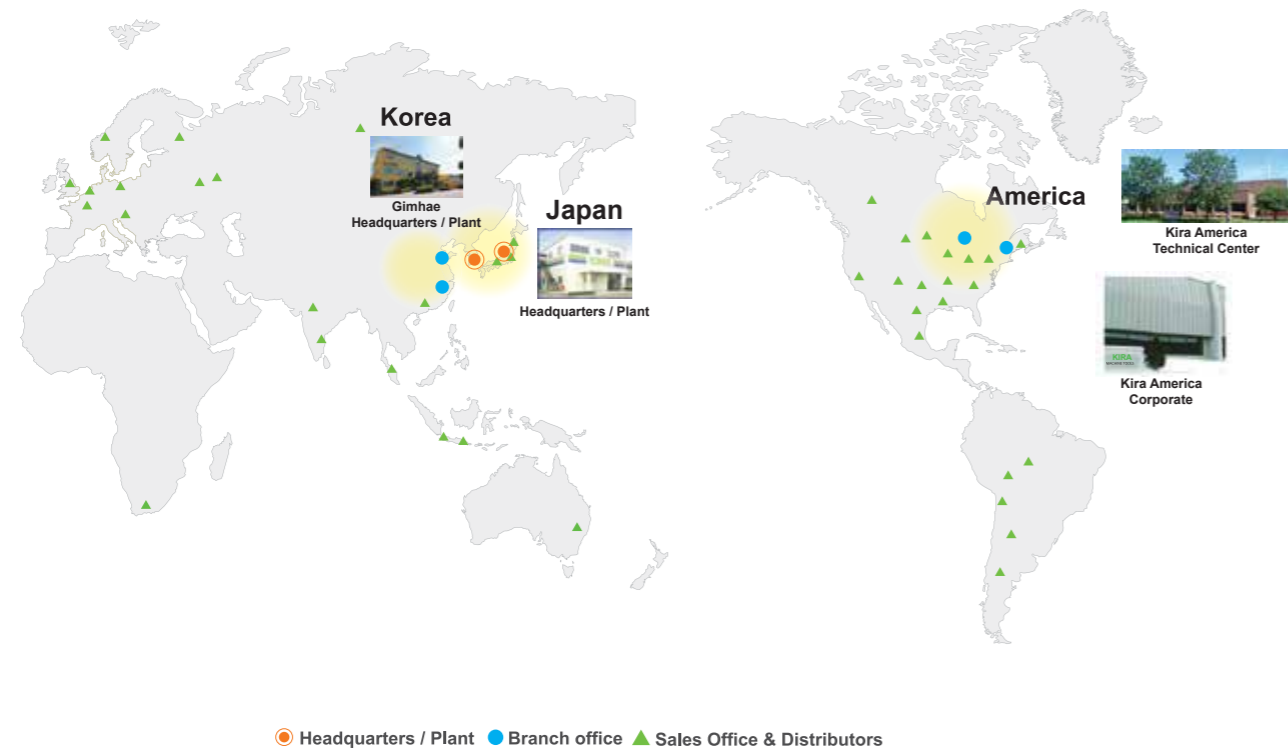


KIRA AMERICA WORLDWIDE CUSTOMER SUPPORT NETWORK



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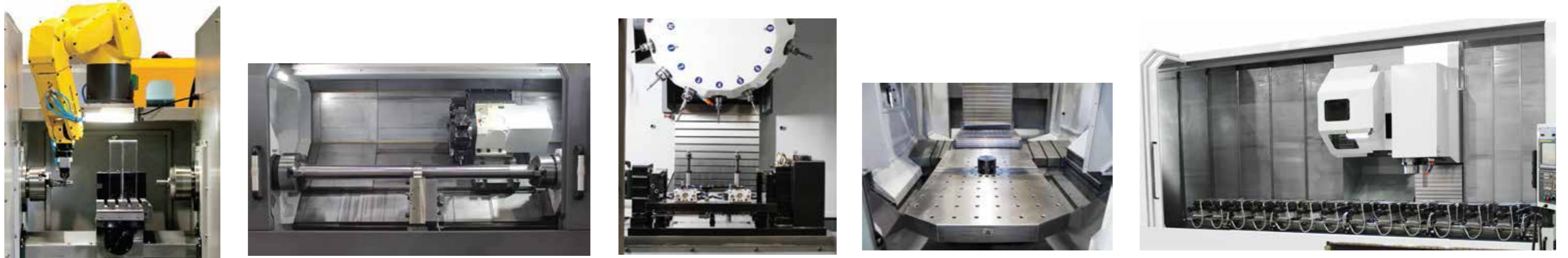
☒ Design and specifications are subject to change without prior notice.
 ☒ We do not take responsibility for the difference between the information in catalogues and the actual machine.


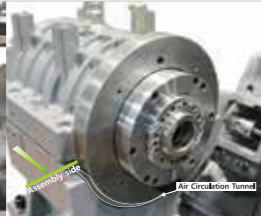










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High Quality Components



Dove tail	Spindle	Built-in tailstock	Box guide way	Vertical lathe	Wide saddle	Integrated bed	Gear box	BBT spindle	Coil screw conveyor
									
Precision ground for accuracy, strength and rigidity	Spindle cartridge and head body are separated for heat prevention	Strong, large size diameter	Wide span and precision ground 6 faced box way	Strong and sturdy column and saddle	Wide span and robust turret saddle minimizes vibration	One piece torque tube design eliminates twisting and bending	Low speed, high torque machining using three speed gear box	Dual contact spindle for maximum rigidity	Large volume screws pull the chips toward chip pan or chip conveyor



STRIVING FOR PERFECTION

																		
Gear Box	Standard Turret	Mill Turret	Chuck	Ball Screw		Ball Screw		Ball Screw	Ball Screw	Controller	Motor	Controller	Motor	Chip Conveyor	Oil Cooler	Hydraulic Unit		
																		

KDT Series

Tapping Center

Linear Guide

KDT 30 / 30i / 40 / 40i [A] / 40iL[T]

[C-frame traveling table type with head drum ATC]

KDT 32C / 32CXL / 32CD

[Fixed table, traveling column type with twin arm ATC]

- Reduced vibration during high speed machining was result of unique larger 3 position bearings support system
- Extended X axis stroke machines are available for narrow long parts : KDT 32CXL with 3m (118") X travel
- Robust and reliable dual table design : 400kg(880lbs) per pallet with 3 port rotary joint is a standard feature

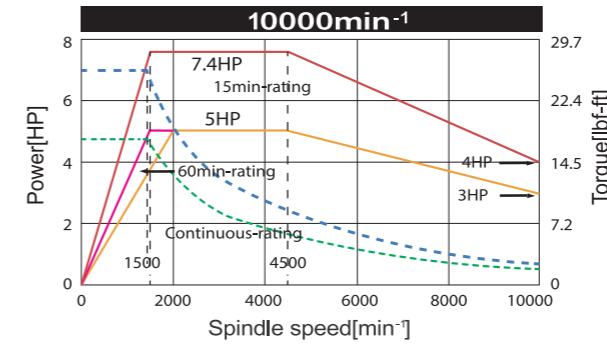


Major Specifications

() : Option

DESCRIPTION		KDT 30	KDT 30i	KDT 40	KDT 40i [A]	KDT 40iL [T]	
Travel	X-axis travel	inch 17.72	17.72	23.62	23.62	27.56	
	Y-axis travel	inch 11.81	11.81	15.75	15.75	15.75	
	Z-axis travel	inch 10.63	11.81	15.75	13.78	13.78	
	Spindle nose to table surface	inch 7.09~17.72	7.09~18.90	5.91~21.65	5.91~19.69	5.91~19.69	
Table	Table dimensions	inch 19.69x13.78	19.69x13.78	27.56x15.75	27.56x15.75	31.5x15.75	
	Maximum load	lbf 330.69	330.69	441	441	441[882]	
	T-slot & Tap	inch 3-18H8x100	3-14H8x100	3-18H8x100	3-14H8x100	3-14H8x100	
Main spindle	Spindle speed	rpm 10,000	10,000(12,000/18,000)	10,000	10,000(12,000/18,000)	10,000(12,000/18,000)	
	Spindle motor power(Cont./30min)	hp 7.5/5	7.5/5	7.5/5	7.5/5[10/7.5]	7.5/5	
	Spindle drive method	- Belt	Direct	Belt	Direct	Direct	
Rapid Traverse	X-axis rapid traverse	ipm 1,890(2,205)	1,890(2,205)	1,890	1,890(2,205)	1,890(2,205)[Roller(NSK)]	
	Y-axis rapid traverse	ipm 1,890(2,205)	1,890(2,205)	1,890	1,890(2,205)	1,890(2,205)[Roller(NSK)]	
	Z-axis rapid traverse	ipm 1,417(1,654)	1,417(1,654)	1,417	1,417(1,890)	1,417(1,890)[Roller(NSK)]	
ATC	Tool changing time	Tool-Tool	sec 1.3	1.3	1.3	1.3[Twin Arm:0.84]	1.3
		Chip-Chip	sec 2.1	2.1	2.1	2.1[Twin Arm:1.9]	2.1
	Tool storage capacity	ea 14(21)	14(21)	14(21)	14(21)[Twin Arm:24]	14(21)	
	Tool shank	type BT30	BBT30	BT30	BBT30	BBT30	
	Pull stud	type MAS P30T-1	MAS P30T-1	MAS P30T-1	MAS P30T-1	MAS P30T-1	
	Max. tool weight	lbs 6.61	6.61	6.61	6.61	6.61	
	Max. tool length	inch 7.87	7.87	7.87	7.87	7.87	
Max. tool diameter	inch 3.15	3.15	3.15	3.15	3.15		
Floor Space(L X W)	inch 49.21x85.04	53.15x89.88	62.99x92.91	66.92x101.06[103.74]	74.80x101.06		
Machine Height	inch 82.68	97.05	84.92	102.83	102.83		
Machine Weight	lbs 4,409	4,630	5,511	5,776	6,283		
Power capacity	kVA 7	7	11	11	11		
CNC CONTROLLER		F O i-MD	F O i-MD (Mitsubishi M70V)	F O i-MD	F O i-MD (Mitsubishi M70V)	F O i-MD (Mitsubishi M70V)	

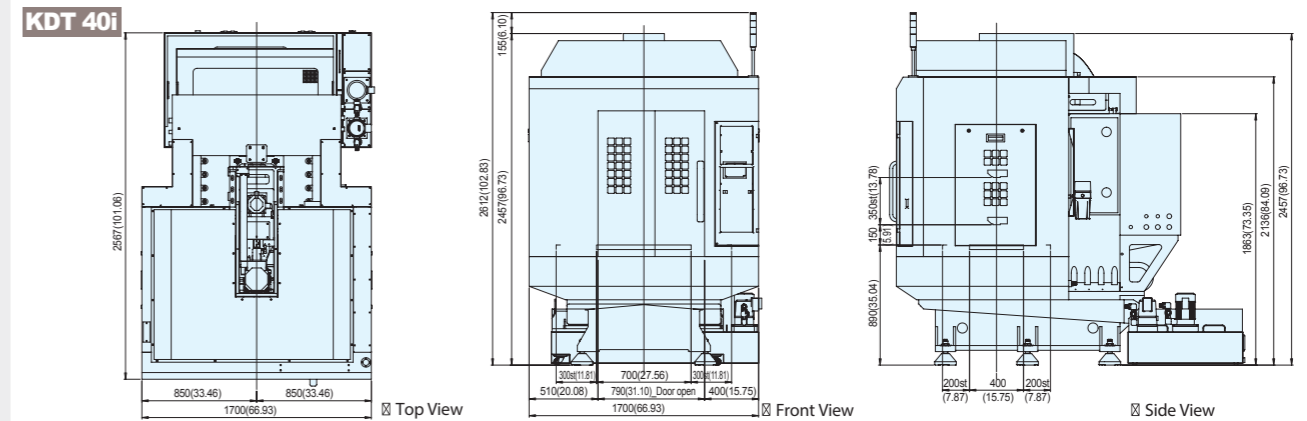
Spindle power and torque diagram



Material	Operation	Machining Capacity
Carbon steel S45C (1045)	Drilling	Ø15mm (Ø0.59")
	Tapping	M12 (UNC 1/2")
Cast iron FC300	Drilling	Ø16mm (Ø0.62")
	Tapping	M14 (UNC 9/16")
Aluminum A5052	Drilling	Ø18mm (Ø0.70")
	Tapping	M16 (UNC 5/8")

Machine Layout

() : inch



Major Specifications

[] : Option

DESCRIPTION		KDT 32C	KDT 32CXL	KDT 32CD	
Travel	X-axis travel	inch 20.47	118.11	20.47	
	Y-axis travel	inch 12.60	12.60	12.60	
	Z-axis travel	inch 11.81	11.81	11.81	
	Spindle nose to table surface	inch 7.87~19.69	7.87~19.69	7.87~19.69	
Table	Table dimensions	inch 24.41x14.76	122.05x14.76	2-23.62x14.76	
	Maximum load	lbf 1,764	2,646	2-882	
	T-slot & Tap	inch 2x20-M16x20 TAP	2x20-M16x20 TAP	2x20-M16x20 TAP	
Main spindle	Spindle speed	rpm 10,000(12,000/18,000)	10,000(12,000/18,000)	10,000(12,000/18,000)	
	Spindle motor power(Cont./30min)	hp 7.5/5	7.5/5	7.5/5	
	Spindle drive method	- Direct	Direct	Direct	
Rapid Traverse	X-axis rapid traverse	ipm 1,890[2,205]	1,417	1,890[2,205]	
	Y-axis rapid traverse	ipm 1,890[2,205]	1,890	1,890[2,205]	
	Z-axis rapid traverse	ipm 1,890[2,205]	1,890	1,890[2,205]	
	ATC	Tool changing time	Tool-Tool	sec 0.84	0.84
Chip-Chip			sec 1.9	1.9	1.9
Tool storage capacity		ea 24[16, 20]	24[16, 20]	24[16, 20]	
Tool shank		type BBT30	BBT30	BBT30	
Pull stud		type MAS P30T-1	MAS P30T-1	MAS P30T-1	
Max. tool weight		lbs 11.02	11.02	11.02	
Max. tool length		inch 7.87	7.87	7.87	
Max. tool diameter<without adjacent>	inch 2.76<4.72>	2.76<4.72>	2.76<4.72>		
Floor Space(L X W)	inch 74.80x98.43	-	74.80x110.23		
Machine Height	inch 96.46	-	96.46		
Machine Weight	lbs 7,826	-	8,157		
Power capacity	kVA 20	20	20		
CNC CONTROLLER		F O i-MD [Mitsubishi M70V]	F O i-MD [Mitsubishi M70V]	F O i-MD [Mitsubishi M70V]	

KDM V/Vc Series

VERTICAL MACHINING CENTER

KDM V/Vc Series

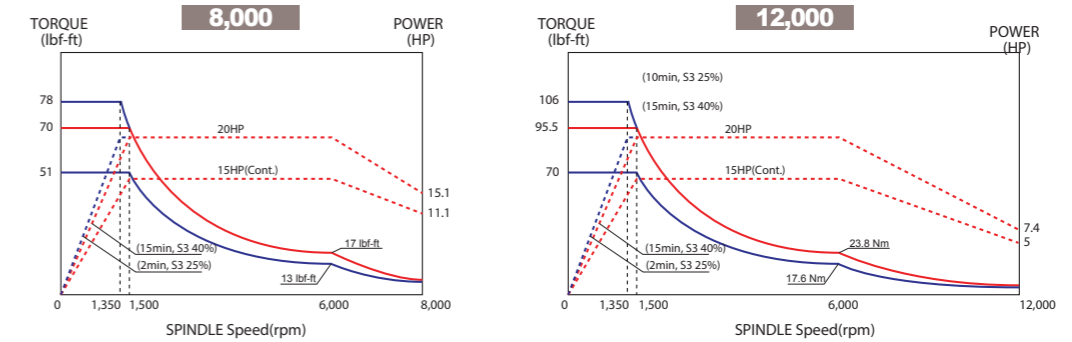
Vertical Machining Center

KDM 42V / 42VL / 50V / 52VL / 65V KDM 43VC / 43VCXL / 43VCD

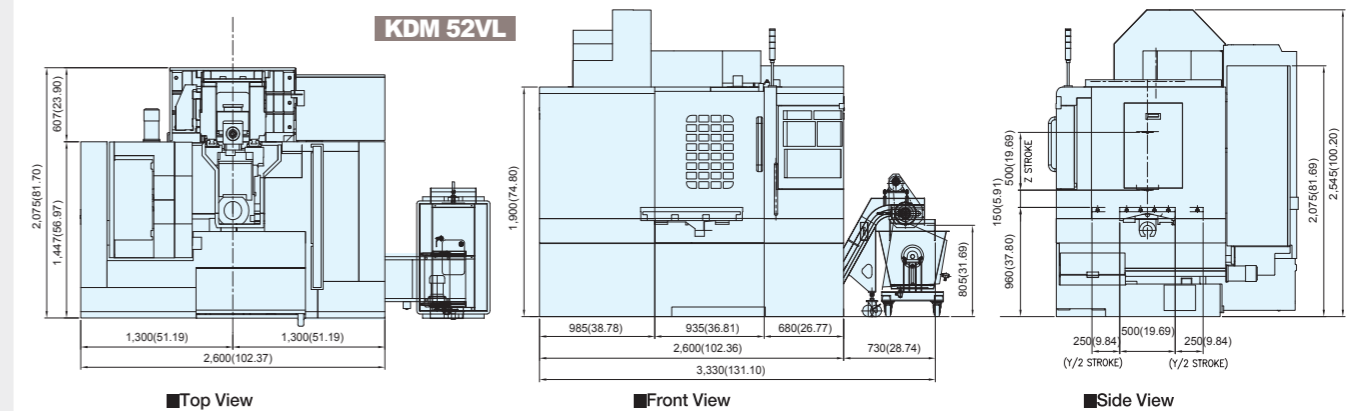
- Both C-frame and traveling column design with twin arm ATC models are available
Extended extra long X axis stroke machines are available for narrow long parts : KDM 43VCXL with 4.2m (165") X travel
- Big plus tool (Face & Taper contact) compatible spindle is provided as standard feature
- User friendly and ergonomic design : KDM 43VCD Main operation panel, side door. Built-in 5 port per side rotary joint for fixtures (Opt.)



Spindle power and torque diagram



Machine Layout



Major Specifications

[] : Option

DESCRIPTION		KDM 42V	KDM 50V	KDM 52VL	KDM 65V/50
Travel	X-axis travel	inch 24.41	35.43	40.16	50.39
	Y-axis travel	inch 16.54	19.69	20.47	26.38
	Z-axis travel	inch 20.08	20.08	20.08	25.20
	Spindle nose to table surface	inch 5.91~25.98	5.91~25.98	5.91~25.98	5.51~30.71
Table	Table dimensions	inch 27.56 × 15.75	36.22 × 19.69[43.31 × 19.69]	43.31 × 20.47	55.12 × 27.56
	Maximum load	lbf 661	1,764	1,543	3,307
Main spindle	Spindle speed	rpm 8,000[12,000]	8,000[12,000]	8,000[12,000]	8,000[12,000]
	Spindle motor power(Cont./15min)	hp 10/15	15/20	15/20	15/20
	Spindle drive method	- Belt	Belt	Belt	Belt
Rapid Traverse	X-axis rapid traverse	ipm 1,890	1,417	1,417	1,417
	Y-axis rapid traverse	ipm 1,890	1,417	1,417	1,417
	Z-axis rapid traverse	ipm 1,417	1,181	1,181	1,181
ATC	Tool changing time	Tool-Tool	sec 1.3	1.3	1.3
		Chip-Chip	sec 3.9	3.9	3.9
	Tool storage capacity	ea 24	30[24, 40]	30[24, 40]	30[40]
	Tool shank	type CAT40	CAT40	CAT40	CAT40/CAT50
	Pull stud	type MAS P40T-1	MAS P40T-1	MAS P40T-1	MAS P50T-1
	Max. tool weight	lbs 15.43	17.64	17.64	17.64
	Max. tool length	inch 11.81	11.81	11.81	11.81
Max. tool diameter (without adjacent)	inch 3.15 (4.92)	3.15 (4.92)	3.15 (4.92)	3.15 (4.92)	
Floor Space(L X W)	inch 98.43 × 80.71	102.36 × 81.69	102.36 × 81.69	100.39 × 133.86	
Machine Height	inch 104.33	100.20	100.20	110.23	
Machine Weight	lbs 8,818	12,456	12,566	16,534	
Power capacity	kVA 25[30]	30	30	50	
CNC CONTROLLER		F Oi-MD	F Oi-MD	F Oi-MD	F Oi-MD

Major Specifications

[] : Option

DESCRIPTION		KDM 43VC	KDM 43VCXL	KDM 43VCD
Travel	X-axis travel	inch 23.62	165.35	23.62
	Y-axis travel	inch 16.93	16.93	16.93
	Z-axis travel	inch 22.44	22.44	22.44
	Spindle nose to table surface	inch 7.87~30.31	7.87~30.31	7.87~30.31
Table	Table dimensions	inch 27.55 × 17.71	169.29 × 17.72	2-27.56 × 18.70
	Maximum load	lbf 2,205	4,409	2-882
Main spindle	Spindle speed	rpm 8,000[10,000/12,000]	8,000[10,000/12,000]	8,000[10,000/12,000]
	Spindle motor power(Cont./15min)	hp 15/20	15/20	15/20
	Spindle drive method	- Belt	Belt	Belt
Rapid Traverse	X-axis rapid traverse	ipm 1,890	1,181	1,890
	Y-axis rapid traverse	ipm 1,890	1,890	1,890
	Z-axis rapid traverse	ipm 1,417	1,417	1,417
ATC	Tool changing time	Tool-Tool	sec 1.3	1.3
		Chip-Chip	sec 3.9	3.9
	Tool storage capacity	ea 30[40]	30[40]	30[40]
	Tool shank	type CAT40	CAT40	CAT40
	Pull stud	type MAS P40T-1	MAS P40T-1	MAS P40T-1
	Max. tool weight	lbs 17.64	17.64	17.64
	Max. tool length	inch 11.81	11.81	11.81
Max. tool diameter (without adjacent)	inch 3.15 (4.92)	3.15 (4.92)	3.15 (4.92)	
Floor Space(L X W)	inch 93.50 × 110.24	311.02 × 152.54	94.49 × 125.98	
Machine Height	inch 107.48	122.04	107.68	
Machine Weight	lbs 14,330	44,092	15,432	
Power capacity	kVA 30	30	30	
CNC CONTROLLER		F Oi-MD	F Oi-MD	F Oi-MD

KQ Series

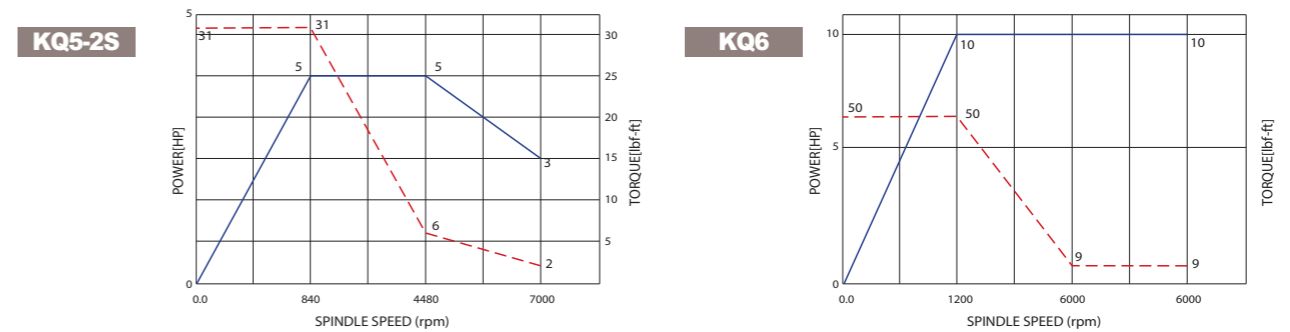
CNC Turning Center (Quick & High Efficiency)

KQ3 / KQ5 / KQ5-2S KQ6 / KQ6-2S

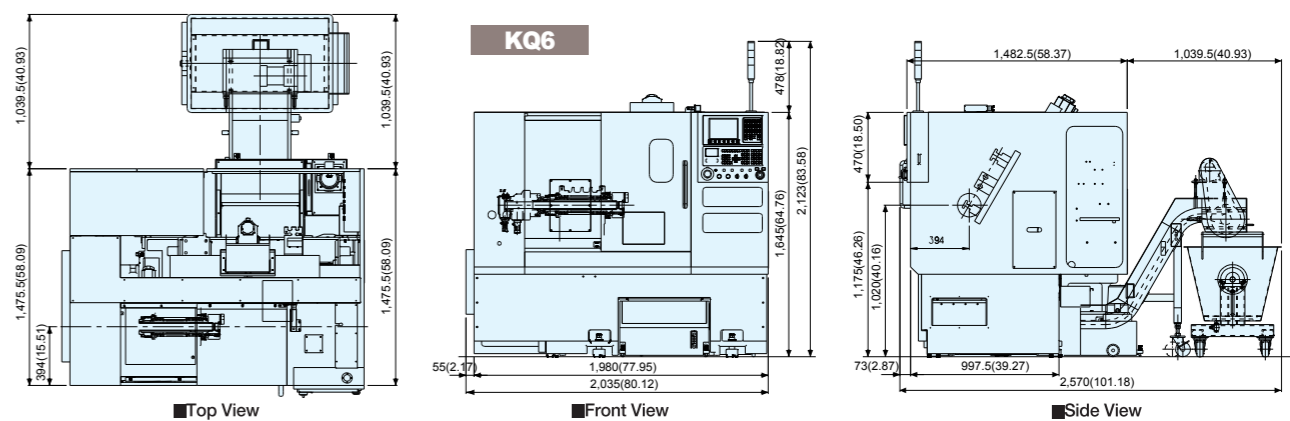
- Durable dovetail design, Flat Gang, Built-in spindle design : KQ3, KQ5, KQ5-2S (dual spindle)
- High speed LM guide way design, Slant Gang with Built-in spindle design : KQ6, KQ6-2S (dual spindle), KQ8
- K Q-series models with built-in spindle motor have acceleration/deceleration speeds of less than 1 second



Spindle power and torque diagram



Machine Layout



Major Specifications

[] : Option

DESCRIPTION			KQ3	KQ5	KQ6
Capacity	Swing over Bed	inch	9,06	14.17	19,29
	Swing over Cross slide	inch	2.76	4.72	6.69
	Max. Turning Dia.	inch	2.76	4.53	6.69
	Max. Turning Length	inch	5,91	5,91	9,45
Main spindle	Max. Spindle Speed	rpm	8,000[10,000]	7,000[8,000]	6,000[7,000]
	Spindle Nose	-	FLAT	A2-4	A2-5
	Spindle Bore diameter	inch	1.02	1.02	1.77
	Max. Spindle Torque	lbf	27.12	31.03	44.12
	Standard Chuck Size	inch	3/collet	5/collet	6
Motor	Main Spindle Motor(Cont./30min)	hp	3/5	3/5	7/10
	X/Z axis Servo Motor	hp	1,34/1,34	1,34/1,34	2/2
Bed, Saddle, Cross slide	X/Z axis travel	inch	7,87/7,09	11,81/9,25	16,54/9,84
	Guideway Type	-	Dove_Tail	Dove_Tail	LM Guide
	X/Z axis rapid traverse rate	ipm	591/591	945/945	1,181/1,417
Turret	Turret Index Type	-	Gang	Gang	Gang
	Max. No. of Tools	ea	5	5	6
	Turning tool shank size	inch	□ ½	□ ¾	□ 1
	Boring bar diameter	inch	∅ ¾	∅ 1	∅ 1 ¼
Floor Space(L X W)	inch	41,93 x 37,40	64,76 x 49,61	80,12 x 60,24	
Machine Height	inch	61.81	64.96	66.14	
Machine Weight	lbs	1,653	3,637	5,511	
Power capacity	kVA	8.5	8.5	15	
CNC CONTROLLER		F Oi-TD	F Oi-TD	F Oi-TD	

Major Specifications

[] : Option

DESCRIPTION			KQ5-2S	KQ6-2S
Capacity	Swing over Bed	inch	14.17	15.75
	Swing over Cross slide	inch	4.72	6.69
	Max. Turning Dia.	inch	4.53	6.69
	Max. Turning Length	inch	9,84	9,84
Main spindle	Max. Spindle Speed	rpm	7,000[8,000]	6,000[7,000]
	Spindle Nose	-	A2-4	A2-5
	Spindle Bore diameter	inch	1.02	1.57
	Max. Spindle Torque	lbf	31.03	44.12
	Standard Chuck Size	inch	5/collet	6
Motor	Main Spindle Motor(Cont./30min)	hp	(3/5) x 2	(7/10) x 2
	X/Z axis Servo Motor	hp	1,34/1,34	2/2
Bed, Saddle, Cross slide	X/Z axis travel	inch	11,81/9,25	12,60/9,84
	Guideway Type	-	Dove_Tail	Dove_Tail
	X/Z axis rapid traverse rate	ipm	945/945	945/945
Turret	Turret Index Type	-	Gang	Gang
	Max. No. of Tools	ea	5	5
	Turning tool shank size	inch	□ ¾	□ 1
	Boring bar diameter	inch	∅ 1	∅ 1
Floor Space(L X W)	inch	88,19 x 54,33	100,39 x 57,09	
Machine Height	inch	65.75	65.75	
Machine Weight	lbs	5,070	6,173	
Power capacity	kVA	15	25	
CNC CONTROLLER		F Oi-TD	F Oi-TD	

DL G Series

CNC Turning Center (Gang Type)

KDL 3G / 5GH / 6GF KDL 6G / 8G / 6GB / 8GB / 600GB / 800GB

- High speed LM guide way, Flat Gang design : KDL 3G, KDL 5GH, KDL 6GF (High volume mass production)
- High speed LM guide way, Slant Gang design : KDL 6G, KDL 8G, 10G (not shown)
- Specialty gang lathe : KDL 600GB, KDL 800GB (ceramic grinding specialty : Max grinding diameter 600/800mm)

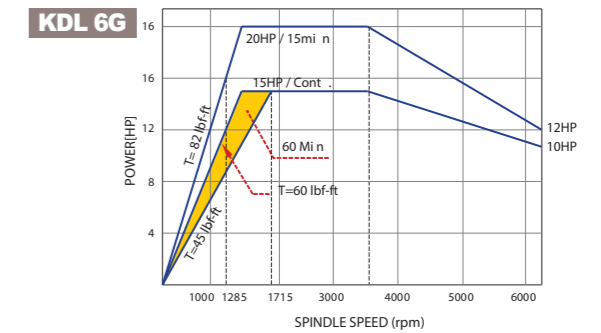
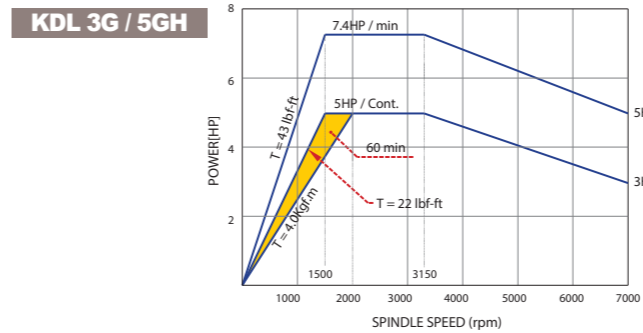


Major Specifications

[] : Option

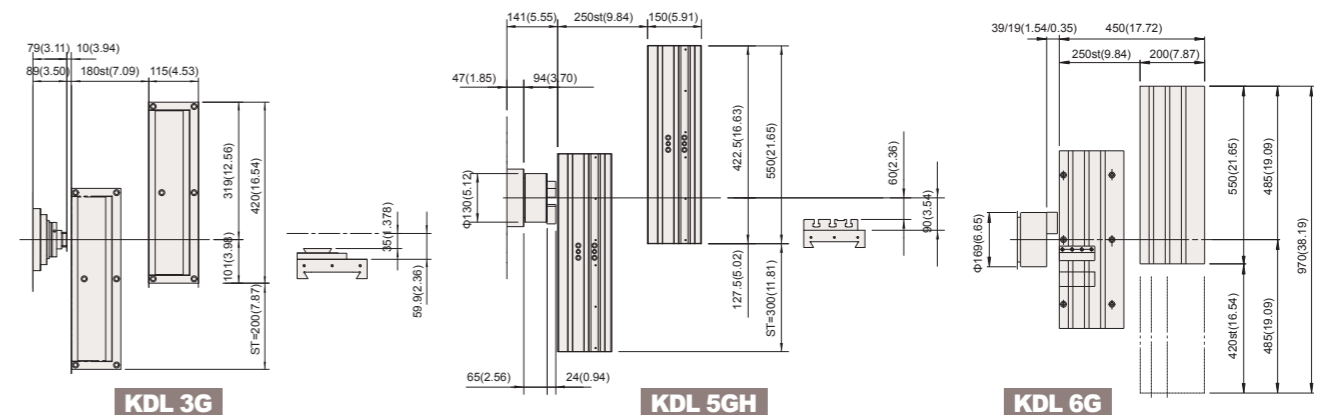
DESCRIPTION			KDL 3G	KDL 5GH	KDL 6GF	KDL 6G	KDL 8G
Capacity	Swing over Bed	inch	9,06	14,17	14,17	19,29	19,29
	Swing over Cross slide	inch	2,76	4,72	4,72	6,69	6,69
	Max. Turning Dia.	inch	2,76	4,33	4,33	6,69	6,69
	Max. Turning Length	inch	5,91	5,91	5,91	9,45	8,66
Main spindle	Max. Spindle Speed	rpm	6,000	6,000	2,000	6,000	4,500
	Spindle Nose	-	FLAT	FLAT	A2-5	A2-5	A2-6
	Spindle Bore diameter	inch	1,26	1,69	2,17	2,17	2,44
	Max. Spindle Torque	lbf	25,32	25,32	29,66	81,73	109,22
Motor	Main Spindle Motor(Cont./30min)	hp	5/7	5/7	11 Induction	15/20	15/20
	X/Z axis Servo Motor	hp	1/1	1/1	1/1	2/2	2/2
Bed, Saddle, Cross slide	X/Z axis travel	inch	7,87/7,09	11,81/9,25	7,87/7,87	16,5/9,84	16,5/9,84
	Guideway Type	-	Dove_Tail	Dove_Tail	Dove_Tail	LM Guide	LM Guide
	X/Z axis rapid traverse rate	ipm	591/591	945/945	591/591	1,181/1,417	1,181/1,417
Turret	Turret Index Type	-	Gang	Gang	Gang	Gang	Gang
	Max. No. of Tools	ea	5	5	3	6	6
	Turning tool shank size	inch	□ 1/2	□ 3/4	□ 3/4	□ 3/4	□ 3/4
	Boring bar diameter	inch	∅ 3/4	∅ 1	∅ 1	∅ 1 1/4	∅ 1 1/4
Floor Space(L X W)	inch	41,93 x 37,40	64,76 x 47,64	36,22 x 76,38	80,71 x 55,91	80,71 x 55,91	
Machine Height	inch	61,81	64,96	79,65	64,37	64,37	
Machine Weight	lbs	1,764	3,748	3,968	5,511	5,732	
Power capacity	kVA	10	10	13	21	21	
CNC CONTROLLER		F Oi-Mate TD	F Oi-Mate TD	F Oi-Mate TD	F Oi-Mate TD	F Oi-Mate TD	

Spindle power and torque diagram



Work Range

[] : inch



Major Specifications

[] : Option

DESCRIPTION			KDL 6GB	KDL 8GB	KDL 600GB	KDL 800GB
Capacity	Swing over Bed	inch	19,29	19,29	23,62	31,5
	Swing over Cross slide	inch	6,69	6,69	23,62	23,62
	Max. Turning Dia.	inch	6,69	6,69	23,62	31,5
	Max. Turning Length	inch	9,45	8,66	3,94	3,94
Main spindle	Max. Spindle Speed	rpm	6,000	4,500	2,500	2,500
	Spindle Nose	-	A2-5	A2-6	A2-8	A2-8
	Spindle Bore diameter	inch	2,17	2,44	3,54	3,39
	Max. Spindle Torque	lbf	81,73	109,22	164,19	164,19
Motor	Main Spindle Motor(Cont./30min)	hp	15/20	15/20	15/20	15/20
	X/Z axis Servo Motor	hp	2/2	2/2	3,4/3,4	3/3
Bed, Saddle, Cross slide	X/Z axis travel	inch	15,75/9,84	15,75/9,84	15,75/11,02	18,70/16,93
	Guideway Type	-	BOX Way	BOX Way	BOX Way	BOX Way+Roller guide
	X/Z axis rapid traverse rate	ipm	787/945	787/945	787/945	394/945
Turret	Turret Index Type	-	Gang	Gang	G/WHEEL	G/WHEEL
	Max. No. of Tools	ea	6	6	1	1
	Turning tool shank size	inch	□ 3/4	□ 3/4	-	-
	Boring bar diameter	inch	∅ 1 1/4	∅ 1 1/4	-	-
Floor Space(L X W)	inch	81,10 x 65,75	81,10 x 65,75	96,46 x 65,94	104,33 x 74,02	
Machine Height	inch	62,99	62,99	76,77	81,3	
Machine Weight	lbs	5,732	5,952	6,173	8,929	
Power capacity	kVA	21	21	22	23	
CNC CONTROLLER		F Oi-Mate TD	F Oi-Mate TD	F Oi-Mate TD	F Oi-Mate TD	

KDL T Series

CNC Turning Center (Compact & Economic Type)

Linear Guide

KDL 6T / 6TH / 8T / 8TH KDL 6TM / 6TMH / 8TM / 8TMH

- Space saving design with modular spindle head: Compact lay-out, Slant, LM guide way, servo driven turret
- KDL 6T/TM : 6", 1.75" bar capacity, 3/4" 12 face turret, VDI30 12 Face plate turret (M)
- KDL 8T/TM : 8", 2.0" bar capacity, 1" 10 face turret, VDI30 12 Face plate turret (M)
- KDL 10T/TM : Recommend collect chuck, 3.0" bar capacity, long delivery none stock model
- KDL 6/8/10TM with Barfeeder, parts catcher and chip conveyor: Perfect solution for turning and milling automation

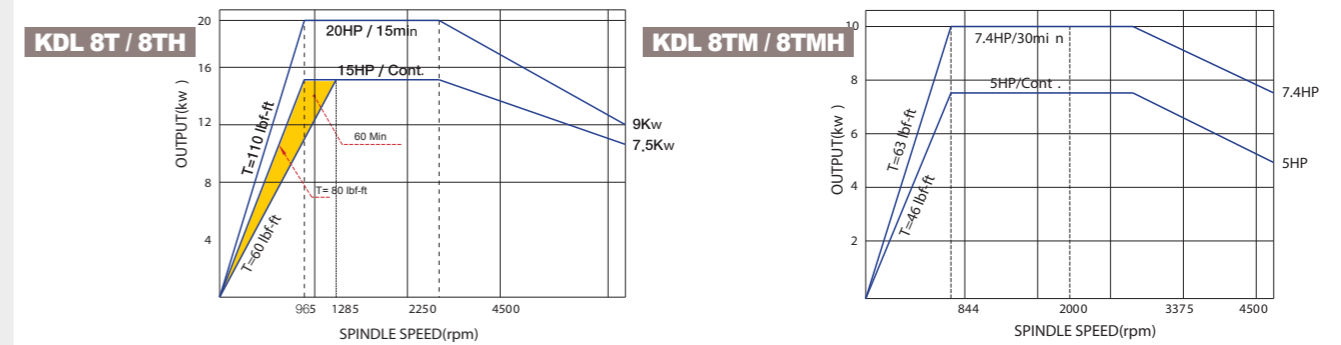


Major Specifications

[] : Option

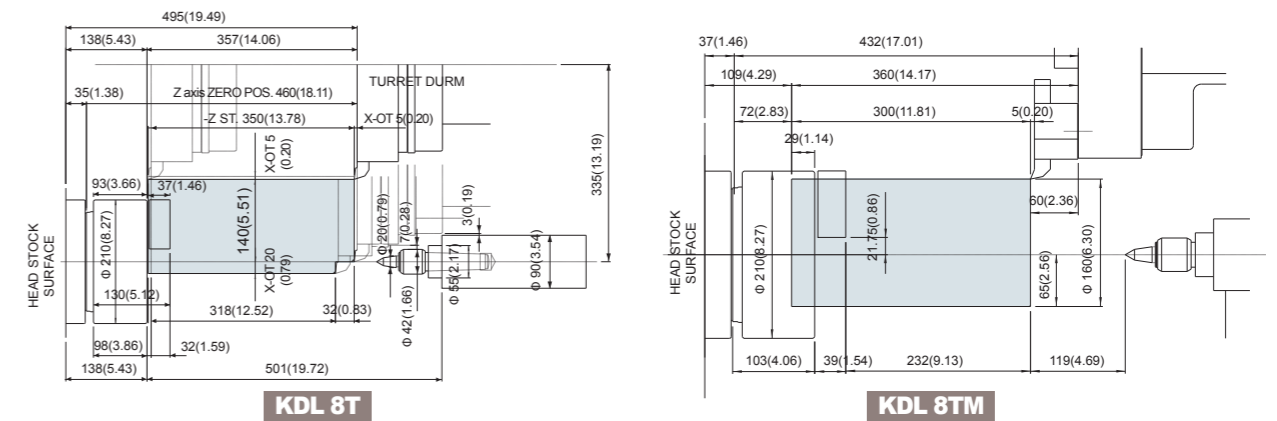
DESCRIPTION			KDL 6T	KDL 6TH	KDL 8T	KDL 8TH
Capacity	Swing over Bed	inch	18,90	18,90	18,90	18,90
	Swing over Cross slide	inch	11,22	11,22	11,22	11,22
	Max. Turning Dia.	inch	11,02	11,02	11,02	11,02
	Max. Turning Length	inch	12,60	20,47	11,81	20,08
Main spindle	Max. Spindle Speed	rpm	6,000	6,000	4,500	4,500
	Spindle Nose	-	A2-5	A2-5	A2-6	A2-6
	Spindle Bore diameter	inch	2,17	2,17	2,44	2,44
	Max. Spindle Torque	lb-ft	81,73	81,73	109,22	109,22
Motor	Standard Chuck Size	inch	6	6	8	8
	Main Spindle Motor(Cont./30min)	hp	15/20	15/20	15/20	15/20
Bed, Saddle, Cross slide	X/Z axis Servo Motor	hp	2/2	2/2	2/2	2/2
	X/Z axis travel	inch	6,50/13,78	6,50/20,47	6,50/13,78	6,50/20,47
	Guideway Type	-	L,M Guide	L,M Guide	L,M Guide	L,M Guide
Turret	X/Z axis rapid traverse rate	ipm	1,181/1,417	1,181/1,417	1,181/1,417	1,181/1,417
	Turret Index Type	-	Hyd	Hyd	Servo	Servo
	Max. No. of Tools	ea	12	12	10	10
	Turning tool shank size	inch	□ 1/2	□ 1/2	□ 1	□ 1
Tailstock	Boring bar diameter	inch	ø 1 1/2	ø 1 1/2	ø 1 1/2	ø 1 1/2
	Turret Indexing Time (1st swivel)	sec	0,4	0,4	0,2	0,3
	Tailstock Quill Dia.	inch	ø 2,56	ø 2,56	ø 2,56	ø 2,56
	Tailstock Quill Taper	MT	MT#4	MT#4	MT#4	
Floor Space(L X W)	inch	80,51 x 63,98	83,86 x 65,75	80,51 x 63,98	83,86 x 65,75	
Machine Height	inch	64,76	61,81	64,76	61,81	
Machine Weight	lbs	5,798	6,614	6,019	7,055	
Power capacity	kVA	21	21	21	21	
CNC CONTROLLER		F Oi-Mate TD	F Oi-Mate TD	F Oi-Mate TD	F Oi-Mate TD	

Spindle power and torque diagram



Work Range

[] : inch



Major Specifications

[] : Option

DESCRIPTION			KDL 6TM	KDL 6TMH	KDL 8TM	KDL 8TMH
Capacity	Swing over Bed	inch	18,90	18,90	18,90	18,90
	Swing over Cross slide	inch	11,22	11,22	11,22	11,22
	Max. Turning Dia.	inch	7,48	7,48	7,48	7,48
	Max. Turning Length	inch	9,45	15,35	8,66	14,96
Main spindle	Max. Spindle Speed	rpm	6,000	6,000	4,500	4,500
	Spindle Nose	-	A2-5	A2-5	A2-6	A2-6
	Spindle Bore diameter	inch	2,17	2,17	2,44	2,44
	Max. Spindle Torque	lb-ft	47,01	47,01	62,57	62,57
Motor	Standard Chuck Size	inch	6	6	8	8
	Main Spindle Motor(Cont./30min)	hp	7/10	7/10	7/10	7/10
Bed, Saddle, Cross slide	X/Z axis Servo Motor	hp	2/2	2/2	2/2	2/2
	X/Z axis travel	inch	6,3/11,81	6,50/15,75	6,3/11,81	6,50/15,16
	Guideway Type	-	L,M Guide	L,M Guide	L,M Guide	L,M Guide
Turret	X/Z axis rapid traverse rate	ipm	1,181/1,417	1,181/1,417	1,181/1,417	1,181/1,417
	Turret Index Type	-	Servo	Servo	Servo	Servo
	Max. No. of Tools	ea	12	12	12	12
	Turning tool shank size	inch	□ 1/2	□ 1/2	□ 1/2	□ 1/2
Tailstock	Boring bar diameter	inch	ø 1 1/2	ø 1 1/2	ø 1 1/2	ø 1 1/2
	Turret Indexing Time (1st swivel)	sec	0,2	0,2	0,2	0,2
	Tailstock Quill Dia. [Opt.]	inch	ø 2,56	ø 2,56	ø 2,56	ø 2,56
	Tailstock Quill Taper	MT	MT#4	MT#4	MT#4	
Floor Space(L X W)	inch	80,51 x 63,98	83,86 x 65,75	80,51 x 63,98	83,86 x 65,75	
Machine Height	inch	62,60	61,81	62,60	61,81	
Machine Weight	lbs	5,798	6,724	6,019	7,165	
Power capacity	kVA	22	22	22	22	
CNC CONTROLLER		F Oi-TD	F Oi-TD	F Oi-TD	F Oi-TD	

KDL R Series

CNC Turning Center (Super Fast & Durable Type)

Roller Guide

KDL 21A / 21LA / 21MA / 21LMA KDL 21B / 21LB / 21MB / 21LMB

- Modular design : Compact lay-out, Slant Roller guide way, servo driven turret
 - Standard head : A2-6, 8" chuck, 2.5" bar capacity. / Big bore head : A2-8, 10" chuck, 3.0" bar capacity
 - Standard bed : Turning length 410mm (16.14") / Long bed : Turning length 550mm (21.65")
 - Standard turret : 12 face (12 OD tool) turret
 - Milling turret : 12 face BMT55, any position live tool design, 2 axial & 2 Radial live tool holders included

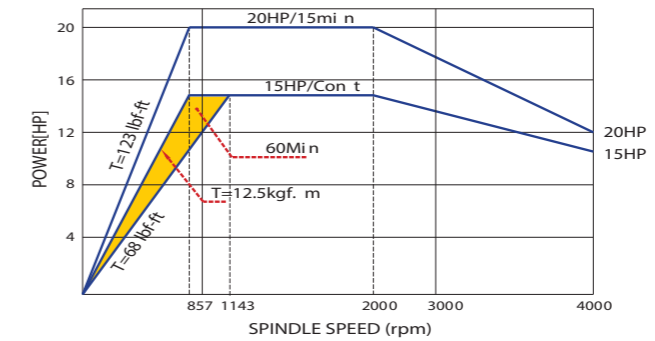


Major Specifications

[] : Option

DESCRIPTION			KDL 21A	KDL 21LA	KDL 21LMA
Capacity	Swing over Bed	inch	21.65	21.65	21.65
	Swing over Cross slide	inch	14.17	14.17	14.17
	Max. Turning Dia.	inch	13.78	13.78	11.02
	Max. Turning Length	inch	16.14	21.26	19.69
Main spindle	Max. Spindle Speed	rpm	4,000	4,000	4,000
	Spindle Nose	-	A2-6	A2-6	A2-6
	Spindle Bore diameter	inch	2.99	2.99	2.99
	Cs-Axis Spindle Index angle	deg	-	-	0,001
	Max. Spindle Torque	lbf-ft	122,96	122,96	122,96
	Standard Chuck Size	inch	8(BIG)	8(BIG)	8(BIG)
	Main Spindle Motor(Cont./30min)	hp	15/20	15/20	15/20
Motor	X/Z axis Servo Motor	hp	4/4	4/4	4/4
	Mill Spindle Motor(Cont./30min)	hp	-	-	3/5
	X/Z axis travel	inch	8,27/16,93	8,27/22,83	7,87/21,65
Bed, Saddle, Cross slide	Guideway Type	-	Roller Guide	Roller Guide	Roller Guide
	X/Z axis rapid traverse rate	ipm	1,417/1,417	1,417/1,417	1,417/1,417
	Turret Index Type	-	Servo	Servo	Servo
Turret	Max. No. of Tools	ea	12	12	12/BMT55
	Turning tool shank size	inch	□1	□1	□1
	Boring bar diameter	inch	∅ 1 1/2	∅ 1 1/2	∅ 1 1/2
	Turret Indexing Time (1st swivel)	sec	0,2	0,2	0,2
	Tailstock Quill Dia.	inch	∅ 2,55	∅ 3,15	∅ 3,15
Tailstock	Tailstock Quill Taper	MT	MT#4	MT#4	MT#4
	Floor Space(L X W)	inch	104,72 x 64,96	116,54 x 64,96	116,54 x 64,96
Machine Height	inch	74,02	74,02	74,02	
Machine Weight	lbs	8,708	9,590	9,810	
Power capacity	kVA	27	27	30	
CNC CONTROLLER		F Oi-Mate TD	F Oi-Mate TD	F Oi-TD	

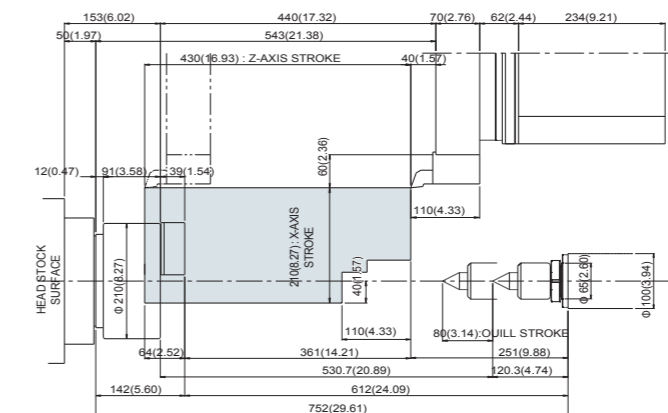
Spindle power and torque diagram



Work Range

() : inch

KDL 21A



Major Specifications

[] : Option

DESCRIPTION			KDL 21B	KDL 21LB	KDL 21LMB
Capacity	Swing over Bed	inch	21.65	21.65	21.65
	Swing over Cross slide	inch	14.17	14.17	14.17
	Max. Turning Dia.	inch	13.78	13.78	11.02
	Max. Turning Length	inch	14.96	20.87	19.29
Main spindle	Max. Spindle Speed	rpm	3,500	3,500	3,500
	Spindle Nose	-	A2-8	A2-8	A2-8
	Spindle Bore diameter	inch	3,39	3,39	3,39
	Cs-Axis Spindle Index angle	deg	-	-	0,001
	Max. Spindle Torque	lbf-ft	164,19	164,19	164,19
	Standard Chuck Size	inch	10	10	10
	Main Spindle Motor(Cont./30min)	hp	15/20	15/20	15/20[20/25]
Motor	X/Z axis Servo Motor	hp	4/4	4/4	4/4
	Mill Spindle Motor(Cont./30min)	hp	-	-	3/5
	X/Z axis travel	inch	8,27/16,93	8,27/22,83	7,87/21,65
Bed, Saddle, Cross slide	Guideway Type	-	Roller Guide	Roller Guide	Roller Guide
	X/Z axis rapid traverse rate	ipm	1,417/1,417	1,417/1,417	1,417/1,417
	Turret Index Type	-	Servo	Servo	Servo
Turret	Max. No. of Tools	ea	12	12	12/BMT55
	Turning tool shank size	inch	□1	□1	□1
	Boring bar diameter	inch	∅ 1 1/2	∅ 1 1/2	∅ 1 1/2
	Turret Indexing Time (1st swivel)	sec	0,2	0,2	0,2
	Tailstock Quill Dia.	inch	∅ 2,55	∅ 3,15	∅ 3,15
Tailstock	Tailstock Quill Taper	MT	MT#4	MT#4	MT#4
	Floor Space(L X W)	inch	104,72 x 64,96	116,54 x 64,96	116,54 x 64,96
Machine Height	inch	74,02	74,02	74,02	
Machine Weight	lbs	8,929[9,149]	9,810[10,031]	10,031	
Power capacity	kVA	27	27	34	
CNC CONTROLLER		F Oi-Mate TD	F Oi-Mate TD	F Oi-TD	

KDL B Series

CNC Turning Center

Box Way

KDL 22A / 22LA / 22MA / 22LMA KDL 22B / 22LB / 22MB / 22LMB / 22LSY

- Modular design : Compact lay-out, Slant Box way, servo driven turret
 - Standard head : A2-6, 8" chuck, 2.5" bar capacity. / Big bore head : A2-8, 10" chuck, 3.0" bar capacity
 - Standard bed : Turning length 410mm (16.14") / Long bed : Turning length 550mm (21.65")
 - Standard turret : 12 face (12 OD tool) turret
 - Milling turret : 12 face BMT55, any position live tool design, 2 axial & 2 Radial live tool holders included

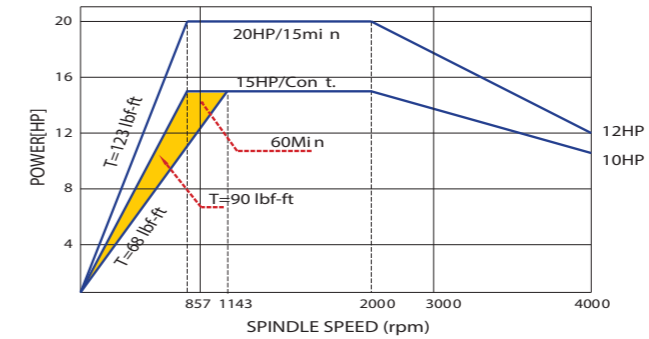


Major Specifications

[] : Option

DESCRIPTION			KDL 22A	KDL 22LA	KDL 22LMA
Capacity	Swing over Bed	inch	21.65	21.65	21.65
	Swing over Cross slide	inch	14.17	14.17	14.17
	Max. Turning Dia.	inch	13.78	13.78	11.02
	Max. Turning Length	inch	16.14	21.26	19.69
Main spindle	Max. Spindle Speed	rpm	4,000	4,000	4,000
	Spindle Nose	-	A2-6	A2-6	A2-6 Mill
	Spindle Bore diameter	inch	2.99	2.99	2.99
	Cs-Axis Spindle Index angle	deg	-	-	360(0,001)
	Max. Spindle Torque	lbf-ft	122.96	122.96	122.96
	Standard Chuck Size	inch	8(BIG)	8(BIG)	8(BIG)
	Main Spindle Motor(Cont./30min)	hp	15/20[20/25]	15/20[20/25]	15/20[20/25]
Motor	X/Z axis Servo Motor	hp	4/4	4/4	4/4
	Mill Spindle Motor(Cont./30min)	hp	-	-	3/5
Bed, Saddle, Cross slide	X/Z axis travel	inch	8.27/16.93	8.27/22.83	7.87/21.65
	Guideway Type	-	BOX Guide	BOX Guide	BOX Guide
	X/Z axis rapid traverse rate	ipm	945/945	945/945	945/945
Turret	Turret Index Type	-	Servo	Servo	Servo
	Max. No. of Tools	ea	12	12	12/BMT55
	Turning tool shank size	inch	□1	□1	□1
	Boring bar diameter	inch	ø 1 1/2	ø 1 1/2	ø 1 1/2
	Turret Indexing Time (1st swivel)	sec	0.2	0.2	0.2
Tailstock	Tailstock Quill Dia.	inch	ø 3.15	ø 3.15	ø 3.15
	Tailstock Quill Taper	MT	MT#4	MT#4	MT#4
Floor Space(L X W)	inch	104.72 x 64.96	116.54 x 64.96	116.54 x 64.96	
Machine Height	inch	74.02	74.02	74.02	
Machine Weight	lbs	8,708	9,700	9,810	
Power capacity	kVA	27	27	30	
CNC CONTROLLER		F Oi-Mate TD [F Oi-TD]	F Oi-Mate TD [F Oi-TD]	F Oi-TD	

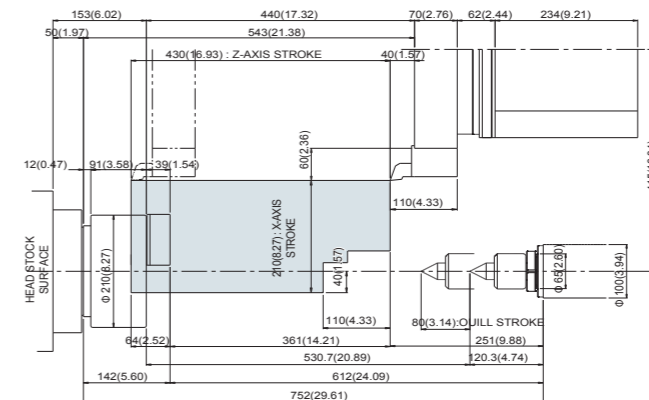
Spindle power and torque diagram



Work Range

() : inch

KDL 22A



Major Specifications

[] : Option

DESCRIPTION			KDL 22B	KDL 22LB	KDL 22LMB	KDL 22LMS	KDL 22LSY
Capacity	Swing over Bed	inch	21.65	21.65	21.65	21.65	21.65
	Swing over Cross slide	inch	14.17	14.17	14.17	14.17	14.17
	Max. Turning Dia.	inch	13.78	13.78	11.02	11.02	11.02
	Max. Turning Length	inch	14.96	20.87	19.29	19.69	19.69
Main spindle	Max. Spindle Speed	rpm	3,500	3,500	3,500	4,000	6,000
	Spindle Nose	-	A2-8	A2-8	A2-8 Mill	A2-6	A2-5
	Spindle Bore diameter	inch	3.39	3.39	3.39	2.99	1.57
	Cs-Axis Spindle Index angle	deg	-	-	360(0,001)	0,001	0,001
	Max. Spindle Torque	lbf-ft	173.81	173.81	173.81	151.89	44.12
	Standard Chuck Size	inch	10	10	10	8	6
	Main Spindle Motor(Cont./30min)	hp	20/25	15/20[20/25]	15/20[20/25]	5.5/7.5	5.5/7.5
Motor	X/Z axis Servo Motor	hp	4/4	4/4	4/4	4/4	4/4
	Mill Spindle Motor(Cont./30min)	hp	-	-	3/5	3/5	3/5
Bed, Saddle, Cross slide	X/Z axis travel	inch	8.27/16.93	8.27/22.83	7.87/21.65	8.27/21.65	8.27/21.65/Y:3.15
	Guideway Type	-	BOX Guide	BOX Guide	BOX Guide	BOX Guide	BOX Guide
	X/Z axis rapid traverse rate	ipm	945/945	945/945	945/945	944.88/944.88	944.88/944.88
Turret	Turret Index Type	-	Servo	Servo	Servo	Servo	Servo
	Max. No. of Tools	ea	12	12	12/BMT55	12 / BMT 55	12 / BMT 55
	Turning tool shank size	inch	□1	□1	□1	□1	□1
	Boring bar diameter	inch	ø 1 1/2	ø 1 1/2	ø 1 1/2	ø 1 1/2	ø 1 1/2
	Turret Indexing Time (1st swivel)	sec	0.2	0.2	0.2	0.15	0.15
Tailstock	Tailstock Quill Dia.	inch	ø 3.15	ø 3.15	ø 3.15	-	-
	Tailstock Quill Taper	MT	MT#4	MT#4[Built-in center]	MT#4	-	-
Floor Space(L X W)	inch	104.72 x 64.96	116.54 x 64.96	116.54 x 64.96	116.54 x 64.96	-	
Machine Height	inch	74.02	74.02	74.02	74.02	-	
Machine Weight	lbs	8,818	9,810	9,921	10,030.88	-	
Power capacity	kVA	27	27	30	40	-	
CNC CONTROLLER		F Oi-Mate TD [F Oi-TD]	F Oi-Mate TD [F Oi-TD]	F Oi-TD	F Oi-TD	F Oi-TD [32i-B]	F Oi-TD [32i-B]

KDL S Series

CNC Turning Center (Classical Horizontal Type)

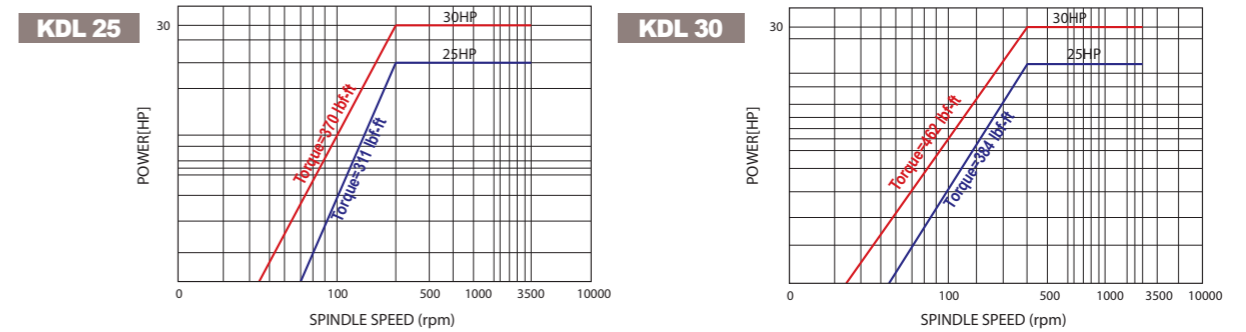
Box Way

KDL 25 / 30 / 30L KDL 30M / 30LM / 25SY

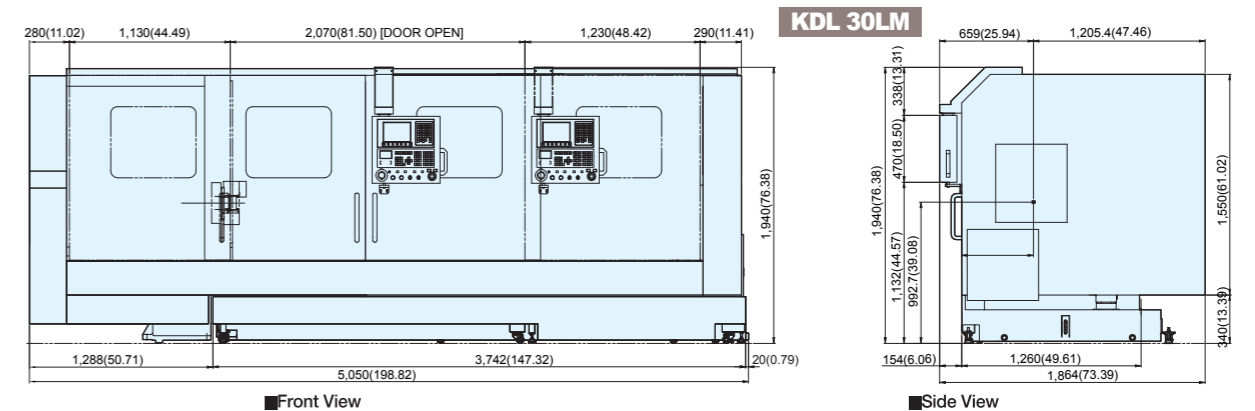
- The robust bed is a one piece casting with torque tube design eliminating twisting and bending
- 45 deg slant bed, servo driven 12 face turret, BMT65 (live tool turret)
- The machine was designed with a low center of gravity to minimize vibration during high speed machining and heavy turning



Spindle power and torque diagram



Machine Layout



Major Specifications

[] : Option

DESCRIPTION			KDL 25	KDL 25SY
Capacity	Swing over Bed	inch	24,02	24,02
	Swing over Cross slide	inch	18,90	18,90
	Max. Turning Dia.	inch	15,75	15,75
	Max. Turning Length	inch	42,52	38,58
Main spindle	Max. Spindle Speed	inch	3,500	3,500
	Spindle Nose	-	A2-8	A2-8(Sub A2-6)
	Spindle Bore diameter	mm	3,39	3,39
	Max. Spindle Torque	lbf-ft	174,32	174,32
	Standard Chuck Size	inch	10	10
Sub spindle	Chuck Size	inch	-	8
	Spindle Speed	rpm	-	4,500
Motor	Main Spindle Motor(Cont./30min)	hp	25/30	25/30
	X/Z axis Servo Motor	hp	4/4	4/4
	Mill Spindle Motor(Cont./30min)	hp	-	3/5
Bed, Saddle, Cross slide	X/Z axis travel	inch	9,06/44,49	9,06/40,55
	Guideway Type	-	BOX Way	BOX Way
	X/Z axis rapid traverse rate	ipm	787/945	787/945/394/945
Turret	Turret Index Type	-	Servo	Servo
	Max. No. of Tools	ea	12	12/BMT55
	Turning tool shank size	inch	□1	□1
	Boring bar diameter	inch	ø 2	ø 1 1/2
	Turret Indexing Time (1st swivel)	sec	0,2	0,2
Tailstock Quill Dia.	inch	ø 4,33	-	
Floor Space(L X W)	inch	161,42 x 74,25	161,42 x 74,25	
Machine Height	inch	80,12	80,12	
Machine Weight	lbs	15,653	16,094	
Power capacity	kVA	34	50	
CNC CONTROLLER		F Oi-TD	F 32i-B	

Major Specifications

[] : Option

DESCRIPTION			KDL 30	KDL 30M	KDL 30LM
Capacity	Swing over Bed	inch	24,02	24,02	24,02
	Swing over Cross slide	inch	18,90	18,90	18,90
	Max. Turning Dia.	inch	15,75	15,75	15,75
	Max. Turning Length	inch	42,52	42,52	81,89
Main spindle	Max. Spindle Speed	rpm	3,000	3,000	3,000
	Spindle Nose	-	A2-8	A2-8 Mill	A2-8 Mill
	Spindle Bore diameter	inch	4,13	4,13	4,13
	Max. Spindle Torque	lbf-ft	174,32	174,32	174,32
	Standard Chuck Size	inch	12	12	12
Motor	Main Spindle Motor(Cont./30min)	hp	25/30	25/30	25/30
	X/Z axis Servo Motor	hp	4/4	4/4	4/4
	Mill Spindle Motor(Cont./30min)	hp	-	3/5	3/5
Bed, Saddle, Cross slide	X/Z axis travel	inch	9,06/44,49	9,06/44,49	8,66/84
	Guideway Type	-	BOX Way	BOX Way	BOX Way
	X/Z axis rapid traverse rate	ipm	787/945	787/945/-/-	787/709/-/-
Turret	Turret Index Type	-	Servo	Servo	Servo
	Max. No. of Tools	ea	12	12/BMT65	12/BMT65
	Turning tool shank size	inch	□1	□1	□1
	Boring bar diameter	inch	ø 1 1/2	ø 1 1/2	ø 1 1/2
	Turret Indexing Time (1st swivel)	sec	0,2	0,2	0,2
Tailstock Quill Dia.	inch	ø 4,33	ø 4,33	ø 4,33	
Floor Space(L X W)	inch	161,42 x 74,25	208,58 x 74,25	247,95 x 74,25	
Machine Height	inch	80,12	80,12	80,12	
Machine Weight	lbs	15,653	15,653	18,959	
Power capacity	kVA	34	40	40	
CNC CONTROLLER		F Oi-TD	F Oi-TD	F Oi-TD	

KDL S Series

CNC Turning Center (Heavy Duty)

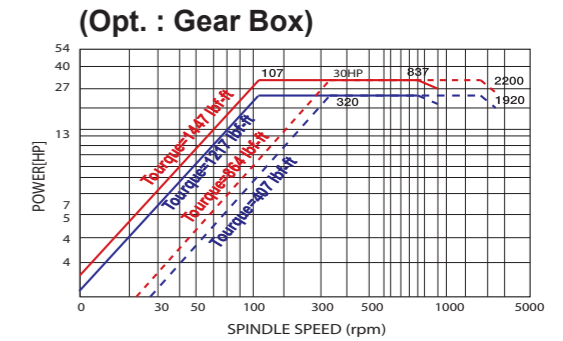
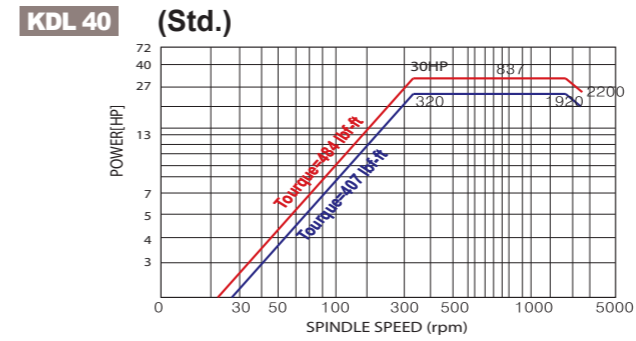
Box Way

KDL 35 / 35L / 35M / 35LM KDL 40 / 40L / 40M / 40LM

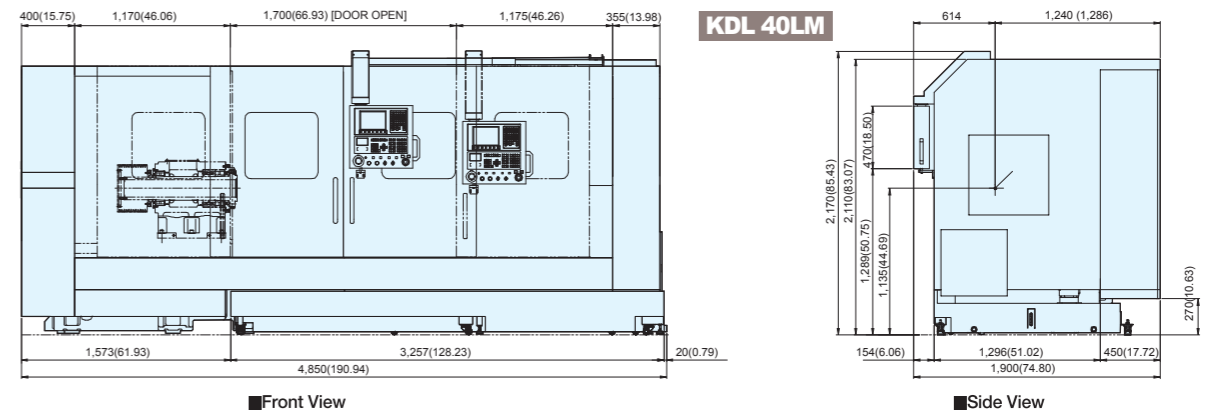
- The robust bed is a one piece casting with torque tube design eliminating twisting and bending
- 45 deg slant bed, servo driven 12 face turret, BMT65 (live tool turret)
- The machine was designed with a low center of gravity to minimize vibration during high speed machining and heavy turning



Spindle power and torque diagram



Machine Layout



Major Specifications

DESCRIPTION		KDL 35	KDL 35M	KDL 35LM
Capacity	Swing over Bed	inch 25.59	25.59	25.59
	Swing over Cross slide	inch 16.69	16.69	16.69
	Max. Turning Dia.	inch 18.11	16.54	16.54
	Max. Turning Length	inch 49.41	49.41	65.16
Main spindle	Max. Spindle Speed	rpm 2,500	2,500	2,500
	Spindle Nose	- A2-11	A2-11 Mill	A2-11 Mill
	Spindle Bore diameter	inch 5.20	5.20	5.20
	Max. Spindle Torque	lbf-ft 477.38[1,446.6]	477.38[1,446.6]	477.38[1,446.6]
Motor	Standard Chuck Size	inch 15	15	15
	Main Spindle Motor(Cont./30min)	hp 25/30	25/30	25/30
	X/Z axis Servo Motor	hp 4/5	4/5	4/5
	Mill Spindle Motor(Cont./30min)	hp -	5/7	5/7
Bed, Saddle, Cross slide	X/Z axis travel	inch 9.45/51.38	9.45/51.38	9.45/67.13
	Guideway Type	- BOX Way	BOX Way	BOX Way
	X/Z axis rapid traverse rate	ipm 709/787	709/787	709/591
Turret	Turret Index Type	- Servo	Servo	Servo
	Max. No. of Tools	ea 10	12/BMT65	12/BMT65
	Turning tool shank size	inch □1	□1	□1
	Boring bar diameter	inch ø 1 3/4	ø 1 3/4	ø 1 3/4
Turret Indexing Time (1st swivel)	sec 0.25	0.25	0.25	
Tailstock Quill Dia.	inch ø 5.12	ø 5.12	ø 5.12	
Floor Space(L X W)	inch 186.2 x 73.82	186.2 x 73.82	201.77 x 73.82	
Machine Height	inch 90.08	90.08	90.08	
Machine Weight	lbs 18,739	18,739	19,841	
Power capacity	kVA 45	60	60	
CNC CONTROLLER		F Oi-TD	F Oi-TD	F Oi-TD

Major Specifications

DESCRIPTION		KDL 40	KDL 40M	KDL 40LM
Capacity	Swing over Bed	inch 29.53	29.53	29.53
	Swing over Cross slide	inch 20.67	20.67	20.67
	Max. Turning Dia.	inch 22.05	20.47	20.47
	Max. Turning Length	inch 49.41	49.41	65.16
Main spindle	Max. Spindle Speed	rpm 2,500	2,500	2,500
	Spindle Nose	- A2-11	A2-11 Mill	A2-11 Mill
	Spindle Bore diameter	inch 5.20	5.20	5.20
	Max. Spindle Torque	lbf-ft 477.38[1,446.6]	477.38[1,446.6]	477.38[1,446.6]
Motor	Standard Chuck Size	inch 15	15	15
	Main Spindle Motor(Cont./30min)	hp 25/30	25/30	25/30
	X/Z axis Servo Motor	hp 4/5	4/5	4/5
	Mill Spindle Motor(Cont./30min)	hp -	5/7	5/7
Bed, Saddle, Cross slide	X/Z axis travel	inch 11.42/51.38	11.42/51.38	11.42/67.13
	Guideway Type	- BOX Way	BOX Way	BOX Way
	X/Z axis rapid traverse rate	ipm 709/787	709/787	709/591
Turret	Turret Index Type	- Servo	Servo	Servo
	Max. No. of Tools	ea 10	12/BMT65	12/BMT65
	Turning tool shank size	inch □1	□1	□1
	Boring bar diameter	inch ø 2	ø 2	ø 2
Turret Indexing Time (1st swivel)	sec 0.25	0.25	0.25	
Tailstock Quill Dia.	inch ø 5.12	ø 5.12	ø 5.12	
Floor Space(L X W)	inch 186.02 x 73.82	186.02 x 73.82	201.77 x 73.82	
Machine Height	inch 90.08	90.08	90.08	
Machine Weight	lbs 18,959	18,959	20,062	
Power capacity	kVA 45	60	60	
CNC CONTROLLER		F Oi-TD	F Oi-TD	F Oi-TD

KDL S Series

CNC Turning Center (Heavy Duty)

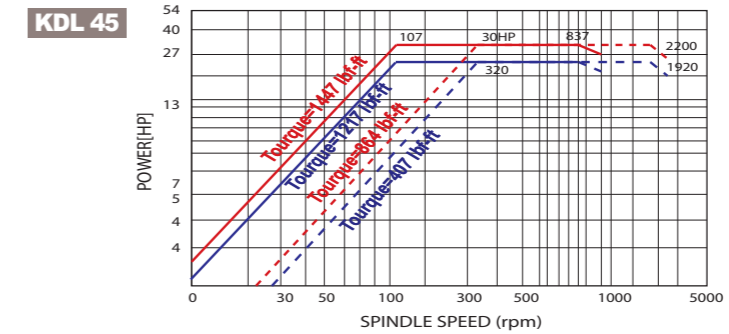
Box Way

KDL 45 / 45L / 45M / 45LM KDL 55 / 55L / 55M / 55LM

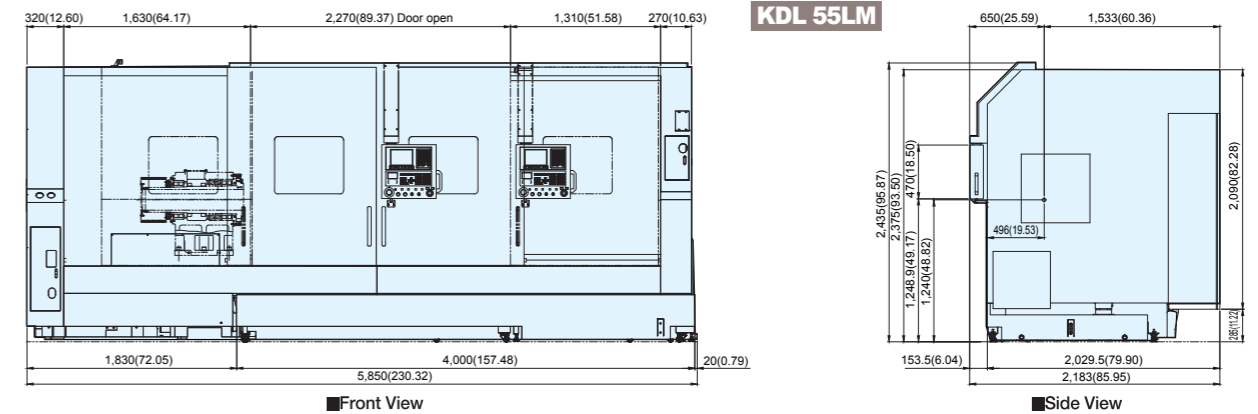
- The robust bed is a one piece casting with torque tube design eliminating twisting and bending
- 45 deg slant bed, servo driven 12 face turret, BMT75 (live tool turret)
- The machine was designed with a low center of gravity to minimize vibration during high speed machining and heavy turning



Spindle power and torque diagram



Machine Layout



Major Specifications

[]: Option

DESCRIPTION		KDL 45	KDL 45M	KDL 45LM
Capacity	Swing over Bed	inch 30,51	30,51	30,51
	Swing over Cross slide	inch 24,80	24,80	24,80
	Max. Turning Dia.	inch 27,71	24,41	24,41
	Max. Turning Length	inch 57,68	57,68	89,71
Main spindle	Max. Spindle Speed	rpm 2,000 [2,500]	2,000 [2,500]	2,000 [2,500]
	Spindle Nose	- A2-11	A2-15 Mill	A2-15 Mill
	Spindle Bore diameter	inch 5,20	5,20	5,20
	Standard Chuck Size [Opt.]	lb-ft 18 [15]	18 [15]	18 [15]
Motor	Main Spindle Motor(Cont./30min)	inch 40/50	40/50	40/50
	X/Z axis Servo Motor	hp 10/8	10/8	10/12
	Gear Box	hp Std.	Std.	Std.
	Mill Spindle Motor(Cont./30min)	hp -	7/10	7/10
Bed, Saddle, Cross slide	X/Z axis travel	inch 13,78/60,24	13,78/60,24	13,78/91,73
	Guideway Type	- BOX Way	BOX Way	BOX Way
	X/Z axis rapid traverse rate	ipm 787/709	787/709	787/709
Turret	Turret Index Type	- Servo	Servo	Servo
	Max. No. of Tools	ea 12	12/BMT75	12/BMT75
	Turning tool shank size	inch □1 ½	□1 ½	□1 ½
	Boring bar diameter	inch ø 2 ¼	ø 2 ¼	ø 2 ¼
Turret Indexing Time (1st swivel)	sec 0,25	0,25	0,25	
Tailstock Quill Dia.	inch ø 6,3	ø 6,3	ø 6,3	
Floor Space(L X W)	inch 197,64 x 85,94	197,64 x 85,94	229,13 x 85,94	
Machine Height	inch 93,90	93,90	93,90	
Machine Weight	lbs 20,282	20,282	29,100	
Power capacity	kVA 68	73	73	
CNC CONTROLLER		F Oi-TD	F Oi-TD	F Oi-TD

Major Specifications

[]: Option

DESCRIPTION		KDL 55	KDL 55M	KDL 55LM
Capacity	Swing over Bed	inch 30,51	30,51	30,51
	Swing over Cross slide	inch 24,80	24,80	24,80
	Max. Turning Dia.	inch 27,17	24,41	24,41
	Max. Turning Length	inch 57,68	57,68	89,17
Main spindle	Max. Spindle Speed	rpm 1,800	1,800	1,800
	Spindle Nose	- A2-15	A2-15 Mill	A2-15 Mill
	Spindle Bore diameter	inch 7,13	7,13	7,13
	Standard Chuck Size	lb-ft 21[18]	21[18]	21[18]
Motor	Main Spindle Motor(Cont./30min)	inch 40/50	40/50	40/50
	X/Z axis Servo Motor	hp 10/8	10/8	10/12
	Gear Box	hp Std.	Std.	Std.
	Mill Spindle Motor(Cont./30min)	hp -	7/10	7/10
Bed, Saddle, Cross slide	X/Z axis travel	inch 12,60/60,24	12,60/60,24	12,60/91,73
	Guideway Type	- BOX Way	BOX Way	BOX Way
	X/Z axis rapid traverse rate	ipm 787/709	787/709	787/709
Turret	Turret Index Type	- Servo	Servo	Servo
	Max. No. of Tools	ea 12	12/BMT75	12/BMT75
	Turning tool shank size	inch □1 ½	□1 ½	□1 ½
	Boring bar diameter	inch ø 2 ¼	ø 2 ¼	ø 2 ¼
Turret Indexing Time (1st swivel)	sec 0,25	0,25	0,25	
Tailstock Quill Dia.	inch ø 6,3	ø 6,3	ø 6,3	
Floor Space(L X W)	inch 197,64 x 85,94	197,64 x 85,94	229,13 x 85,94	
Machine Height	inch 93,90	93,90	93,90	
Machine Weight	lbs 20,282	20,282	29,100	
Power capacity	kVA 68	73	73	
CNC CONTROLLER		F Oi-TD	F Oi-TD	F Oi-TD

KDL S Series

CNC Turning Center (Heavy Duty)

Box Way

KDL 60 / 60L / 65 KDL 60M / 60LM

- The KDL 60/65 series is designed to offer the best of heavy machining, large work space and thermal distortion prevention
- Powerful heavy cutting capability with 3 speed gear box
- Large bore diameter (12.6")
- 45 deg slant bed, servo driven 12 face turret, BMT85 (Mill Turret)

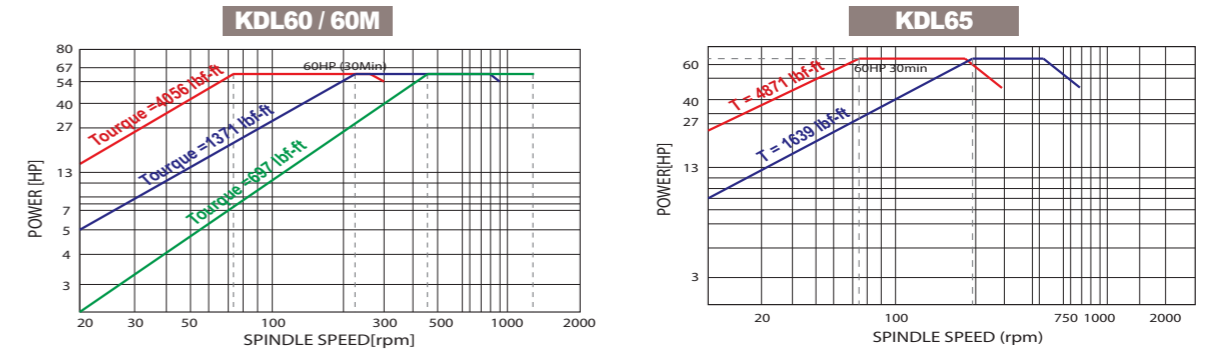


Major Specifications

[]: Option

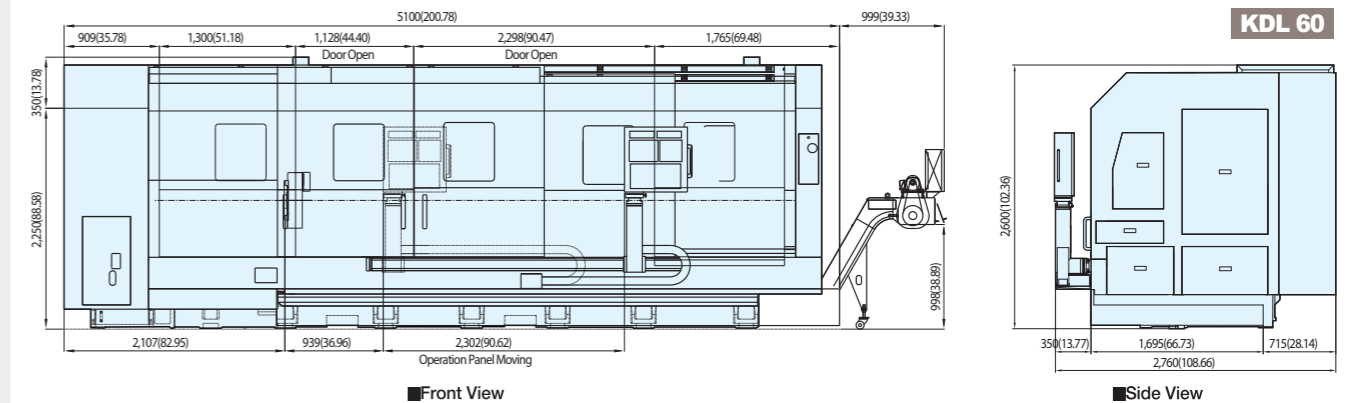
DESCRIPTION			KDL 60	KDL 65
Capacity	Swing over Bed	inch	40,55	40,55
	Swing over Cross slide	inch	31,50	31,50
	Max. Turning Dia.	inch	35,43	35,43
	Max. Turning Length	inch	39,37	39,37
Main spindle	Max. Spindle Speed	rpm	1,400	750
	Spindle Nose	-	A2-15	A1-20
	Spindle Bore diameter	inch	7,13	12,60
Motor	Standard Chuck Size	inch	32[24]	DEPENDING ON USER
	Main Spindle Motor(Cont./30min)	hp	50/60	50/60
	X/Z axis Servo Motor	hp	5/8	5/8
Bed, Saddle, Cross slide	Gear Box	-	IGB	IGB
	X/Z axis travel	inch	18,50/41,34	18,50/41,34
	Guideway Type	-	BOX Way	BOX Way
Turret	X/Z axis rapid traverse rate	ipm	472/709	472/709
	Turret Index Type	-	Servo	Servo
	Max. No. of Tools	ea	12	12
	Turning tool shank size	inch	□1 ↓	□1 ↓
Tailstock Quill Dia.	Boring bar diameter	inch	∅3	∅3
	Turret Indexing Time (1st swivel)	sec	0,25	0,25
Floor Space(L X W)	inch	204,33 x 111,22	204,33 x 111,22	
Machine Height	inch	102,36	102,36	
Machine Weight	lbs	36,375	35,273	
Power capacity	kVA	67	67	
CNC CONTROLLER		F Oi-TD	F Oi-TD	

Spindle power and torque diagram



Machine Layout

() : inch



Major Specifications

[]: Option

DESCRIPTION			KDL 60M	KDL 60LM
Capacity	Swing over Bed	inch	40,55	40,55
	Swing over Cross slide	inch	31,50	31,50
	Max. Turning Dia.	inch	35,43	35,43
	Max. Turning Length	inch	39,37	125,98
Main spindle	Max. Spindle Speed	rpm	1,400	1,400
	Spindle Nose	-	A2-15 Mill	A2-15 Mill
	Spindle Bore diameter	inch	7,13	7,13
Motor	Standard Chuck Size	inch	32[24]	24
	Main Spindle Motor(Cont./30min)	hp	50/60	50/60
	X/Z axis Servo Motor	hp	5/8	5/8
Bed, Saddle, Cross slide	Gear Box	-	IGB	IGB
	Mill Spindle Motor(Cont./30min)	hp	10/15	10/15
	X/Z axis travel	inch	18,50/41,34	18,50/128,74
Turret	Guideway Type	-	BOX Way	BOX Way
	X/Z axis rapid traverse rate	ipm	472/709	472/393
	Turret Index Type	-	Servo	Servo
	Max. No. of Tools	ea	12/BMT85	12/BMT85
Tailstock Quill Dia.	Turning tool shank size	inch	□1 ↓	□1 ↓
	Boring bar diameter	inch	∅3	∅3
Floor Space(L X W)	inch	204,33 x 114,17	291,34 x 114,17	
Machine Height	inch	102,36	102,36	
Machine Weight	lbs	36,375	48,500	
Power capacity	kVA	75	75	
CNC CONTROLLER		F Oi-TD	F Oi-TD	

KDL V Series

VERTICAL CNC TURNING CENTER

KDL V Series

Vertical CNC Turning Center

Box Way

KDL 40V / 40V-2S / 60V / 60VM / 80V / 80VM KDL 100V / 100VM / 120V / 120VM

- Most compact floor space in the market
- Robust one piece bed, Box way design, servo driven turret, BMT tooling live tool system
- Left hand machine can easily be added at any time to increase productivity
- Robot arm automation can be integrated for unmanned operation

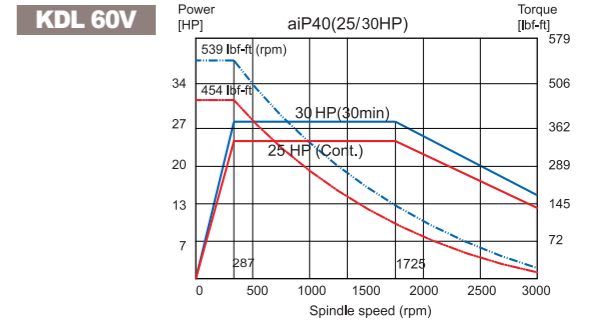
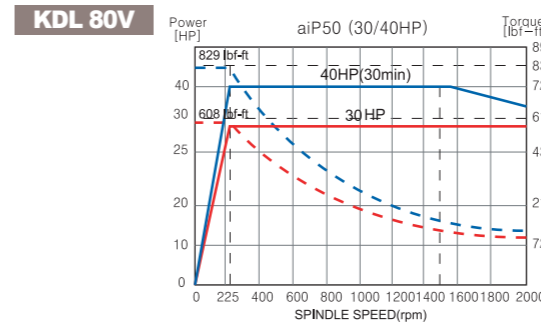


Major Specifications

[] : Option

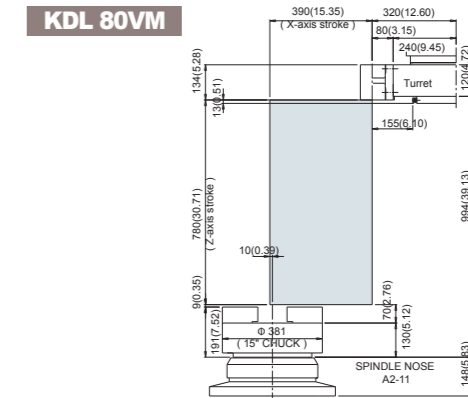
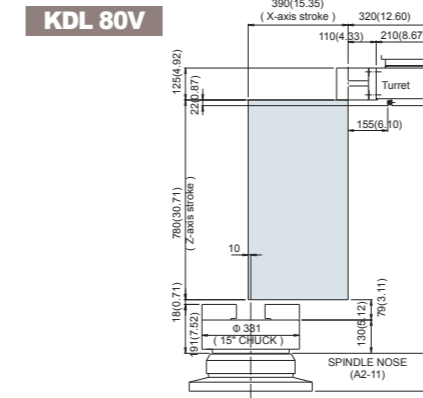
DESCRIPTION		KDL 40V	KDL 40V-2S	KDL 60V	KDL 60VM	KDL 80V(H)	KDL 80VM
Capacity	Swing over Bed	inch 15.74	15.74	24.02	24.02	31.50	31.50
	Max. Turning Dia.	inch 12.6	12.6	18.90	18.86	28.74	28.74
	Max. Turning Length	inch 7.87	7.87	18.90	18.90	32.40	29.53
Main spindle	Max. Spindle Speed	rpm 4,000	4,000	3,000	3,000	2,000	2,000
	Spindle Nose	-	A2-6	A2-6	A2-8	A2-8	A2-11
	Spindle Bore diameter	inch 2.99	2.99	3.54	3.54	4.09	4.09
	Max. Spindle Torque	lbf-ft 164.19	164.19	539.58	539.58	828.90	828.90
	Spindle Driven Method	-	Belt	Belt	Belt	Belt	Belt
	Standard Chuck Size	inch 8[10]	18	12[15,18]	12[15,18]	15[18,21,24]	15[18,21,24]
	Main Spindle Motor(Cont./30min)	hp 15/20	15/20	25/30	25/30	30/40	30/40
Motor	X/Z axis Servo Motor	hp 4/5	4/5	4/5	4/5	4/5	4/5
	Gear Box	-	-	Opt.	Opt.	Opt.	Opt.
	Mill Spindle Motor(Cont./30min)	hp -	-	-	3/5	- (3/5)	3/5
Bed, Saddle, Cross slide	X/Z axis travel	inch 7.87/13.78	7.87/13.78	10.24/18.90	10.24/18.90	15.35/30.71(51.18)	15.35/30.71
	Guideway Type	-	BOX Way	BOX Way	BOX Way	BOX Way	BOX Way
	X/Z axis rapid traverse rate	ipm 629.92/787.40	629.92/787.40	787/787	787/787	787/787	787/787
Turret	Turret Index Type	-	Servo	Servo	Servo	Servo	Servo
	Max. No. of Tools	ea 8	8	12	12/BMT65	12	12/BMT75
	Turning tool shank size	inch Max. \varnothing 1.18	Max. \varnothing 1.18	\varnothing 1	\varnothing 1	\varnothing 1¼	\varnothing 1¼
Boring bar diameter	inch Max. \varnothing 2	Max. \varnothing 2	\varnothing 2	\varnothing 2	\varnothing 2	\varnothing 2	
Floor Space(L X W)	inch 77.76x47.24	77.76x76.77	81.50x57.48	81.50x57.48	95.28x74.80 (82.68x112.99)	95.28x74.80	
Machine Height	inch 120.47	120.47	105.91	105.91	133.46(165.35)	133.46	
Machine Weight	lbs 12,125	18,739	13,668	13,999	21,604(21,936)	21,935	
Power capacity	kVA 40	45	50	55	57.5(62)	62	
CNC CONTROLLER		F O i-TD	F O i-TD	F O i-TD	F O i-TD	F O i-TD	

Spindle power and torque diagram



Work Range

() : inch



Major Specifications

[] : Option

DESCRIPTION		KDL 100V	KDL 100VM	KDL 120V	KDL 120VM
Capacity	Swing over Bed	inch 39.37	39.37	49.21	49.21
	Max. Turning Dia.	inch 36.22	36.22	45.28	45.28
	Max. Turning Length	inch 33.46	33.46	39.37	39.37
Main spindle	Max. Spindle Speed	rpm 1,800	1,800	900	900
	Spindle Nose	-	A2-15	A2-15	A2-15
	Spindle Bore diameter	inch 4.25	4.25	4.92	4.92
	Max. Spindle Torque	lbf-ft 2,640	2,640	2,640	2,640
	Spindle Driven Method	-	Belt	Belt	Belt
	Standard Chuck Size	inch 24	24	32	32
	Main Spindle Motor(Cont./30min)	hp 50/60	50/60	60/74	60/75
Motor	X/Z axis Servo Motor	hp 5/9	5/9	5/9	5/9
	Gear Box	-	-	Std.	Std.
	Mill Spindle Motor(Cont./30min)	hp -	10/15	-	10/15
Bed, Saddle, Cross slide	X/Z axis travel	inch 18.9/33.86	18.9/33.86	24.61/39.37	24.61/39.37
	Guideway Type	-	Box Way	Box Way	Box Way
	X/Z axis rapid traverse rate	ipm 787/787	787/787	787/787	787/787
Turret	Turret Index Type	-	Servo	Servo	Servo
	Max. No. of Tools	ea 12	12/BMT85	12	12/BMT85
	Turning tool shank size	inch \varnothing 1¼	\varnothing 1¼	\varnothing 1¼	\varnothing 1¼
Boring bar diameter	inch \varnothing 3	\varnothing 3	\varnothing 3	\varnothing 3	
Floor Space(L X W)	inch 106.30x85.43	106.30x85.43	129.92x114.17	129.92x114.17	
Machine Height	inch 147.24	147.24	159.45	159.45	
Machine Weight	lbs 33,069	33,069	48,500	48,500	
CNC CONTROLLER		F O i-TD	F O i-TD	F O i-TD	