

Single Column SKJ Series



Vertical lathe SKJ series are a modern single-column multipurpose machine tool designed for work pieces up to nominal diameter 629", height 157" and weight 220,000lbs. It is constructed with a traveling column and cross rail, rail head and side head (optional). It enables turning in a large range of work piece diameters at the most favorable position of the column and thus also better utilization of the side head. These concepts are useful especially for turning of ring-shaped work pieces, which have a larger diameter and do not need machining in the centers. The machine consists of a modular system of main assemblies and equipment that enables creating, in addition to the standard ones, special designs of machines customized to the customer's specific requirements.

	SKJ32-63D	SKJ50-100D	SKJ80-160D
	Vertical turning lathe, single column	Vertical turning lathe, single column	Vertical turning lathe, single column
<u>Machining capacity</u>			
Nominal diameter of turning ²	6300 mm (248")	10,000 mm (393")	16,000 mm (629")
Max.turning diam. to the centre of table	4000 mm (157")	6300 mm (248")	8000 mm (314")
Max. height of workpiece over table	2 500mm (98.4")	4 000mm (157")	5000mm (196")
Table diameter	3200 mm (126")	4700 mm (185")	8000 mm (314")
Maximum load	50 000 kg (110,000 lb)	100000kg (220,000 lbs)	320000kg (704,000 lbs)
Maximum torque	228 kNm (168,163 lbf)	236kNm (17,064 lbf)	580kNm (427754 lbf)
Main drive motor output	2x71kw (2x95hp)	2x71kw (2x95hp)	2x71kw (2x95hp)
Table revolutions 1st stage	0,87-25	0.5-12	0.25-6.2
2nd stage	3,5-100	2.5-50	1-25
Right head - horizontal cross rail travel	2 200mm (86.6")	3500mm (137")	6 500mm (156")
Left head - horizontal cross rail travel ³	-	-	-

Side head - vertical cross rail travel ⁴⁾	1400 mm (55")	2800 mm (110")	3600 mm (141")
Crossing of ram axis over the table centre	20 mm (0.78")	20 mm (0.78")	20 mm (0.78")
Ram slide	1600 mm (2000) 62" (78.7")	2000 mm (2500) 78.7" (98.4")	3200 mm (125")
Feeds	0,1- 8 000mm (314 ipm)	0,1- 8 000mm (314 ipm)	0,1- 8 000mm (314 ipm)
Rapid traverse	8 000mm /min(314 ipm)	8 000mm /min(314 ipm)	8 000mm /min(314 ipm)
Ram cross-section	340x340mm (13.3"x13.3")	340x340mm (13.3"x13.3")	450x450
Maximum tool cross-section	50x50 mm ,1.96 x1.96"	50x50 mm ,1.96 x1.96"	63x63
Maximum cutting force ⁵⁾	100kN (22480 lbf)	100kN (22480 lbf)	125kN (28101 lbf)
Cross rail stroke	1800 mm (73.7")	3000 mm (118")	3600 mm (141")
Traverse speed	500mpm (19.6 ipm)	500mpm (19.6 ipm)	500mpm (19.6 ipm)
Column travel	1 550mm (61")	2 245mm (88")	4 175mm (164")
Traverse speed	500mpm (19.6 ipm)	500mpm (19.6 ipm)	280mpm (7.8 ipm)