

**Main spindle (Z11/S10/S11/C11)**

Max. bar capacity	mm	25,4
Standard workpiece length with rotating guide bush	mm	200
Spindle speed of rotation	rpm	0 to 10 000
Spindle output S11	kW	12,3 (18,1)
Max. constant torque	Nm	19,6 (28,8)
Spindle stoppage time (8 000 rpm to 0)	s	1
Mild steel drilling capacity	mm	14
Mild steel tapping capacity		M12

**Independent tool platens (X11/Y11/S12) (X21/Y21/S21)**

Number of tool positions on guide bush		10 (5 + 5)
Cross section of rotating tools		16 x 16
Positions for rotating tools		Max 6 (4 with S21 + 2 with S12)
Rotating tools speed of rotation	rpm	100 to 8 000
Rotating tools output	kW	1,5 - 2,2
Steel drilling / rotating tool capacity	mm	8
Rotating tool / steel tapping		M6 - M8

**End attachment (X31/Y31/S31)**

Number of tool positions		4
Positions for rotating tools		3
Speed of rotation of rotating tools	rpm	100 to 6 000
Output of rotating tools	kW	1,5 - 2,2
Steel drilling / rotating tool capacity	mm	8
Rotating tool / steel tapping capacity		M6

**Counter spindle (Z41/Y41/S41/C41)**

Max. bar capacity	mm	25,4
Insertion length of workpiece into spindle	mm	150
Spindle speed of rotation	rpm	0 to 10 000
Counter spindle output S41	kW	9,5 (12,3)
Max. constant torque	Nm	15,1 (19,6)
Stoppage time (8 000 rpm to 0)	s	1
Mild steel drilling capacity	mm	14
Mild steel tapping capacity		M12

**Secondary operation (X41/S42)**

Number of tool positions (steady or rotating)		7
Positions for rotating tools		3
Rotating tools speed of rotation	rpm	100 to 8 000
Rotating tools output	kW	1,5 - 2,2
Steel drilling / rotating tool capacity	mm	8
Rotating tool / steel tapping capacity		M6
Max. number of tools (with adaptors)		27
Distribution of tools in main / counter operations		19/8