

SHL-FREE-BELT AND CONTACT WHEEL BELT GRINDING MACHINE TYPE FKS 250/450 ROB

The SHL-Free-Belt and Contact Wheel Belt Grinding Machine FKS 250/450 ROB is built for use in SHL-Robot-Belt-Grinding Plants and applies the latest development in belt grinding technology in design and construction. The machine is connected to a robot by the SHL BUS-System as a functional unit. The SHL-Free-Belt and Contact Wheel Belt Grinding Machine FKS 250/450 ROB meets in its construction the special requirements for belt grinding and deburring of profiled

workpieces and shaped parts, even such with most difficult contours and materials of metal, nonferrous metal, wood and plastics with various belt speeds.

With the movable and programmable contact wheel the machine can be used for grinding either at the free belt or at the contact wheel. The compact construction gives a large free moving space for the workpiece movements.

The Standard Design for Aluminium

Dust from aluminium materials in combination with air can create highly explosive mixtures. Thanks to its extensive specialist know-how in this safety-relevant work process, SHL can plan a solution for your application too. SHL had TÜV Süd review the FKS for compliance with Machinery Guidelines and got the test report.

Special technical features

- Contact wheel diameter 250 - 450 mm
- Sensitive and infinitely programmable control of the contact wheel pressure to compensate workpiece tolerances
- Contact wheel can be moved in and out via robot program so that a large free belt area is available if contact wheel is retreated
- Additional motorised movement of contact wheel to adjust s.p.m. for various contact wheel diameters
- The upper idler wheel can be used as contact wheel unit with automatic contact pressure control for small radii as an option
- Micro-processor controlled frequency transformer for infinite variation of the spindle speed
- Digital display of the spindle speed in the central SHL operating panel for precise adjustment of the speed level according to the application with regard to contact wheel diameter and the materials to be finished
- Infinitely operating automatic belt re-tensioning device to keep a constant belt tension which is automatically adjusted by the robot programme or manually in the central SHL operating panel.
- Automatic belt tension release for fast and easy belt change
- Motorised belt tracking device



FKS 250/450 ROB INTEGRATED INTO ONE UNIT



Technical data

Wheel diameter:	250 – 450 mm
Motor output:	4 kW (optional 5.5 kW)
Spindle rpm:	min. 300 1/min. max. 3500 1/min.
Spindle diameter:	35 mm
Grinding belt length:	3500
Max. grinding belt width:	100 mm (optional 150 mm)
Free belt:	yes
Electr. connection:	400 V, 3 phase, 50 Hz
Belt tension:	min. 0.3 bar / max. 7 bar
Pressing pressure:	min. 0.0 bar / max. 7 bar
Suction connection:	140 mm ducting diameter
Dimensions (L x W x H):	750 x 720 x 1865 mm
RAL colour:	7035 / 7016
Weight:	400 kg
Required suction performance:	V = 1700 m ³ /h at $\Delta p = -850$ Pa
Spindle attachment	yes, optional



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