

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

The SHL Double Free-Belt and Contact Wheel Belt Grinding Machine DKS 250/450 ROB has two independently controlled free-belt and contact wheel grinding units with two separate drives. They were built for use in robot grinding cells and apply the latest development in belt grinding technology in their construction.

With its two independently controlled free-belt and contact wheel grinding units, this machine can be used to work with different grinding belt grains and contact wheel hardnesses.

The DKS 250/450 ROB is installed on a fixed base and is connected to the robot by a field-bus system as a functional unit. This ensures quick assembly and commissioning within the SHL robot cell. Grinding is possible with the free belt or contact wheel.

The SHL-DKS 250/450 ROB's construction meets the special requirements for belt grinding and deburring of parts with difficult profiles and contours, parts of both ferrous and non-ferrous metals, wood and plastics may also be surface finishes at various belt speeds.

Special technical features

- Micro-processor controlled frequency transformer for infinite variation of the spindle speed.
- Independently powered drive spindles.
- Display and setting of the spindle speed via an external operator panel (belt speed).
- Sensitive and infinitely programmable control of the contact wheel pressure to compensate for part tolerances.
- Automatic belt tension release for fast and easy belt change.
- Continuously operating automatic belt re-tensioning device.
- Belt track adjustment motor-driven via push button.
- Increased flexibility and better accessibility by integration with the DPE optional.
- Contact wheel can be moved in and out via a robot program so that a large free belt area is available if contact wheel is retracted.
- Adjusting of the contact wheel for setting and adjusting the different contact wheel diameters.

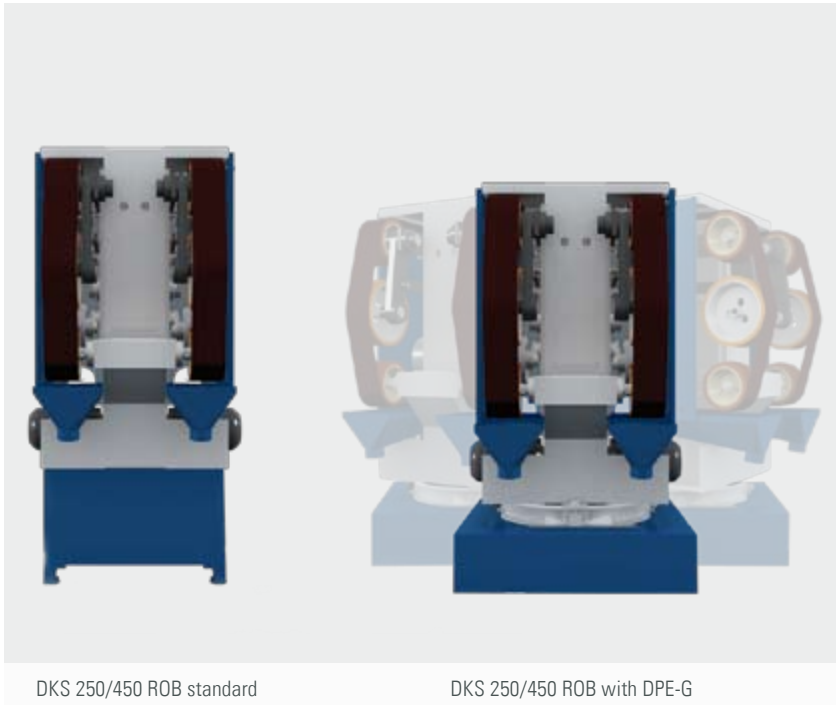
The Standard Design for Aluminium Grinding

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 DKS for compliance with the Machinery Guidelines and got the test report.



DKS with DPE-G optional

DKS 250/450 ROB



DKS in connection with DPE-G



Assembly Cell



Expansion options

Optional

Combination with DPE-G - for both greater flexibility and improved accessibility
 → DPE-G/K-Datasheet

Additional modules for greater flexibility. They can be used for all purposes when doing practical work
 → Additional elements: Datasheet "Grinding on machines, type DKS.../FKS..."

Technical data

Wheel diameter:	250 – 450 mm
Motor output:	4 kW (optional 5.5 kW)
Spindle speed:	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
Elect. Connection:	400 V, 3-phase, 50 Hz
Belt tension:	min. 0.3 bar max. 7 bar
Force control:	min. 0.0 bar max. 7 bar
Exhaust connection:	140 mm
Dimensions (LxWxH):	approx. 1200 x 900 x 1900 mm
RAL colour:	7035 / 7016
Weight:	approx. 700 kg
Required suction output:	V = 170 m3/h at Dp= -850 Pa
Preliminary spindle:	yes, optional



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