



RASOMA



DOUBLE SPINDLE MACHINING CENTER

DSP 450 (500)- PERFORATING, DUBBING AND MILLING OF BRAKE DISCS

AREAS OF USE AND APPLICATION

The double spindle machining center DSP of the RASOMA brand is specialized in highly efficient drilling/milling machining of internally ventilated brake discs or similar parts such as tapered bearing rings, including automatic parts handling. The centers, based on 2 vertical main spindles, allow simultaneous machining of 2 workpieces using the pick-up method. In addition, automatic parts handling by means of loading and workpiece feeding via the raw part storage and a friction roller conveyor system, automatic workpiece turning via a turning station, as well as the discharge of the workpieces via a finished parts roller conveyor, is integrated into the machine.

The machine features automated part recognition, thickness measurement, and position determination of ribs and studs, as well as automatic height positioning of the workpieces.

The tools are mounted on the drilling spindles arranged opposite to the main spindles, and machining can optionally be performed with 2, 3, or 4 drilling spindles

per side to add additional tools. For example, operations such as dubbing or grooving can be added, or three holes can be drilled simultaneously per work cycle. Optionally, it is also possible to equip the machine with an angle drilling head to drill the pin holes.

ADDED VALUE

- Simultaneous machining, workpiece turning, and measuring of workpiece side 1 and 2
- Extraordinary cycle times and continuous accuracy due to high specialization
- Compact space-saving design
- Machine bed made of polymer concrete or granite with very high stiffness
- Robust design of machine components
- User-friendly and technology-specific operating screens and programming interfaces
- Machine integration into turnkey cells and complete production lines





MACHINE SPECIFICATION

WORKING AREA		DSP360-2	DSP450-2	DSP500-2
Swing diameter	mm	350	450	500
Chuck Ø, standard	mm	400	400	400
x-axis (horizontal)	mm	1200	1200	1700
y-axis (vertical)	mm	330	330	370
FEED DRIVES				
Ball screw Ø X	mm	40	40	40
Ball screw Ø Z	mm	40	40	40
Rapid feed x-axis	m/min	60	60	60
Rapid feed y-Axis	m/min	60	60	60
MOTOR SPINDLE				
Spindle head with short cone	Gr.	A6	A6	A6
Drive power, 100% duty	kW	14	14	14
Torque, 100% duty	Nm	250	250	250
Max. Speed	U/min	280	280	280
TOOL CARRIER (DRILLING SPINDLE)				
Drilling Spindle	Peaces	2 / 4	2 / 4 / 6	4 / 6 / 8
Angle head (drilling horizontal)		-	max. 2	max. 2
Drive power, 100% duty	kW	18	18	18
Torque, 100% duty	Nm	11	11	11
Max. Speed	U/min	10000	10000 / 16000	10000 / 16000
CNC-CONTROLS		SIEMENS	SIEMENS	SIEMENS
Type		Sinumerik SL840 (ONE)	Sinumerik SL840 (ONE)	Sinumerik SL840 (ONE)
DIMENSIONS				
Weight	kg	9000	10500	19000
Depth (incl. chip conveyer)	mm	3500 (4500)	3600 (4500)	5000 (6000)
Width	mm	2400	2600	3800
Heights	mm	3150	3150	3500