

High-precision sintered components for different applications



automotive



e-bike



medical technology

COMPANY INFORMATION

ABOUT SHW POWDER SYSTEMS

The product range of SHW Powder Systems located in Aalen-Wasserralfingen comprises mainly gear sets, camshaft phaser parts as well as sprockets and rotors used in a wide range of industries.

Whether in the automotive industry for engines and transmissions, in e-bikes or in medical technology - the high-precision and robust parts of SHW are convincing due to their cost efficiency, high dimensional accuracy and high quality.

Established

 **1962**

Production of

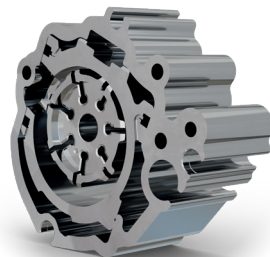
 **30 Mio. sinterparts/a**



ROTORS AND SLIDERS

FOR OIL PUMPS IN ENGINES AND TRANSMISSIONS

Engine and transmission oil pumps place high demands on the components in the flow area in terms of precision, dimensional stability, component strength and wear resistance. Depending on the strength and tribological requirements, different sintering materials and surface treatment or hardening processes are available.



ROTORS AND SLIDERS

FOR CAMSHAFT PHASER

Fuel consumption and CO₂ emissions are reduced using highly precise camshaft phasing components such as stators and rotors. Sintered components allow the requirements for camshaft phasing systems, such as phasing speed, precision and efficiency with optimised space, to be implemented economically – whether for hydraulic or electromechanical phasing systems.



SINTERED ALUMINUM PARTS

The materials developed for the robust requirements in the engine environment are characterised by high wear resistance. The fundamental advantages of aluminium, such as its low weight, its mechanical properties and its corrosion resistance, contribute to the reduction of CO₂ emissions.



SPLIT GEAR WHEELS/ DRIVE WHEELS

High demands are placed on the strength of backlash-compensating gear systems that are optimised in terms of space and cost. They must also be precise and wear-resistant. In addition to various hardening processes, SHW uses the special 'X-Size' compression process for high-strength, noise-optimised engine gears. This results in a wear-resistant quality with a surface that is almost as dense as steel.



SPUR AND HELICAL GEARS FOR ENGINE/ TRANSMISSION

We develop and produce gears and sprockets of the highest precision and repeatability for various engine and transmission applications, as well as for other applications. Therefore we use compression and hardening processes to meet the respective requirements for the gears.



MOULDED SINTERED PARTS FOR DIFFERENT APPLICATIONS

The portfolio includes belt wheels and belt tensioning systems, pinions, encoder wheels, selector arms and pawls, clutch parts, bolts, valve pins, synchronizer bodies and much more.





improved mechanical properties

The sintering process **improves** the **strength**, **durability** and **structural integrity** of materials. **High dimensional accuracy**. Suitable for mass production with high volumes and consistent quality.



complex shapes and designs

Production of **parts with highly complex geometries** and **complex designs** that are difficult or impossible to produce using conventional manufacturing methods.



self-lubricating properties

The micropores in sintered materials can be filled with lubricating oil, **resulting in self-lubricating bearings**.



environmental friendliness

Sintering is an environmentally friendly process, **as less material waste is produced and energy consumption is lower** compared to melting processes.

»» We would like to contribute with our global and long-term experience to your success.

CONTACT US

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