

## Vertical machining centers



### **Main features:**

- High performance and rigidity
- Precision ball screws
- Long term working accuracy
- Fast and reliable tool change
- Precision hand scraping ensure high precision



Model	VDL-500	VDL-600A	VDL-800	VDL-1000	VDL-1200	VDL-1300	VDL-1400
Table size(L x W) (mm)	700x320	800x420	900x420	1120x560	1220x620	1300x560	1450x620
T-slot(Nos x width x CD) (mm)	3x14x110	3x18x125	3x18x125	5x18x100	5x18x100	5x18x100	5x18x100
Max.Load on table (kg)	150	500	500	750	1500	750	1500
Distance from spindle center to column way surface (mm)	430	510	510	629	660	629	660
Distance from spindle nose to table (mm)	140-520	150-670	150-670	135-735	100-775	135-735	100-775
X/Y/Z travel (mm)	450/350/380	600/420/520	800/420/520	1020/560/600	1200/600/675	1270/560/600	1400/600/675
X/Y/Z guide way type (m/min)	Linear way	Linear way	Linear way	X/Y, Linear way Z, box way	X/Y Linear way Z box way (Y 3 rails)	X/Y Linear way Z box way	X/Y Linear way Z box way (Y 3 GUIDE WAY))
X/Y/Z rapid traverse speed (mm/min)	30/30/30	24/24/20	24/24/20	24/24/18	24/24/18	24/24/18	24/24/18
Feedrate (mm/min)	1-10000	1-10000	1-10000	1-10000	1-10000	1-10000	1-10000
X/Y/Z servo motor power (Nm)	7/7/7	12/12/12	12/12/12	12/12/12	22/22/22	12/12/12	22/22/22
Spindle motor power (kW)	5.5/7.5	7.5/11	7.5/11	7.5/11	11/15	7.5/11	11/15
Spindle speed range (r/min)	60-8000	60-8000	60-8000	60-8000	45-6000	60-8000	45-6000
Spindle taper	#40(7/24)	#40(7/24)	#40(7/24)	#40(7/24)	#50(7/24)	#40(7/24)	#50(7/24)
Tool magazine capacity/type	12 drum	16 drum	16 drum	20 drum	24 swing arm	20 drum	24 swing arm
Tool shank type	BT40	BT40	BT40	BT40	BT50	BT40	BT50
Max.Tool weight (kg)	6	7	7	7	15	7	15
Max.Tool diameter/length (mm)	ø80/200	ø77/280	ø77/280	ø77/305	ø127/305	ø77/305	ø127/305
Time of tool change(T-T) (Sec)	6-8	6-8	6-8	6-8	3,5	6-8	3,5
Way of tool change	random	random	random	random	random	random	random
Positioning accuracy (mm)	0,016	X 0.020 Y/Z 0.020	X 0.020 Y/Z 0.020	X 0.016 Y/Z 0.012	X 0.025 Y/Z 0.020	X/Z 0.016 Y 0.012	X/Z 0.025 Y 0.020
Repeatability accuracy(mm)	0,006	X 0.008 Y/Z 0.006	X 0.008 Y/Z 0.006	X 0.010 Y/Z 0.008	X 0.010 Y/Z 0.008	X 0.010 Y/Z 0.008	X 0.010 Y/Z 0.008
CNC control system	FANUC 0i-MC	FANUC 0i-MC	FANUC 0i-MC	FANUC 0i-MC	FANUC 0i-MC	FANUC 0i-MC	FANUC 0i-MC
OVERALL DIMENSION (L x W x H) (mm)	1590x2450x2200	2040x2310x2400	2040x2310x2400	2900x2100x2480	4000x2250x2480	3200x2100x2480	4000x2250x2480
Net weight (kg)	2000	4800	5200	7000	8000	7300	8500
GROSS WEIGHT (kg)	2700	5500	6000	7800	9000	8100	9500

Model	VDF-850	VDF-1000	VDF-1200	VDF-1500	VDF-1800
Table size(L x W) (mm)	1000x500	1120x560	1220x620	1700x800	2000x800
T-slot(Nos x width x CD) (mm)	5x18x100	5x18x100	5x18x100	6x18x125	6x18x125
Max.Load on table (kg)	500	750	1200	2500	2500
Distance from spindle center to column way surface (mm)	550	629	660	850	850
Distance from spindle nose to table (mm)	150-660	135-735	90-765	200~962	180~942
X/Y/Z travel (mm)	850/510/510	1020/560/600	1200/600/675	1530x800x762	1850x800x762
X/Y/Z guide way type (m/min)	box way	box way	X/Y BOX way Z box way (Y 4 GUIDEWAY)	X/Y BOX way Z box way (Y 4 GUIDEWAY)	X/Y BOX way Z box way (Y 4 GUIDEWAY)
X/Y/Z rapid traverse speed (mm/min)	20/20/18	24/24/18	20/20/18	15/15/12	15/15/12
Feedrate (mm/min)	1-7600	1-10000	1-10000	1~6000	1~6000
X/Y/Z servo motor power (Nm)	12/12/12	12/12/12	22/22/22	22/22/22	22/22/22
Spindle motor power (kW)	7.5/11	7.5/11	11/15	11/15	11/15
Spindle speed range (r/min)	80-8000	60-8000	45-6000	45~6000	45~6000
Spindle taper	#40(7/24)	#40(7/24)	#50(7/24)	#50(7/24)	#50(7/24)
Tool magazine capacity/type	20 drum	20 drum	24 swing arm	24 swing arm	24 swing arm
Tool shank type	BT40	BT40	BT50	BT50	BT50
Max.Tool weight (kg)	7	7	15	15	15
Max.Tool diameter/length (mm)	ø77/250	ø77/305	ø127/305	ø110/350	ø110/350
Time of tool change(T-T) (Sec)	6-8	6-8	3,5	3,5	3,5
Way of tool change	random	random	random	random	random
Positioning accuracy (mm)	X 0.025 Y/Z 0.020	X 0.025 Y/Z 0.020	X 0.025 /ZY 0.020	X 0.030 Z/Y 0.020	X 0.030 Z/Y 0.020
Repeatability accuracy(mm)	X 0.010 Y/Z 0.008	X 0.010 Y/Z 0.008	X 0.010 Y/Z0.008	X 0.013 Z/Y 0.008	X 0.013 Z/Y 0.008
CNC control system	FANUC 0i-MC	FANUC 0i-MC	FANUC 0i-MC	FANUC 0i-MC	FANUC 0i-MC
Required air (MPa)	0,6	0,6	0,6	0,6	0,6
Power requirements (KVA)	25	25	35	40	40
Net weight (kg)	4500	7000	8000	14000	14500
GROSS WEIGHT (kg)	5200	7800	9000	13000	13500