supfina



PLANET V Double-Disc Grinding



SupfinaSurface Finishing Systems



Paired with an extensive knowledge of the up- and downstream processes, Supfina Grieshaber has long experience in the field of superfinishing machines with both stones and tapes. Supfina offers world-renown superfinishing solutions for automotive suppliers, anti-friction bearing and general precision industries as well as the medical technology sector. We also offer cost-effective machining systems for double-disc and belt grinding.

Our automated machines are used for high volume production. Supfina's attachments and small machines are integrated into manufacturing lines for low volume production. With either solution we can ensure a cost-effective process guaranteeing optimum machining of the functional surfaces of components.

Combined with our advanced knowledge of proven tools, we, as a system supplier offer a wide range of comprehensive solutions for flexible machines and its processes. Our outstanding and knowledgeable service technicians ensure you, as a customer, that you can always rely on Supfina both now and in the future.

We have the right solutions to your machining needs: fast - efficient - flexible

From our Supfina Technology and Production Center in Germany, systems and production lines are delivered to customers all around the world.

With over 50 representatives and our locations in the American and Asian region we are globally active and can offer our customers comprehensive service and support.



Double-Disc Grinding

A new dimension

With the development of the new and powerful Planet V line Supfina advances into a new dimension of double-disc grinding.

The extremely rigid and compact overall machine concept with vertical spindle arrangement was developed together with our customers. For the end user, it offers an excellent finished part with cost-effective production.

Down time is reduced to a minimum thanks to unique equipment features such as the patented tilting navigation and the integrated tool change device. With the Planet V's floor space saving self-contained design (machine can be transported in one piece), the machine can easily be integrated into new or existing manufacturing lines. Loading and unloading can be manual or automatic.

Depending on the part requirements, different tools (conventional/CBN) and methods (through-feed/plunge-cut) can be used. All dressing technologies are of course available.





PLANET

The solution

Fields of application:

- Large-quantity and high-precision flat parts
- Automotive and automotive suppliers' industry
- Anti-friction bearing industry
- Manufacture of the following components: pump parts, sealing washers, clock and watch parts, etc. made from hardened and unhardened steel, ceramics, hard metal, brass, sintered material and special alloys

Advantages:

- Robust process
- High stock removal rates
- Short cycle times
- Short change-over times
- Short non-productive times
- · High part quality



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Planet V4 (figure)

Working range

Max. part height: 40 mm Max. diameter: 85 mm

Planet V7

Working range

Max. part height: 100 mm Max. diameter: 180 mm

supfina PLANET $oldsymbol{V}$

Our development --> your benefit

FEM-optimized machine base made from composite material

--- Compact system with outstanding machine rigidity

Patented tilting navigation

→ Visualization of the grinding process

Linear, compact dressing system

- → Maximum dressing precision
- Possibility to change over to CBN and diamond tool technology

Motorized spindles

High performance and variable speeds

Optional use of CBN and diamond grinding wheels

- → Long tool life
- Safe investment due to best in class versatility

Optimum ergonomics --> comfortable operation

Modern, compact design

- ⇒ Excellent accessibility
- Low space requirement
- → Large sliding door
- ⇒ Easy to service
- Machine can be transported as one piece

Cost-effectiveness → your advantage

Future-oriented machine concept

- Short tool change times due to integrated tool change mechanism
- → Short change-over times
- → Very easy to operate
- Easy integration into existing and new manufacturing lines
- Flexible automation capability
- → Virtually maintenance-free
- Excellent finished part quality



PLANET

Perfection in every detail

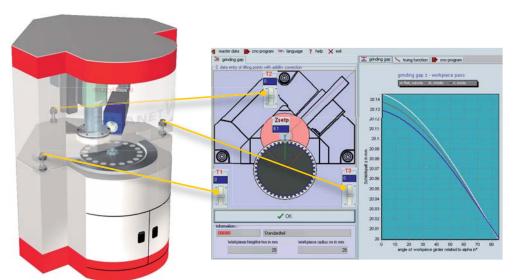
One of the systems we developed to offer a quick and easy change-over of the machine to other part types is the patented Tilting Navigation System®.

By means of this program visualizing the grinding gap, the position of the upper grinding spindle can be precisely adjusted with minimal time, taking into account the respective part and process.

The required setting parameters are clearly and simply displayed on the operating screen.

The control automatically transmits all new positions of the upper grinding spindle to the dressing system.

A corresponding dressing system reacts directly to the changed tool positions, guaranteeing optimum grinding tool conditions and, consequently, close manufacturing tolerances in every situation.



Tilting navigation with display of set and actual values

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Depending on the requirements of the customer, loading and unloading can either be manual (with stacking magazine and discharge chute) or automatic. We deliver all systems required for automation such as vibratory feeders and

Flexible loading / unloading

robots as well as all components needed to integrate the Planet V into new and existing manufacturing lines. If you require further information please contact us.



The novel design of the Planet V, featuring a working compartment that can be opened 180°, offers a maximum of freedom for the operator and for the integration into automated

processes. A smoothly sliding hood opens towards the top, giving access to the entire working range. There are no doors getting in the way of the operator.



Excellent accessibility

The ergonomic design of the Planet V with its control cabinet arranged in T-shape offers extremely good accessibility and ease of service from all sides. Due to its compact dimensions

(transport in one piece), the machine is especially suited for integration into existing machine processes.



Compact dimensions

Each part type requires a specific machining process. On the Planet V, you can choose between the through-feed and the plunge-cut method.



A variety of grinding processes

The easy and safe handling of the integrated tool change system reduces non-productive time to a minimum, thus contributing to the high cost-effectiveness of the Planet V.



Machine-integrated tool change mechanism

The compact dressing system ensures that all tools in operation fulfill the process requirements at any time. As it is always possible to change over to the dressing of

Linear dressing system

