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HAUSER TRIPET TSCHUDIN

HAUSER S35-400

HIGH TECH AS YOU WANT IT

From the straightforward
bore grinding machine
to the automatic
grinding unit.

TECHNICAL DATA

Capacity

Range of adjustment X, Y	500 x 300 mm (19.7 x 11.8 in)
Vertical adjustment of grinding head (W)	450 mm (17.7 in)
Clearance between grinding motor (45S) and table	0 - 500 mm (0 - 19.7 in)
Distance between spindle center and column	365 mm (14.5 in)
Diameter ground (with wheel Ø 100 mm):	
- without extension plate	max. 230 mm (9 in)
- with extension plate	max. 360 mm (14.2 in)
Taper grinding, included angle (divergent and convergent)	max. 16°

Table

Working surface	600 x 380 mm (23.6 x 15 in)
6 T-slots, width	10 mm (.394 in)
Admissible load	max. 300 kg (660 lb)

Feeds

Table and saddle X, Y	
- Machining speed	0 - 2'000 mm/min (0 - 78.7 in/min)
- Traversing speed	2'000 mm/min (78.7 in/min)
Vertical traversing speed W	
- Machining speed	0 - 2'000 mm/min (0 - 78.7 in/min)
- Traversing speed	4'000 mm/min (157.4 in/min)

Grinding spindle

Diameter of the spindle sleeve	100 mm (3.94 in)
Machine prepared for the following grinding spindle speeds:	
- Grinding motors, infinitely adjustable and programmable	4'500 - 80'000 min^{-1} (r.p.m.)

- Grinding turbines, adjustable up to	130'000 min^{-1} (r.p.m.)
- Slot-grinding attachments, infinitely adjustable	3'900-18'300 min^{-1} (r.p.m.)
Planetary speed C-axis:	
- Planetary-mode, infinitely adjustable and programmable	5 - 300 min^{-1} (r.p.m.)
- C-axis follow-up mode, AC servo-drive	up to 20 min^{-1} (r.p.m.)
Stroke speed Z-axis:	
- Alternating stroke movement, infinitely adjustable	$V_{min.}$ 0,500 mm/min (.02 in/min)
	$V_{max.}$ 14'000,000 mm/min (551 in/min)
- Stroke frequency Z	max. 5 Hz
- Stroke length Z, infinitely adjustable	max. 110 mm (4.33 in)
Radial feed U-axis	up to 5,5 mm (.217 in)

Accuracy indications

Positional uncertainty of the axes X ,Y and W (approached from ± direction) P corresponding to VDI/DGQ 3441	0,002 mm (.00008 in)
Mean positional scatter of the axes X ,Y and W (approached from ± direction) P_s corresponding to VDI/DGQ 3441	0,0016 mm (.00006 in)
Mean reversing error of the axes X ,Y and W (approached from ± direction) U corresponding to VDI/DGQ 3441	0,001 mm (.00004 in)
Positional deviation of the axes X ,Y and W (approached from ± direction) P_a corresponding to VDI/DGQ 3441	0,0015 mm (.00006 in)
Contouring accuracy of the axes X - Y : Grinding of a gauge-ring Ø 200 mm. Measuring of the ground gauge-ring, with Talyrond. Max. allowed deviation	0,005 mm (.0002 in)
Repeating accuracy of the Z-axis	±0,001 mm (.00004 in)
Dynamic reversing accuracy of the Z axis in stroking	+0,000 mm (+.000 in)
mode and on the full speed range between 1 and 12 m/min	-0,050 mm (-.002 in)

Measuring conditions

Ambient temperature	20 °C -0°/+2°
Permissible temperature changes	2 °C per 24 hours, resp. 0,5 °C per hour
Variations of temperature within the machine volume	0,5 °C

Conditions for installation

Electric connection	3 x 400 V, 50 Hz
Installed power	7,5 kW
Preliminary fuses	25 A
Connection to earth with flex cable	min. 10 mm^2
Mains voltage/mains frequency tolerance	±10 % / ±2 %

Mains failure duration	max. 10 ms
Ambient temperature of the control unit	5 °C - 30 °C
Air requirement (suction capacity of compressor)	20 m^3/h (706 cu.ft./h)
Necessary mains pressure	6 bar (90 psi)
Permissible mains pressure	max. 10 bar (150 psi)