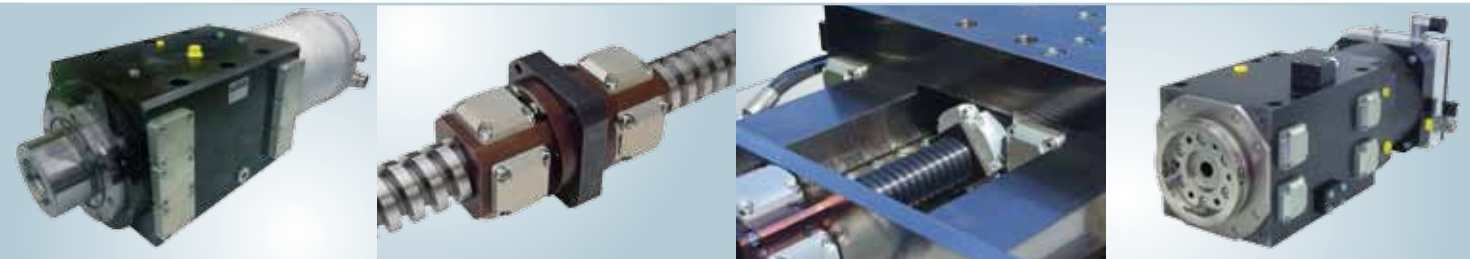


# It's good to be friction-free

Hydrostatic components



**HYPROSTATIK<sup>®</sup>**

# It's good to be **friction-free**

**HYPROSTATIK**<sup>®</sup>



## Highly popular

Intelligent technologies that pay off are always in great demand. In particular, when the global economy leaves much to be desired. Innovations are necessary in order to assert oneself successfully on the market in a troubled investment climate. Hyprostatik provides exactly these: machine tools, which are equipped with our hydrostatic components that provide you with the decisive competitive advantages. Low friction, no wear and tear, low energy losses, instead a significant gain in precision, performance and durability.

## Superior innovation

As technology leader in the area of hydrostatics, we design and produce unique products for the global use. Hydrostatic guideway systems, screw drives and spindle bearings enriched by our unprecedented PM-Flow-Controller. By its innovative construction it provides a five-fold increased stiffness and a significantly higher rotation speed in spindle bearings and significantly lower friction and performance of the pumps.

In contrast to alternative systems, maximum loads are even possible at highest rotation speeds. Our hydrostatic lead screw is globally unique: with up to twice the stiffness of the nut compared to ball screws with regard to the bearing and a multiple reduction of the energy demand compared to linear motors and with a simultaneous lack of any wear-characteristics, this product, too, sets new standards.

## Efficiency that has many reasons

Whether grinding machine, lathe, milling machine or an entire machining center – our hydrostatic technology is an advantage for any machine tool and any production.

The benefits at a glance:

### Wear-free operation

Lower maintenance fees, improved machine availability and operating life; machine features keep whole machine life.

### Friction behaviour

The friction force of the guideway systems is very low, too, in heavy carriages and proportionally to the speed: by this, no position failure and no stick-slip-effects during reversal of the motion direction occur.

### Excellent damping

Increased tool service life and an improved surface quality and maximum chip removal, both lead to more universality and can make hard machining possible.

### Concentricity and track accuracy

The smooth respectively integrating effect of hydrostatic enables an extraordinary movement quality of the spindle bearings less than  $0.1\mu\text{m}$  and a respectively excellent precision of track movements of the carriage units.

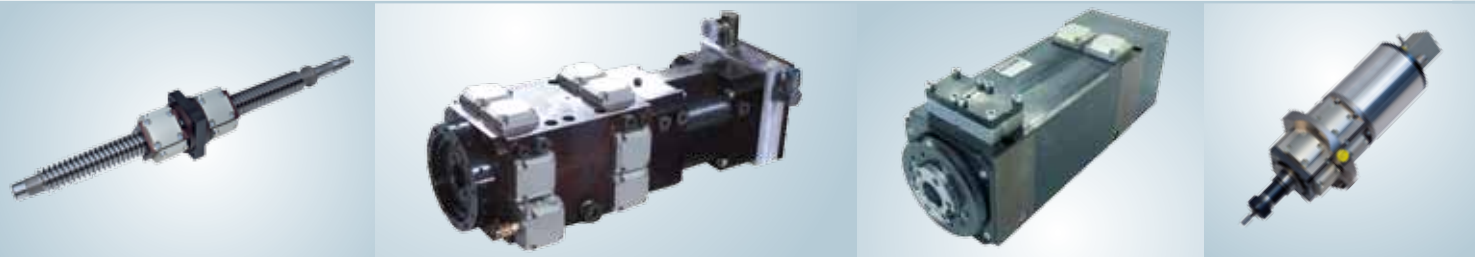
### Temperature stability

During recooling the hydrostatic oils, possible heat input into the machine is prevented. Instead, it will be thermally stabilized. By that, thermal symmetrical constructions mostly can be waived. The heat drift after switching the machine on is omitted.

### Further possibilities

By measuring the pocket pressures, the machine functions and the process forces can be controlled. Furthermore, a shaft in the hydrostatic radial bearing can rotate and move along-side. Two separate bearings are not necessary, and in limited overall dimensions spindle bearings with significantly larger spindle diameter are possible.

# HYPROSTATIK®



**HYPROSTATIK** – a benefit for your machine tool



**HYPROSTATIK®** Schönfeld GmbH  
Felix-Hollenberg-Strasse 3  
73035 Göppingen-Jebenhausen  
GERMANY  
Phone +49 (0)7161 - 96 59 59-0  
Fax +49 (0)7161 - 96 59 59-20  
E-Mail: [info@hyprostatik.de](mailto:info@hyprostatik.de)

[www.hyprostatik.de](http://www.hyprostatik.de)