3. Technical information

3.1. Turret punch press C6/C8

Ram force	300 kN (Korea: 29.4 ton = 288 kN)
Punching stroke	servo hydraulic
Number of tool stations in turret	20 pcs
Tools	Thick Turret
Punch diameter, max.	89 mm
Material thickness, max.	8 mm
CNC Index Tool:	
Number of index tool stations	standard 2 pcs (max.10 pcs)
Punch diameter, max.	89 mm
Tool rotation, max.	166 r/min
Upforming cylinder (indexable, option):	
Force	250 kN
Stroke length	12 mm
Sheet weight, max. (1)	200 kg
Clamps	pneumatic, 3 pcs (optional 4 pcs)
Sheet size X x Y, max. (C6)	3074 mm x 1565 mm
Sheet size X x Y, max. (C8)	4300 mm x 1565 mm
X-traverse	3144 mm
X-traverse, axis speed max.	120 m/min
Y-traverse	1615 mm
Y-traverse, axis speed max.	90 m/min
Positioning speed, max.	150 m/min
Hit speed, max. (2)	
1 mm between holes	1100 1/min
25 mm between holes	500 1/min
250 mm between holes	200 1/min
Punching accuracy according to LKP-7100: (3)	
Hole location deviation (X/Y axes), max.	0.1 mm
Hole-to-hole distance deviation (X/Y axes), max.	+/- 0.05 mm
Angular deviation (CNC Index Tool) max.	+/- 0.1°
Positioning accuracy according to VDI/DGQ 3441: (4)	
Positional deviation P_a (X/Y axes)	0.08 mm (+/- 0.04 mm)
Positional scatter P_s (X/Y axes)	0.04 mm (+/- 0.02 mm)
Turret rotation	30 r/min
Tool change time (5)	1 ... 3 s
Work chute (option), max. part size	500 mm x 500 mm
CNC control	Siemens Sinumerik 840D
Program memory	1.5 MB
Ethernet connection 100 Mbps	Yes
Machine weight	13 000 kg
Hydraulic unit drained weight	600 kg
Oil tank volume	200 l
Oil cooler, cooling capacity max.	1.0 kW / °C
Oil cooler air flow	2.9 m^3/s

[redacted]

Electrical connection (E1):	
Average power consumption [6]	15 kVA / 13 kW
Power requirements [7]	35 kVA
Fuse	3 x 50 A (with voltage 3 x 400 V)
Compressed air connection (P1):	
Min. air pressure	6 bar
Max. air consumption	5 Nl/s
Average air consumption [8]	2.5 Nl/s

3.2. Notes

[1] Acceleration/deceleration rate of X and Y axes is dependent on sheet weight. Part accuracy depends on acceleration/deceleration rate and sheet size and weight.

[2] Hit speed is dependent on the programmed stroke length, ram speed and acceleration/deceleration rate and speed of the axes.

[3] Punching accuracy is tested according to the Finn-Power standard LKP-7100 by punching holes in a 1 m x 1 m sheet at 100% speeds and by measuring the location (X/Y) and angle (CNC Index Tool) of the punched holes from the sheet.

[4] Positioning accuracy is measured according to the VDI/DGQ 3441 standard, using a laser-interferometer measurement system, from the X and Y-slides of the coordinate table of the machine.

[5] When using special tools, the tool change time may differ from the given value.

[6] Average power consumption is based on production run of a typical nesting program with nominal sheet size and 1.5 mm sheet thickness. Effective value can be used when calculating energy costs.

[7] This value must be used when dimensioning the power supply to machine (transformer and cable sizes).

[8] Average compressed air consumption is based on production run of a typical nesting program with nominal sheet size and 1.5 mm sheet thickness. The value can be used when calculating energy costs.

We reserve the right to change technical specifications without prior notice.