

Fine grinding, flathoning, lapping and polishing

SERIES HAHN & KOLB
DUOMAT 500 – 900 / ZL 500 – 900
ZL 501





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The STÄHLI Group has breathed new life into a „pioneer“ of the fine grinding process on two-disc machines, the Hahn & Kolb DUOMAT and ZL type model series.

In 60 years over 2000 machines from these series have been sold worldwide. Supported today by the STÄHLI Group, these users now benefit from our cutting-edge technology.

While we have retained the time-tested cast design with the pivoted arm supported on a centre beam with upper disc bearing and hydraulic power input, we have added a new control system that meets today's requirements – the STÄHLI system.

In conjunction with specially devised measurement control technology and modern drives, this now permits the use of conventional SIC and COR machining discs or state-of-the-art diamond and CBN discs.

DUOMAT



ZL 50T

Inspiration. The surface of the earth changes inexorably. Water and wind constantly erode the skin of our planet and alter its countenance. Forms, surfaces and structures come into being in endless diversity. Unique, entrancing works of art, characterized by a beauty and quintessence such as only Nature can create. Nature is our model – both inspiration and standard for our endeavors towards innovation and perfection.



AT 500 – 900 / ZL 500 – 900



Features

- Strudy cast design
- Hydraulic machining load control
- Sensitive loading capability
- high repeatability
- Dressing facility
- Disc cooling
- Insert for lapping with cast discs
- Insert for cylindrical lapping
- Capability of attaching loading and unloading tables
- Automation concepts
- Safety guard for work zones
- Machining disc diameters of 500-900 mm
- Variable planetary drive equipment
- Retrofit computer-aided measurement control
- Process linking



Twin-disc flat honing machine

- Can be used for virtually all materials
- No magnetic clamping device, hence no material distortion
- High machining pressure for increased material removal
- Separate, variably-adjustable drives for the lower and upper working discs as well as the inner pin crown wheel
- Two operating concepts with different emphases:

Concept 1 with simple and clear operation by means of pushbuttons, switches and a separate measuring desk

■ **Concept 2** with significantly expanded and easy operation by means of an operating panel and regulated hydraulics

- Machine which is well-known for its extreme robustness and long-life
- Flat honing machine with hydraulic loading
- Infinitely variable drives
- Automatic dimensional, time and pressure control with several machining stages

- Working disc dressing device with dressing diamond
- Cooling lubricant circuit
- Protective clothing
- Separate electrical control cabinet
- Electrical height adjusting device for outer pin crown wheel

■ Expanded options for operating concept 2 (extract):

- Programming of load and speeds with ramps for each of the five machining stages
- All program parameters in one view on the graphics display
- Entry of the approach positions for fast travelling the outer pin crown wheel for loading/unloading
- Cycling of the rotor discs for fast loading/unloading
- Entry of sequence parameters for the free configuration of the machine functions
- Display of error sources and faulty operation with help information

Technical data

POWER	
Total power requirement	14 kW
Workloads	0-450 daN
Upper and lower disc	0-200 r./min.
Inner pin crown disc	0-120 r./min.
Number of workstations	2
DIMENSIONS	
Max. working discs-diameter	540 mm
Max. disc ring width	165 mm
Max. material-diameter	160 mm
Gap between grinding discs	80 mm
Dimensions incl. disc dressing, control cabinet and hydraulic unit LxWxH	2300x2200x2250 mm
Weight	approx. 1800 kg

Worldwide Stähli Group services aimed specifically at the Hahn & Kolb type range of fine grinding, lapping and polishing machines:

- Spares service for all models of the DUOMAT and ZL type
- On-site repair and installation service
- Factory machine repairs
- General and dedicated overhauls
- Modernisation of existing concepts
- Measurement control added or exchanged for new STÄHLI system
- On-site advice
- Used machines bought and sold

We are one of the leading companies worldwide in the manufacture of flathoning, lapping and polishing machines. For our customers, we are represented just as much by our standard products as by custom - made and need - oriented special productions. The special know-how needed for this is due to decades of experience of daily new assignments in contract work, with the support of our expert and committed workforce. We are happy to pass on our know-how to our customers within the framework of contract work, tests and complex

or experimental project studies. Try out our reliability and innovative dynamism. Further information may be obtained from the following addresses or from our homepage.

Consultation and Sales, Machining and Testing centers:

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