Double spindle machining center

DSP 450



102 holes in 50 seconds (1 drill spindle of each side in the machine)

since 1895



A member of the **NSH**-Group

TOWARDS THE FUTURE WITH TRADITION

We introduce

The double spindle machining center enables the machining of two work pieces simultaneously and is equipped with 2, optionally 4 or 6 drill spindles. With this machine, plenty of holes can be achieved at will.

The automatic loading via a storage for raw parts is coupled to a work piece alignment to bring the different hole patterns into the brake discs position-oriented. In addition, a height-positioning of the brake disks takes place for the different heights. The thus determined height adjustment degrees are deposited in the control for the machining operation.

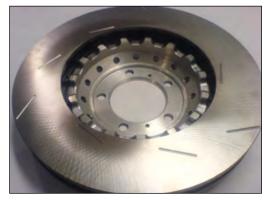
For each type of brake disk, from the control side there is a machining program deposited for the corresponding hole pattern. A turning station connects the first clamping with the second clamping. Finished parts can be discharged by means of a roller conveyor.

Technical data

Operating capacity	
Diameter of brake disk, max.	450 mm
Thicknesses of brake disc	8-45 mm
Slide travel X	1,170 mm
Slide travel Z	380 mm
Main spindle	
Motor spindle	Siemens torque motor
Spindle head DIN 55026	A6
Turning spindle drilling	32 mm
Speed	Max. 280 U/min
Drill spindles	
Number	2, optional 4 or 6
Motor spindle	Siemens synchronos
motor Spindle head	HSK 50
Speed, max.	10,000 opt. 16,000 U/min
Feed drive	
Rapid traverse rate XY	60m / min
Diameter of ball screw XY	40 mm
Compressed air connection	6 bar
Electrical specifications	
Operation voltage	3/PEN AC 50 Hz 400V
Control voltage	24 VDC
Power frequency	50 Hz
Nominal current	175 A
Connected load	105 kV A
Max. fuse	250 A
Dimensions	
Length (with chip conveyor)	~7,400 mm
Width	~5,600 mm
Height	~3,500 mm



Perforating of brake disks: 0.25 ... 0.6 seconds per hole plus 9 seconds for automatic loading and unloading



Brake disks of a sports car manufacturer with milled grooves, produced with RASOMA **DSP 450**



