

## Technical Data – FADAL VMC

			VMC 3016 FX	VMC 4020 FX	VMC 4525	VMC 6030
<b>Capacity</b>	X-axis travel (longitudinal)	in ch	30	40	45	60
	Y-axis travel (latitudinal)	in ch	16	20	25	30
	Z-axis travel (vertical)	inch	20 (opt 28)	20 (opt 28)	24 (Opt. 32)	30
	Guide way construction (X-/Y-/Z-axis)		integral cast iron boxways – flame hardened and ground		integral cast iron boxways – flame hardened and ground	
<b>Table</b>	Table size	in ch	39 x 16	48 x 20	53.5 x 25	62.5 x 30
	T-slot (no. x width x span)	in ch	3 x .709 x 4.33	5 x .709 x 3.74	5 x 709 x 4.921	5 x 709 x 5.512
	Weight on table max.	lbs <sup>c</sup>	2,736	3,641	4,250	4,120
	Floor to table surface	in ch	32	32	31.25	36
<b>Motion</b>	Rapid traverse rate (X/Y)	in ch/min	1,000	1,000	1,000	400
	Rapid traverse rate (Z)	in ch/min	1,000	1,000	700	400
	Cutting feed rate (X/Y/Z)	in ch/min	400 (600 at 150%)	400 (600 at 150%)	400 (600 at 150%)	250 (375 at 150%)
	Ball screw size dia. (X/Y)	in ch	1.26 dual mounted	1.26 dual mounted	1.58 dual mounted	1.75 dual mounted
	Axis positioning accuracy**	inch	±0.0002	±0.0002	±0.00016	±0.0004
	Axis repeatability**	inch	±0.0001	±0.0001	±0.00006	±0.0002
	Axis drive motor, thrust	lbf	AC Servo, 3,800*	AC Servo, 3,800*	AC Servo, 3,800*	AC Servo, 5,000*
<b>Spindle</b>	Spindel nose to table top	in ch	4 – 24 (4 – 32 opt)	4 – 24 (4 – 32 opt)	4 – 28 (4 – 36 opt)	5.5 – 35.5
	Spindle center to column ways	in ch	16.1	20.11	27.875	30
	Spindle taper		no. 40	no. 40	no. 40	no. 40
	Power transfer		vector drive (2:1/1:2)	vector drive (2:1/1:2)	vector drive (2:1/1:2)	vector drive (2:1/1:2)
	Spindle speed	rpm	10,000 (opt 15,000)	10,000 (opt 15,000)	10,000 (opt 15,000)	10,000 (opt 15,000)
	Spindle drive motor		AC, vector drive	AC, vector drive	AC, vector drive	AC, vector drive
	Spindle performance - power	hp	15 / 22.5*	15 / 22.5*	15 / 22*	15 / 22*
	Spindle performance - torque	lbf-ft	90 / 220*	90 / 220*	90 / 220*	90 / 220*
	Opt. 10K very high torque spindle	hp / lbf-ft	–	30* / 270*	30* / 270*	30* / 270*
<b>Automatic</b>	Number of tools		21 (opt 20 DATC)	21 (opt 30 ATC, 24 DATC)	24 DATC	21 (opt 30 ATC, 24 DATC)
<b>Tool Changer</b>	Tool to tool	sec	–	–	1.9	–
	Tool selection		random /bi-directional	random/bi-directional	random/bi-directional	random/bi-directional
	Tool diameter max.	in ch	3	3	4	3
	(Without adjacent tools)	in ch	4.5	4.5	6	4.5
	Tool length max.	in ch	15	15	15	15
	Tool weight max.	lbs	15	15	15	15
<b>General</b>	Air pressure requirement	psi	80 – 120 / 15 SCFM (momentary)		80 – 120 / 15 SCFM (momentary)	
	Power requirement (std spindle)	kVA	32 (63 A at 230 VAC) 3-phase (50 Hz or 60 Hz)		32 (63 A at 230 VAC) 3-phase (50 Hz or 60 Hz)	
	Optional single phase		60 A at 220 VAC 3-phase (50 Hz or 60 Hz)		60 A at 220 VAC 3-phase (50 Hz or 60 Hz)	
	Machine weight	lbs	8,550	11,000	15,750	17,000
Construction		cast iron construction (base, column, saddle, table & head) provides unsurpassed damping characteristics				
Floor space required (width x depth)	inch	130 x 83.5	148.5 x 91.7	134.73 x 92.37	159 x 120	

\* Peak

\*\* All accuracies quoted at 68° F

<sup>c</sup> evenly distributed weight

Technical data subject to change without notice