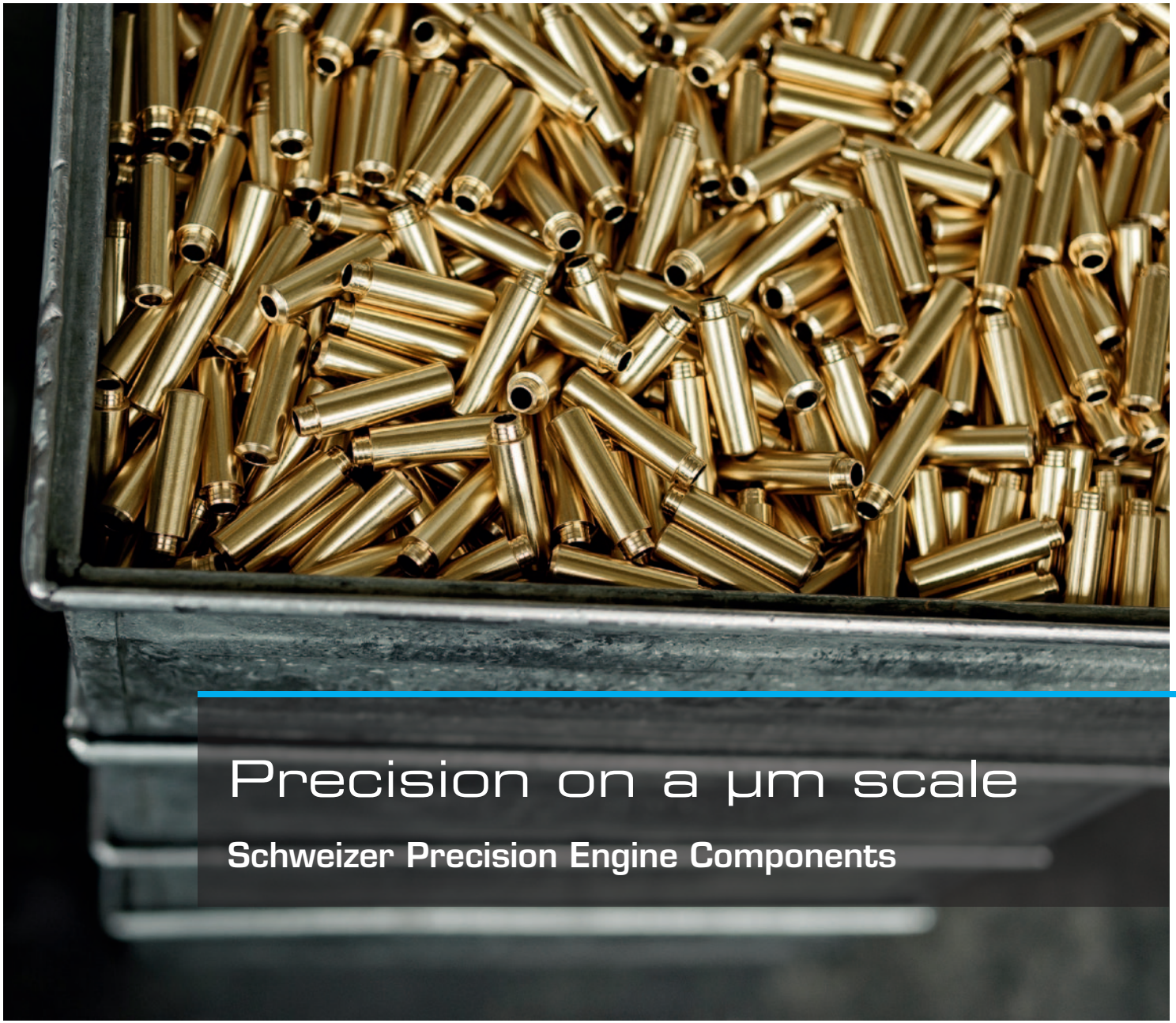
Schweizer
precision engine components



Precision on a µm scale

Schweizer Precision Engine Components

Since establishing our company in 1953, we have produced approximately 230 million precision engine and steering components.

Since 1953

Precision for a mobile world

Schweizer Precision Engine Components

Our company specialises in high-precision engine and steering components.

Our focus is on the production of valve guides, turbocharger components and torsion bars. Our precision components are used in a wide range of applications, ranging from large stationary engines and high-performance racing engines to power-steering assemblies.

We react quickly and flexibly to our customer's requirements.
We can handle special orders at very short notice.

Products

Engine components – Steering components Turbocharger components

We manufacture rotationally symmetrical parts to the customer‘s specification from materials which are difficult to machine.

Engine components

We manufacture valve guides with rough and finished bores up to a length of 200 mm from grey cast iron in various compositions.

In addition, we produce valve guides made of various copper alloys such as CuZn40Al2, Kuprodur or Thermo-Hedul FS and E as well as from sintered metal.

Steering components

Our steering-component programme covers products made of grey cast iron and steel. Valve bushings, for example, are manufactured from grey cast iron, whilst torsion bars, flexural bars and PCF torsion bars are made of steel, for example 51CrV4.

Our steering components are used in power-steering systems.

We employ modern manufacturing technologies such as cold forming and laser welding in the production of our steering components.

Turbocharger components

We mass-produce components for exhaust turbochargers from special high-temperature materials.

Our turbocharger components are used in both diesel and petrol engines.

From the blank to the finished valve guide

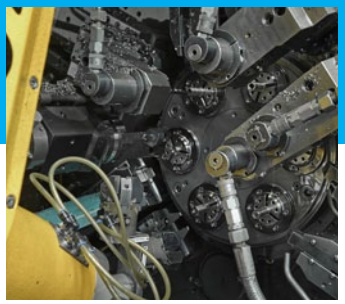
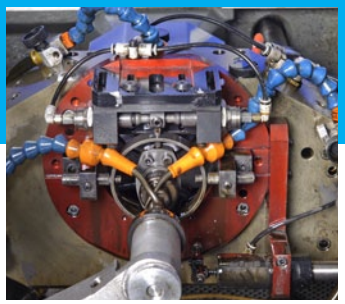
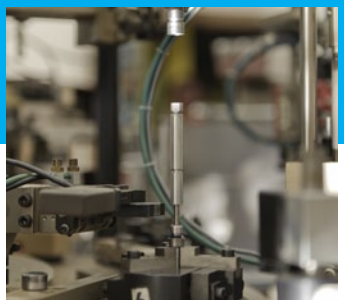
Valve guides

Torsion bars

Turbocharger components

Services

Manufacturing processes – Materials
Centreless grinding

As an expert manufacturer of high-precision engine and steering components, we fulfil the strictest requirements with regard to the quality and dimensional accuracy of our products. Working on a µm scale is our daily business.

Manufacturing processes

- Deep-hole drilling
- Reaming
- Honing
- Turning
- Longitudinal turning
- Automatic-lathe turning
- Multi-spindle turning
- Cylindrical grinding
- Centreless grinding
- Rotary swaging
- Laser welding
- Milling
- Polishing
- Embossing
- Laser etching
- Ring fitting

and many more besides

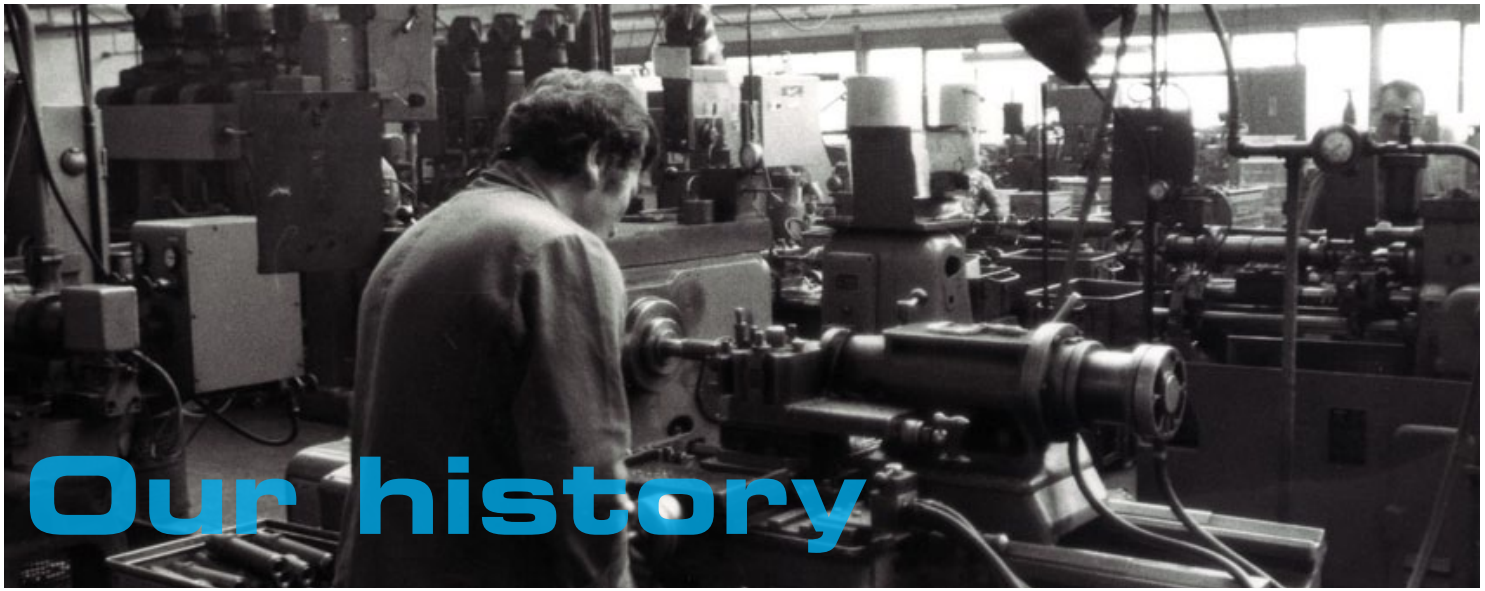
Our materials

- Grey cast iron
- Steel
- Sintered metal
- Copper alloys
- Aluminium

Centreless grinding

Due to our many years experience, we have become specialists in centreless grinding using plunge-cut and through-feed methods

We are able to fulfil the highest requirements regarding dimensional accuracy, geometry and surface finish.



Our history

1953 Karl C. Schweizer and his son, Heinz Schweizer, established the company in the Gartenstraße in Nellingen, Germany

1958 The monthly production reached 100,000 units

1959 Relocation in the new factory in the Lerchenberg-straße in Nellingen, Germany

1960 Manufacture of valve bushings for motor-vehicle steering assemblies

1970 Extension of the factory

1971 After his father's death Heinz Schweizer took over the sole management of the company

1983 Manufacture of flexural bars for HGV steering systems and the introduction of CNC technology

1986 Manufacture of torsion bars for power-steering assemblies

1987 Production facility for the manufacture of steering components

1991 Addition of a warehouse and manufacturing building

1993 Manufacture of PCF torsion bars for power-steering assemblies

1998 Introduction and certification of the QM system according to ISO 9002

1999 Manufacture of turbocharger components and set-up of the multi-spindle machining department

2002 Heinz Schweizer retired and handed over on the management of the company to his sons Joachim und Markus Schweizer

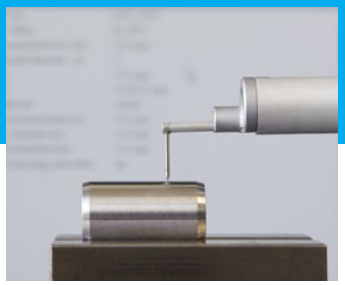
2005 Another factory building was added for the auto-matic and multi-spindle machining department

2007 The monthly production exceeded the one-million mark for the first time

2009 The QM system was certified according to ISO 9001:2008

Quality

Customer-orientated – Progressive
Close to the Process – „Zero-defects“ Approach



We have been certified according to DIN ISO EN 9002 since 1998 and according to DIN ISO EN 9001:2008 since 2009. Moreover, our QM system is based on ISO TS 16949.

Using state-of-the-art measuring instruments, inspection systems and our CAQ system, the quality of our products is ensured from receipt of the raw material, through every production stage right up to the final inspection. Instruction and training are also important elements of our Total Quality Management.

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