

SINCE 1944

\* Specifications in this catalog are subject to change without prior notice.  
\* Please contact us or visit our site for more product information.

# MACHINE TOOLS

## Product Line-Up

[www.ffg-dmc.com](http://www.ffg-dmc.com)



**FFG DMC CO.,LTD.**

631-821,86,Sandan 2-gil, Jinbuk-myeon, Masanhappo-gu,

Changwon-si, Gyeongsangnam-do, Korea

Phone : +82-(0)55-340-8200

Fax : +82-(0)55-340-8394

E-mail : [sales@dmcmt.com](mailto:sales@dmcmt.com)

[www.ffg-dmc.com](http://www.ffg-dmc.com)



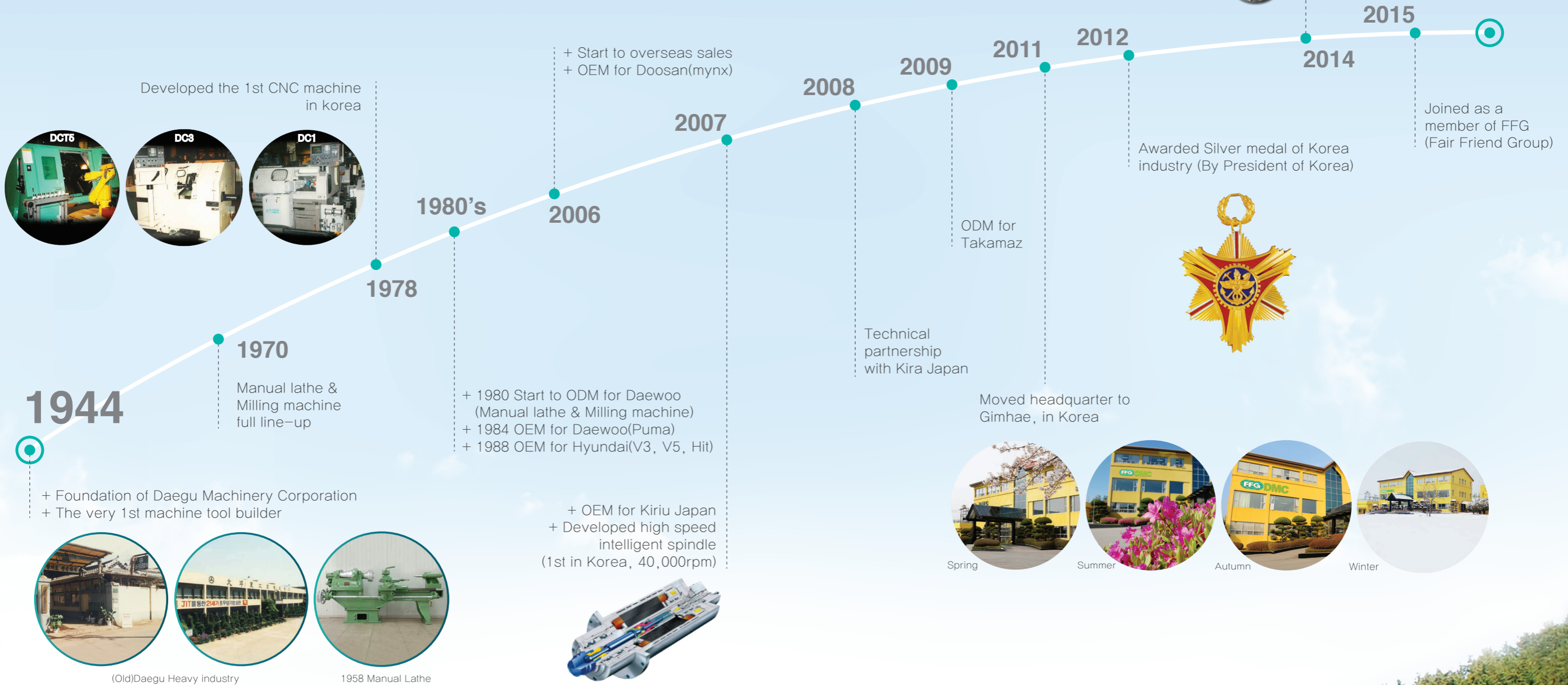
© FFG DMC 2018.02.13(mm)



# FFG DMC Over 70 years of machine tool history since 1944

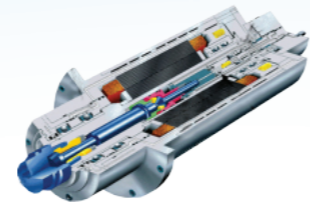


**2020**  
Top Class



(Old)Daegu Heavy industry

1958 Manual Lathe

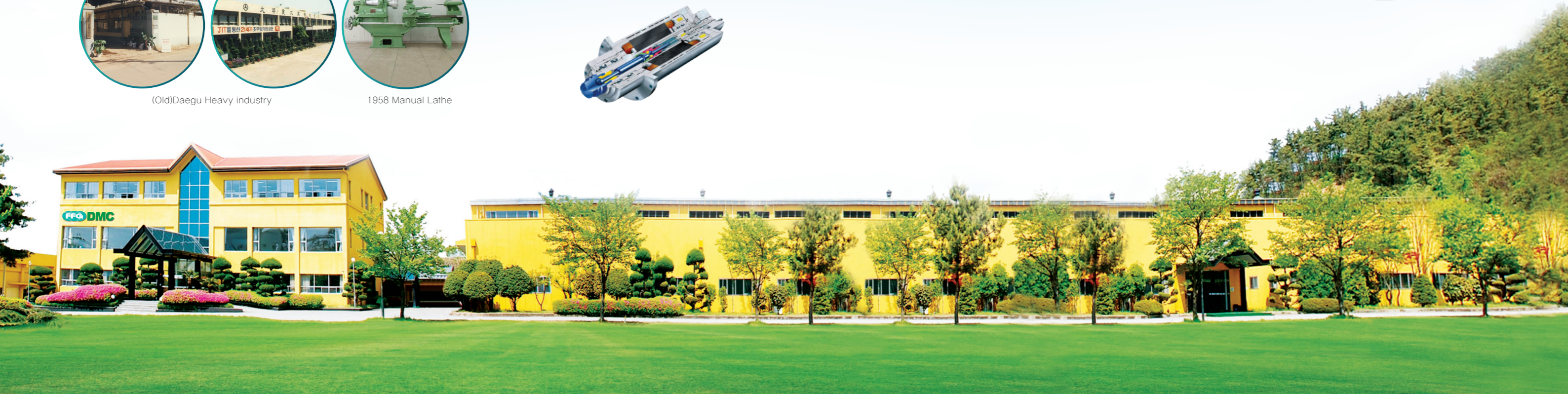


Spring

Summer

Autumn

Winter



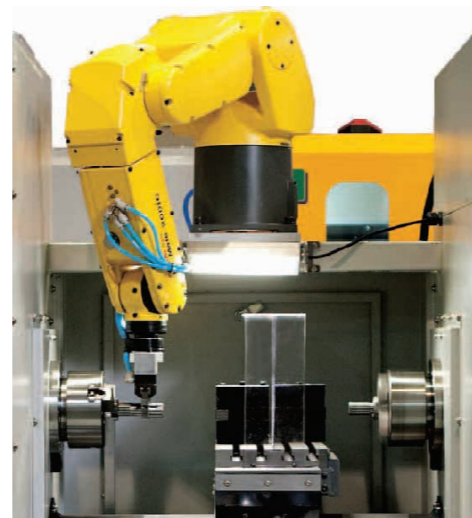


# High Quality Components

**Dovetail** **01**  
compact positioning between table and guide ways permit rapid motion in short distances




**02** **Spindle**  
limitation of thermal displacement due to separation of the spindle cartridge and headstock assembly

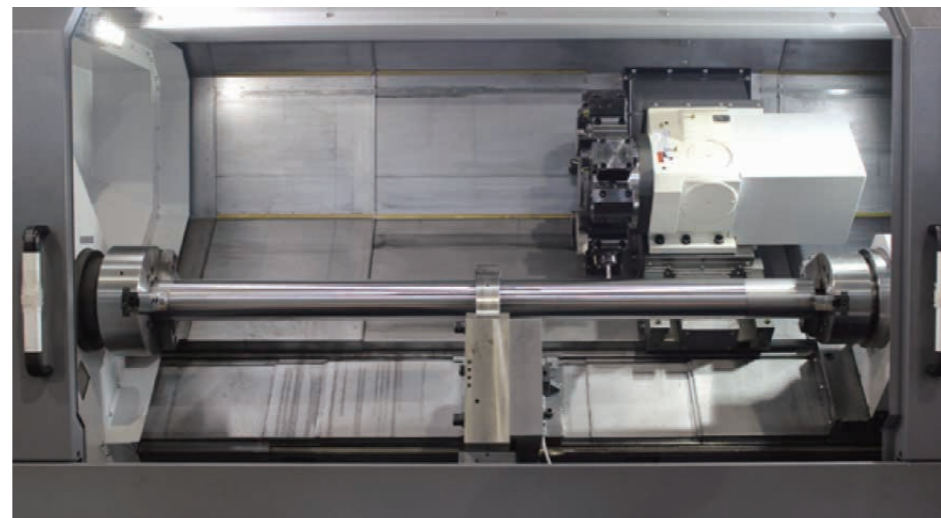
**03** **Built-in tailstock**  
large diameter quill gives high strength and rigid support



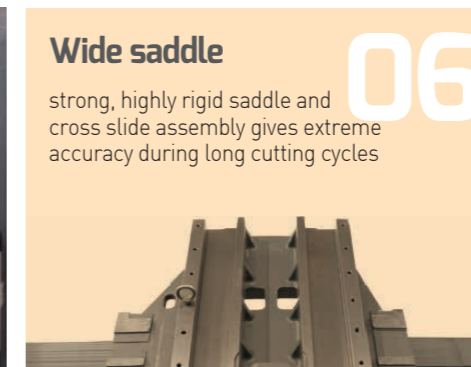
**04** **Box way**  
Integrated expansive 6 face slideways give superior cutting performance and tool life




**05** **Vertical lathe**  
Super sturdy column and saddle assembly is best in its class

**06** **Wide saddle**  
strong, highly rigid saddle and cross slide assembly gives extreme accuracy during long cutting cycles



**07** **Integrated bed**  
Extremely wide base support gives superb stability



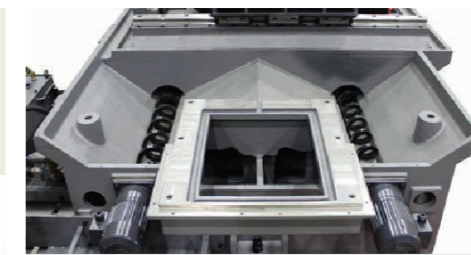

**08** **Gear box**  
Low & High speed torque cutting and stable machining through three(3) step gear box.



**09** **BBT spindle**  
face and taper contact gives extremely strong cutting performance



**10** **Efficient chip removal**  
large diameter screw conveyors on the right, left and front gives substantial chip removal




**2015**  
FFG DMC  
Acquire the certification of Environmental Management Systems -ISO 14001 : 2004



**2015**  
FFG DMC  
Acquire the certification of Quality Management Systems -ISO 9001 : 2008

# FFG DMC FULL LINE-UP & LIST



Horizontal CNC Turning Center (Gang Type)

LINE-UP LIST

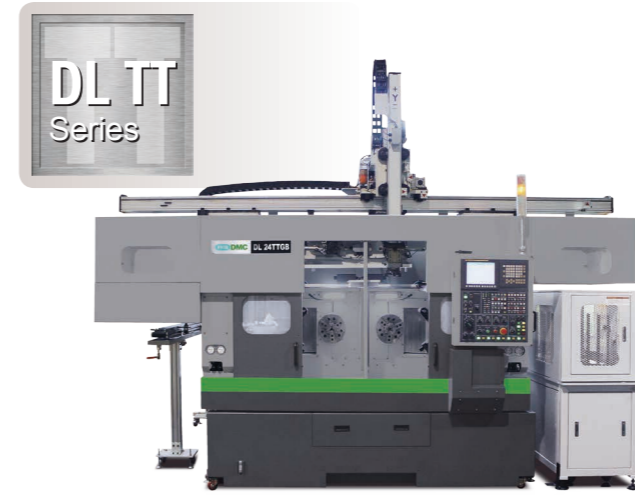
Flat Gang Type : DL 3G	DL 5GH	DL 6GF	Q5-2S
Slant Gang Type : DL 6G	DL 8G	DL 10G	DL 6GB DL 8GB



Horizontal CNC Turning Center (Compact & Economic Type)

LINE-UP LIST

DL 6T	DL 8T	DL 10T	DL 6TB	DL 18MA
DL 6TH	DL 8TH	DL 10TH	DL 8TB	DL 18MB
DL 6TMH	DL 8TMH	DL 10TMH		



Horizontal CNC Turning Center (2 Spindle & 2 Turret)

LINE-UP LIST

DL 24TTGA	DL 24TTGB
-----------	-----------



Horizontal CNC Turning Center (Roller/Box guide way)

LINE-UP LIST (Roller guide way)

DL 21A	DL 21B	DL 21LA	DL 21LB	DL 21MA
DL 21MB	DL 21LMA	DL 21LMB		

LINE-UP LIST (Box guide way)

\* : SUB Spindle

DL 22A	DL 22B	DL 22LA	DL 22LB
DL 22LMA	DL 22LMB	*DL 22LMS	



Horizontal CNC Turning Center (Heavy duty)

LINE-UP LIST

\* : SUB Spindle / \* : Y axis

DL 25	DL 25M	DL 30	DL 30L	DL 30M
DL 30LM	DL 40	DL 40L	DL 40M	DL 40LM
DL 45	DL 45L	DL 45M	DL 45LM	DL 55
DL 55L	DL 55M	DL 55LM	DL 60L	DL 60LM
DL 70	DL 70M			
*DL 25MS	*DL 22LSY	*DL 25Y	*DL 25SY	



Vertical CNC Turning Center (Turret type)

LINE-UP LIST

DL 40V	DL 40VTT		
DL 60V	DL 60VL	DL 60VM	DL 60VLM
DL 80V	DL 80VL	DL 80VM	DL 80VLM
DL 100V	DL 100VM		



Vertical Machining Center

LINE-UP LIST

DM 42V	DM 42VL	DM 52VL	DM 65V/40(50)	FM 50V
--------	---------	---------	---------------	--------



Vertical Machining Center (Column Moving Type)

LINE-UP LIST

DM 43VC	DM 43VCD
---------	----------



Tapping Center

LINE-UP LIST

DT 420(L)	DT 420A(L)	DT 32CD	DT 400D(A)
-----------	------------	---------	------------



## DL G series (Flat Gang Type)

Highly productive and efficient gang type lathe for great repeatability on small sized components. Great accuracy flat dovetail design.

[ ]: option

SPECIFICATIONS	UNIT	DL 3G	DL 5GH	DL 6GF	Q5-2S	
Swing over Bed(Max. swing dia.)	mm	230	360	360	360	
Max. Turning Dia.	mm	70	110	110	115	
Max. Turning Length	mm	150	150	150	250	
Bar Capacity	mm	20	34	44	16	
Max. Spindle Speed	rpm	6,000	6,000	6,000	6,000	
Spindle Nose	-	FLAT	FLAT	A2-5	A2-4	
Spindle Bore diameter	mm	32	44	55	26	
Standard Chuck Size	inch	3"/Collet	5"	6"	5"	
Main Spindle Motor(Cont./30min)	kw	3.7/5.5	3.7/5.5	7.5/11	<2.2/3.7>x2	
X/Z axis travel	mm	200 / 180	300 / 235	200 / 200	300 / 235	
Guideway Type(X/Z)	-	Dove-tail	Dove-tail	Dove-tail	Dove-tail	
X/Z axis rapid traverse rate	m/min	15 / 15	24 / 24	24 / 24	24 / 24	
Max. No. of Tools	ea	5	5	3	5	
Turning tool shank size	mm	12	20	20	20	
Boring bar diameter	mm	20	25	25	25	
Machine Weight	kgf	800	1,700	1,800	2,300	
Floor Space	Height	mm	1,585	1,670	2,050	1,690
	Length	mm	1,250	1,650	950	2,250
	Width	mm	960	1,210	1,940	1,540
Power Capacity	kVA	8	9	19	11	
Controller		F0i-TF	F0i-TF	F0i-TF	F0i-TF	



## DL G series (Slant Gang Type)

Fast, precise and productive gang type CNC turning center

[ ]: option

SPECIFICATIONS	UNIT	DL 6G	DL 8G	DL 10G	DL 6GB	DL 8GB	
Swing over Bed(Max. swing dia.)	mm	490	490	490	490	490	
Max. Turning Dia.	mm	170	170	170	170	170	
Max. Turning Length	mm	240	220	185	240	220	
Bar Capacity	mm	44[Built-in : 28]	51	74	44	51	
Max. Spindle Speed	rpm	6,000	4,500	3,500	6,000	4,500	
Spindle Nose	-	A2-5	A2-6	A2-8	A2-5	A2-6	
Spindle Bore diameter	mm	55	62	87	55	62	
Standard Chuck Size	inch	6"	8"	10"	6"	8"	
Main Spindle Motor(Cont./30min)	kw	11/15[5.5/7.5]	11/15	11/15	11/15	11/15	
X/Z axis travel	mm	420 / 250	420 / 250	420 / 185	400 / 250	400 / 250	
Guideway Type(X/Z)	-	L.M Guide	L.M Guide	L.M Guide	BOX Way	BOX Way	
X/Z axis rapid traverse rate	m/min	30 / 36	30 / 36	30 / 36	20 / 24	20 / 24	
Max. No. of Tools	ea	6	6	6	6	6	
Turning tool shank size	mm	20	20	20	20	20	
Boring bar diameter	mm	32	32	32	32	32	
Machine Weight	kgf	2,500	2,600	2,850	2,600	2,700	
Floor Space	Height	mm	1,645	1,645	1,645	1,610	1,610
	Length	mm	2,055[1,980]	2,055	2,055	2,060	2,060
	Width	mm	1,500	1,500	1,500	1,660	1,660
Power Capacity	kVA	20	20	20	20	20	
Controller		F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF	

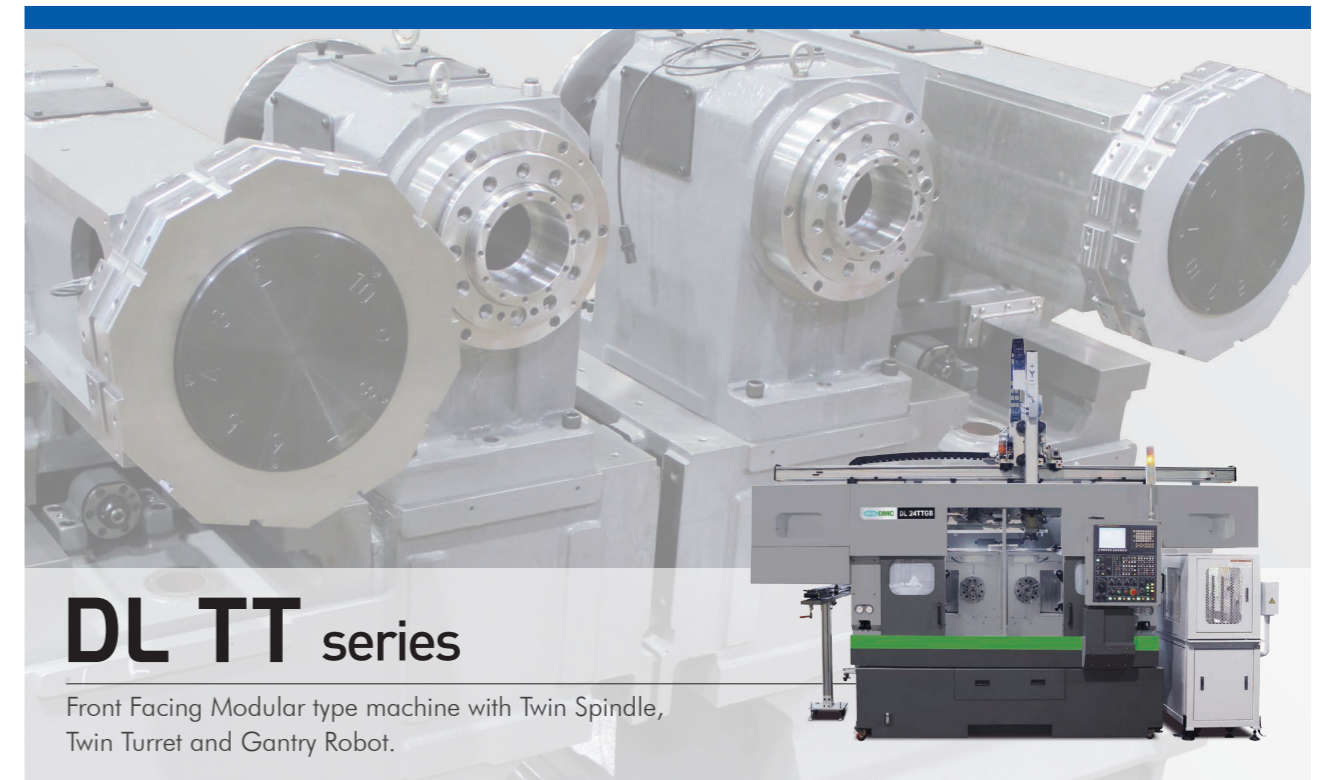


# DL T series

A new generation high speed precision turning center

[ ] : option

SPECIFICATIONS	UNIT	DL 6T (H)	DL 6TMH	DL 6TB	DL 8T (H)	DL 8TMH	DL 8TB	DL 10T (H)	DL 10TMH	DL 18MA	DL 18MB
Swing over Bed(Max. swing dia.)	mm	480	480	170	480	480	170	480	480	490	490
Max. Turning Dia.	mm	280	190	170	280	190	170	270 (280)	190	270	270
Max. Turning Length	mm	320 (520)	390	200	300 (510)	380	200	350 (485)	355	380	370
Bar Capacity	mm	44	44	44	51	51	51	74	74	45	51
Max. Spindle Speed	rpm	6,000	6,000	6,000	4,500	4,500	4,500	3,500	3,500	6,000	4,500
Spindle Nose	-	A2-5	A2-5	A2-5	A2-6	A2-6	A2-6	A2-8	A2-8	A2-5	A2-6
Spindle Bore diameter	mm	55	55	55	62	62	62	87	87	55	62
Standard Chuck Size	inch	6"	6"	6"	8"	8"	8"	10"	10"	6"	8"
Main Spindle Motor(Cont./30min)	kw	11/15	5.5/7.5[11/15]	11/15	11/15	5.5/7.5[11/15]	11/15	11/15	5.5/7.5[11/15]	11/15	11/15
Mill Spindle Motor(Cont./30min)	kw	-	3/-	-	-	3/-	-	-	3/-	3.7	3.7
X/Z axis travel	mm	160/350(520)	160 / 400	125 / 230	160/350(165/520)	160 / 390	125 / 230	160/350(480)	160 / 380	160 / 390	160 / 380
Guideway Type(X/Z)	-	L.M Guide	L.M Guide	FLAT	L.M Guide	L.M Guide	FLAT	L.M Guide	L.M Guide	L.M Guide	L.M Guide
X/Z axis rapid traverse rate	m/min	30 / 36 (30)	30 / 30	20 / 24	30 / 36 (30)	30 / 30	20 / 24	30 / 36 (30)	30 / 30	32 / 32	32 / 32
Turret Index Type	-	Servo[HYD] Servo,BMT	Servo, VDI30	HYD,BMT	Servo[HYD] Servo,BMT	Servo, VDI30	HYD,BMT	Servo[HYD] Servo,BMT	Servo, VDI30	Servo, BMT45	Servo, BMT45
Max. No. of Tools	ea	10[6+6](10)	12	8	10[6+6](10)	12	8	10[6+6](10)	12	12	12
Turning tool shank size	mm	25[20]	20	20	25[20]	20	20	25[20]	20	20	20
Boring bar diameter	mm	32	32	25	32	32	25	32	32	32	32
Tailstock Quill diameter	mm	65	65	-	65	65	-	65	65	80	80
Tailstock Quill Taper	MT	MT#4	MT#4	-	MT#4	MT#4	-	MT#4	MT#4	MT#4	MT#4
Machine Weight	kgf	2,630(3,000)	3,050	2,100	2,730(3,200)	3,250	2,100	3,000(3,400)	3,400	3,050	3,250
Floor Space	Height	mm	1,650(1,570)	1,570	1,685	1,650(1,570)	1,570	1,685	1,500(1,570)	1,570	1,640
	Length	mm	2,055(2,260)	2,260	1,620	2,055(2,260)	2,260	1,620	2,110(2,260)	2,260	2,400
	Width	mm	1,625(1,670)	1,670	1,310	1,625(1,670)	1,670	1,310	1,650(1,670)	1,670	1,460
Power Capacity	kVA	23	27	21	23	27	21	23	27	27	27
Controller		F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF



# DL TT series

Front Facing Modular type machine with Twin Spindle, Twin Turret and Gantry Robot.

[ ] : option

SPECIFICATIONS		UNIT	DL 24TTGA	DL 24TTGB	
Machine	Swing over Bed(Max. swing dia.)	mm	500	500	
	Max. Turning Dia.	mm	250	250	
	Max. Turning Length	mm	150	150	
	Max. Spindle Speed	rpm	4,000	3,500	
	Spindle Bore diameter	mm	76	86	
	Standard Chuck Size	inch	8"	10"	
	Main Spindle Motor(Cont./30min)	kw	11/15	15/18.5	
	X/Z axis travel	mm	190 / 200	190 / 200	
	Guideway Type(X/Z)	-	BOX Guide	BOX Guide	
	X/Z axis rapid traverse rate	m/min	20 / 24	20 / 24	
	Turret Index Type	-	Servo,BMT	Servo,BMT	
	Max. No. of Tools	ea	10	10	
	Boring bar diameter	mm	40	40	
	Machine Weight	kgf	7,200	7,200	
	Floor Space	Height	mm	3,446	3,446
		Length	mm	4,290	4,290
Width		mm	2,271	2,271	
Power Capacity	kVA	50	50		
Controller	-	F0i-TF	F0i-TF		
TYPE	-	GANTRY	GANTRY		
NO. OF FEED AXIS	axis	3 SERVO	3 SERVO		
WORKING SIZE	mm	"OD Φ250*1500L / ID Φ250*100L"	"OD Φ250*1500L / ID Φ250*100L"		
LOADER	MAX. HANDLING WEIGHT	Kgf	8+8	8+8	
	A/B/C - AXIS SPEED	m/min	127/76/52	127/76/52	
	A/B/C - AXIS STROKE	mm	3690/700/260	3690/700/260	
	LO/UNLOADER TIME	sec	within 10	within 10	

DL G SERIES

DL T SERIES

DL TT SERIES

DL R SERIES

DL B SERIES

DL S SERIES

DL V SERIES

DM V SERIES

DM VC SERIES

DT SERIES



## DL R series (Roller guide way)

- Machine design for all kinds of workpiece.
- Greatest productivity with reduced idle time.
- Roller guide are selected for optimal heavy duty cutting machining, ranges from 8" to 10"

[ ] : option

SPECIFICATIONS		UNIT	DL 21A	DL 21LA	DL 21MA	DL 21LMA	DL 21B	DL 21LB	DL 21MB	DL 21LMB
Swing over Bed(Max. swing dia.)	mm		550	550	550	550	550	550	550	550
Swing over Cross slide	mm		360	360	360	360	360	360	360	360
Max. Turning Dia.	mm		390	390	280	280	390	390	280	280
Max. Turning Length	mm		410	540	340	500	380	530	330	490
Bar Capacity(Main/Sub)	mm		65 / -	65 / -	65 / -	65 / -	76 / -	76 / -	76 / -	76 / -
Max. Spindle Speed(Main/Sub)	rpm		4,000 /-	4,000 /-	4,000 /-	4,000 /-	3,500 /-	3,500 /-	3,500 /-	3,500 /-
Spindle Nose(Main/Sub)	-		A2-6 /-	A2-6 /-	A2-6 /-	A2-6 /-	A2-8 /-	A2-8 /-	A2-8 /-	A2-8 /-
Spindle Bore diameter(Main/Sub)	mm		76 /-	76 /-	76 /-	76 /-	86 /-	86 /-	86 /-	86 /-
Standard Chuck Size(Main/Sub)	inch		8" BIG /-	8" BIG /-	8" BIG /-	8" BIG /-	10" /-	10" /-	10" /-	10" /-
Main Spindle Motor(Cont./30min)	Main	kw	11/15	11/15	11/15	11/15	11/15[15/18.5]	11/15[15/18.5]	11/15[15/18.5]	11/15[15/18.5]
	Sub	kw	-	-	-	-	-	-	-	-
Mill Spindle Motor(Cont./30min)	kw		-	-	2.2/3.7	2.2/3.7	-	-	2.2/3.7	2.2/3.7
X/Z/B axis travel	mm		210/430/-	210/580/-	200/410/-	200/550/-	210/430/-	210/580/-	200/410/-	200/550/-
Guideway Type	X/Z	-	Roller Guide	Roller Guide	Roller Guide	Roller Guide	Roller Guide	Roller Guide	Roller Guide	Roller Guide
	B	-	-	-	-	-	-	-	-	-
X/Z/B axis rapid traverse rate	m/min		36/36/-	36/36/-	36/36/-	36/36/-	36/36/-	36/36/-	36/36/-	36/36/-
Turret Index Type	-		Servo, BMT	Servo, BMT	Servo, BMT55	Servo, BMT55	Servo, BMT	Servo, BMT	Servo, BMT55	Servo, BMT55
Max. No. of Tools	ea		12	12	12	12	12	12	12	12
Turning tool shank size	mm		25	25	25	25	25	25	25	25
Boring bar diameter	mm		40	40	40	40	40	40	40	40
Turret Indexing Time (One station)	sec		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Tailstock Quill diameter	mm		65	80	65	80	65	80	65	80
Tailstock Quill Taper	MT		MT#4	MT#4	MT#4	MT#4	MT#4	MT#4	MT#4	MT#4
Machine Weight	kgf		3,950	4,350	4,050	4,450	4,050	4,450	4,150	4,550
	Height	mm	1,900	1,900	1,900	1,900	1,900	1,900	1,900	1,900
	Length	mm	2,660	2,960	2,660	2,960	2,660	2,960	2,660	2,960
Floor Space	Width	mm	1,650	1,650	1,650	1,650	1,650	1,650	1,650	1,650
	Power Capacity	kVA	27	27	30	30	27[32]	27[32]	30[32]	30[32]
Controller			F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF



## DL B series (Box guide way)

High accuracy and powerful turning center equipped with box guideways.

[ ] : option

SPECIFICATIONS		UNIT	DL 22A	DL 22LA	DL 22LMA	DL 22B	DL 22LB	DL 22LMB
Swing over Bed(Max. swing dia.)	mm		550	550	550	550	550	550
Swing over Cross slide	mm		360	360	360	360	360	360
Max. Turning Dia.	mm		390	390	280	390	390	280
Max. Turning Length	mm		410	540	500	380	530	490
Bar Capacity(Main/Sub)	mm		65 / -	65 / -	65 / -	76 / -	76 / -	76 / -
Max. Spindle Speed(Main/Sub)	rpm		4,000 /-	4,000 /-	4,000 /-	3,500 /-	3,500 /-	3,500 /-
Spindle Nose(Main/Sub)	-		A2-6 /-	A2-6 /-	A2-6 /-	A2-8 /-	A2-8 /-	A2-8 /-
Spindle Bore diameter(Main/Sub)	mm		76 /-	76 /-	76 /-	86 /-	86 /-	86 /-
Standard Chuck Size(Main/Sub)	inch		8" BIG /-	8" BIG /-	8" BIG /-	10" /-	10" /-	10" /-
Main Spindle Motor(Cont./30min)	Main	kw	11/15	11/15	11/15	11/15[15/18.5]	11/15[15/18.5]	11/15[15/18.5]
	Sub	kw	-	-	-	-	-	-
Mill Spindle Motor(Cont./30min)	kw		-	-	2.2/3.7	-	-	2.2/3.7
X/Z/B axis travel	mm		210/430/-	210/580/-	200/550/-	210/430/-	210/580/-	200/550/-
Guideway Type	X/Z	-	BOX Guide	BOX Guide	BOX Guide	BOX Guide	BOX Guide	BOX Guide
	B	-	-	-	-	-	-	-
X/Z/B axis rapid traverse rate	m/min		24/24/-	24/24/-	24/24/-	24/24/-	24/24/-	24/24/-
Turret Index Type	-		Servo, BMT	Servo, BMT	Servo, BMT55	Servo, BMT	Servo, BMT	Servo, BMT55
Max. No. of Tools	ea		12	12	12	12	12	12
Turning tool shank size	mm		25	25	25	25	25	25
Boring bar diameter	mm		40	40	40	40	40	40
Turret Indexing Time (One station)	sec		0.2	0.2	0.2	0.2	0.2	0.2
Tailstock Quill diameter	mm		80	80	80	80	80	80
Tailstock Quill Taper	MT		MT#4	MT#4	MT#4	MT#4	MT#4	MT#4
Machine Weight	kgf		3,950	4,400	4,450	4,000	4,450	4,500
	Height	mm	1,900	1,900	1,900	1,900	1,900	1,900
	Length	mm	2,660	2,960	2,960	2,660	2,960	2,960
Floor Space	Width	mm	1,650	1,650	1,650	1,650	1,650	1,650
	Power Capacity	kVA	27	27	30	27[32]	27[32]	30[32]
Controller			F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF



## DL S series ( 10"~21" )

Integrated high rigidity bed and box way for powerful heavy duty cutting CNC Turning Center ranges from 10" to 21"

[ ] : option

SPECIFICATIONS	UNIT	DL 25	DL 25M	DL 30	DL 30L	DL 30M	DL 30LM	DL 40	DL 40L	DL 40M	DL 40LM
Swing over Bed(Max. swing dia.)	mm	610	610	610	610	610	610	750	750	750	750
Max. Turning Dia.	mm	400	400	400	400	400	400	560	560	520	520
Max. Turning Length	mm	1,080	1,080	1,080	2,080	1,080	2,080	1,255	1,655	1,255	1,655
Bar Capacity	mm	76	76	90	90	90	90	119	119	119	119
Max. Spindle Speed	rpm	3,500	3,500	3,000	3,000	3,000	3,000	2,500	2,500	2,500	2,500
Spindle Nose	-	A2-8	A2-8 Mill	A2-8	A2-8	A2-8 Mill	A2-8 Mill	A2-11	A2-11	A2-11 Mill	A2-11 Mill
Spindle Bore diameter	mm	86	86	105	105	105	105	132[161]	132[161]	132[161]	132[161]
Standard Chuck Size	inch	10"[12"]	10"[12"]	12"	12"	12"	12"	15"[18"]	15"[18"]	15"[18"]	15"[18"]
Main Spindle Motor(Cont./30min)	kw	15/18.5	15/18.5	15/18.5	15/18.5	15/18.5	15/18.5	18.5/22	18.5/22	18.5/22	18.5/22
Mill Spindle Motor(Cont./30min)	kw	-	3.7/5.5	-	-	3.7/5.5	3.7/5.5	-	-	3.7/5.5	3.7/5.5
X/Z axis travel	mm	230/1130	230/1130	230/1130	230/2130	230/1130	230/2130	305/1305	305/1705	305/1305	305/1705
Guideway Type(X/Z)	-	BOX Way	BOX Way	BOX Way	BOX Way	BOX Way	BOX Way	BOX Way	BOX Way	BOX Way	BOX Way
X/Z axis rapid traverse rate	m/min	20/24	20/24	20/24	20/18	20/24	20/18	18/20	18/20	18/20	18/20
Turret Index Type	-	Servo, BMT	Servo, BMT 65	Servo, BMT	Servo, BMT	Servo, BMT 65	Servo, BMT 65	Servo, BMT	Servo, BMT	Servo, BMT 65	Servo, BMT 65
Max. No. of Tools	ea	12	12	12	12	12	12	10	10	12	12
Turning tool shank size	mm	25	25	25	25	25	25	25	25	25	25
Boring bar diameter	mm	50	50	50	50	50	50	50	50	50	50
Turret Indexing Time (One station)	sec	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.18
Tailstock Quill diameter	mm	110	110	110	110	110	110	130	130	130	130
Tailstock Quill Taper	MT	MT#5	MT#5	MT#5	MT#5	MT#5	MT#5	MT#4	MT#4	MT#4	MT#4
Machine Weight	kgf	7,100	7,100	7,100	8,600	7,100	8,600	8,600	9,100	8,600	9,100
Floor Space	Height	mm	2,050	2,050	2,050	2,021	2,050	2,021	2,281	2,292	2,281
	Length	mm	3,920	3,920	3,920	5,237	3,920	5,237	4,400	5,080	4,400
	Width	mm	1,810	1,810	1,810	1,810	1,810	1,810	1,854	1,876	1,854
Power Capacity	kVA	32	34	32	32	32	34	37	37	42	42
Controller		F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF



## DL S series ( 10"~21" )

[ ] : option

SPECIFICATIONS	UNIT	DL 45	DL 45L	DL 45M	DL 45LM	DL 55	DL 55L	DL 55M	DL 55LM
Swing over Bed(Max. swing dia.)	mm	775	775	775	775	775	775	775	775
Max. Turning Dia.	mm	690	690	620	620	690	690	620	620
Max. Turning Length	mm	1,465	2,265	1,465	2,265	1,465	2,265	1,465	2,265
Bar Capacity	mm	119	119	119	119	165	165	165	165
Max. Spindle Speed	rpm	2,000	2,000	2,000	2,000	1,700	1,700	1,700	1,700
Spindle Nose	-	A2-11	A2-11	A2-11 Mill	A2-11 Mill	A2-15	A2-15	A2-15 Mill	A2-15 Mill
Spindle Bore diameter	mm	132 [161]	132 [161]	132 [161]	132 [161]	181	181	181	181
Standard Chuck Size	inch	18" [21"]	18" [21"]	18" [21"]	18" [21"]	21"	21"	21"	21"
Main Spindle Motor(Cont./30min)	kw	30/37	30/37	30/37	30/37	30/37	30/37	30/37	30/37
Mill Spindle Motor(Cont./30min)	kw	-	-	5.5/7.5	5.5/7.5	-	-	5.5/7.5	5.5/7.5
X/Z axis travel	mm	350/1530	350/2330	350/1530	350/2330	350/1530	350/2330	350/1530	350/2330
Guideway Type(X/Z)	-	BOX Way	BOX Way	BOX Way	BOX Way	BOX Way	BOX Way	BOX Way	BOX Way
X/Z axis rapid traverse rate	m/min	20/18	20/18	20/18	20/18	20/18	20/18	20/18	20/18
Turret Index Type	-	Servo, BMT	Servo, BMT	Servo, BMT 75	Servo, BMT 75	Servo, BMT	Servo, BMT	Servo, BMT 75	Servo, BMT 75
Max. No. of Tools	ea	12	12	12	12	12	12	12	12
Turning tool shank size	mm	32	32	32	32	32	32	32	32
Boring bar diameter	mm	60	60	60	60	60	60	60	60
Turret Indexing Time (One station)	sec	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Tailstock Quill diameter	mm	160	160	160	160	160	160	160	160
Tailstock Quill Taper	MT	MT#4	MT#4	MT#4	MT#4	MT#5	MT#5	MT#5	MT#5
Machine Weight	kgf	9,200	13,200	9,200	13,200	9,200	13,200	9,200	13,200
Floor Space	Height	mm	2,354	2,354	2,354	2,354	2,354	2,354	2,354
	Length	mm	5,010	5,810	5,010	5,810	5,010	5,810	5,010
	Width	mm	2,202	2,183	2,202	2,183	2,202	2,183	2,202
Power Capacity	kVA	59	59	66	66	59	59	66	66
Controller		F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF





## DL S series ( 24"~32" )

Integrated high rigidity bed and box way for powerful heavy duty cutting CNC Turning Center ranges from 24"to 32"

[ ] : option

SPECIFICATIONS		UNIT	DL 60L	DL 60LM	DL70	DL 70M
Swing over Bed(Max. swing dia.)	mm		1,030	1,030	1,030	1,030
Max. Turning Dia.	mm		900	900	900	900
Max. Turning Length	mm		3,200	3,200	1,000	1,000
Bar Capacity	mm		156	156	156	156
Max. Spindle Speed	rpm		1,400	1,400	750	750
Spindle Nose	-		A2-15	A2-15 Mill	A2-20	A2-20 Mill
Spindle Bore diameter	mm		181	181	320	320
Standard Chuck Size	inch		24" [32"]	24" [32"]	Depending on user	Depending on user
Main Spindle Motor(Cont./30min)	kw		37/45	37/45	37/45	37/45
Mill Spindle Motor(Cont./30min)	kw		-	11	-	11
X/Z axis travel	mm		470/3270	470/3270	470/1050	470/1050
Guideway Type(X/Z)	-		BOX Way	BOX Way	BOX Way	BOX Way
X/Z axis rapid traverse rate	m/min		12/10	12/10	12/18	12/18
Turret Index Type	-		Servo, BMT	Servo, BMT 85	Servo, BMT	Servo, BMT 85
Max. No. of Tools	ea		12	12	12	12
Turning tool shank size	mm		32	32	32	32
Boring bar diameter	mm		80	80	80	80
Turret Indexing Time (One station)	sec		0.25	0.25	0.25	0.25
Tailstock Quill diameter	mm		180	180	-	-
Tailstock Quill Taper	MT		MT#6	MT#6	-	-
Machine Weight	kgf		22,300	22,300	18,060	18,060
Floor Space	Height	mm	2,685	2,685	2,685	2,685
	Length	mm	7,437	7,437	5,237	5,237
	Width	mm	2,750	2,750	2,750	2,750
Power Capacity	kVA		71	81	71	81
Controller			F0i-TF	F0i-TF	F0i-TF	F0i-TF



## DL S series (With SUB/Y Spindle)

Y axis Multi-task CNC Turning Center, which can cover all machining process with only one initial setting (DL 25Y / 25SY)

[ ] : option

SPECIFICATIONS		UNIT	DL 22LMS	DL 22LSY	DL 25MS	DL 25SY	DL 25Y
Swing over Bed(Max. swing dia.)	mm		550	550	710	710	710
Max. Turning Dia.	mm		280	280	400	400	400
Max. Turning Length	mm		500	500	1,000	1,000	1,000
Standard Chuck Size[Option] (Main/Sub)	inch		8/6	8/6	10/8[6]	10/8[6]	10/-
Bar Capacity[Option:chuck] (Main/Sub)[Built in]	mm		64/[26]	65/[26]	76/65[27]	76/65[27]	76/-
Max. Spindle Speed[Option]	Main	rpm	4,000	4,000	3,500	3,500	3,500
	Sub	rpm	6,000	6,000	Max. 4,000[6,000]	Max. 4,000[6,000]	
Spindle Nose[Option]	Main	-	A2-6	A2-6	A2-8 Mill	A2-8 Mill	A2-8 Mill
	Sub	-	A2-5 Mill	A2-5 Mill	A2-6 Mill[A2-5 Mill]	A2-6 Mill[A2-5 Mill]	
Spindle Bore diameter[Option] (Main/Sub)[Built in]	mm		76/[40]	76/[40]	86/76[40]	86/76[40]	86/-
Main Spindle Motor(Cont./30min)	Main	kw	11/15	15/18.5	18.5/22	18.5/22	18.5/22
	Sub[Built in]	kw	5.5/7.5	5.5/7.5	7.5/11[5.5/7.5]	7.5/11[5.5/7.5]	-
Mill Spindle Motor(Cont./30min)	kw		2.2/3.7	1.1/3.7	3.7/5.5	3.7/5.5	3.7/5.5
X/Z axis travel	mm		190/550	195/550	220/1050	220/1050	220/1050
B/Y axis travel	mm		580/-	580±55	940/-	940±55	-/±55
Guideway Type(X/Z/B/Y)	-		Box way	Box way	Box way	Box way	Box way
X/Z/B/Y axis rapid traverse rate	m/min		24/24/24/-	24/24/24/10	20/24/16/-	20/24/16/10	20/24/-/10
Turret Index Type	-		Servo, BMT55	Servo, BMT55	Servo, BMT55	Servo, BMT55	Servo, BMT55
Max. No. of Tools	ea		12	12	12	12	12
Turning tool shank size	mm		25	25	25	25	25
Boring bar diameter	mm		40	40	40	40	40
Turret Indexing Time (1st swivel)	sec		0.15	0.15	0.15	0.15	0.15
Rotating Tool Speed	rpm		5,000	4,500	5,000	5,000	5,000
Machine Weight	kg		4,500	4,660	7,500	7,800	7,800
Power Capacity	kVA		38	54	43	47	40
Controller			F0i-TF	F0i-TF	F0i-TF	F0i-TF	F0i-TF

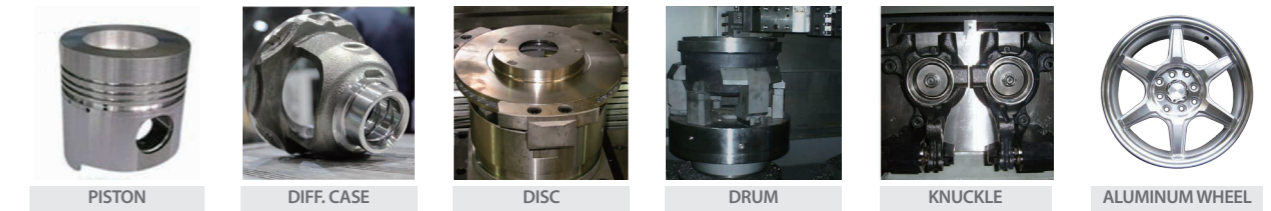


## DL V series

DL V series offers high-precision machining along with the minimal heat distortion. The box guideway, made of meehanite cast, provides necessary robustness for the greater accuracy in machining.

( ) : Model / [ ] : Option

SPECIFICATIONS	UNIT	DL 40V	DL 40VTT	DL 60V(L)	DL 60V(L)M
Swing over Bed(Max. swing dia.)	mm	400	400	610	610
Max. Turning Dia.	mm	320	320	450	450
Max. Turning Length	mm	200	200	450	450
Max. Spindle Speed	rpm	4,000	4,000	3,000	3,000
Spindle Nose	-	A2-6	A2-6	A2-8	A2-8
Spindle Bore diameter	mm	70	70	90	90
Standard Chuck Size	inch	8" [10"]	8" [10"]	12" [15",18"]	12" [15",18"]
Main Spindle Motor(Cont./30min)	kw	11/15	11/15	18.5/22	18.5/22
Mill Spindle Motor(Cont./30min)	kw	-	-	-	2.2/3.7
X/Z axis travel	mm	200/350	200/350	260/480	260/480
Guideway Type(X/Z)	-	BOX Way	BOX Way	BOX Way	BOX Way
X/Z axis rapid traverse rate	m/min	20/16	20/16	20/20	20/20
Turret Index Type	-	Servo, BMT	Servo, BMT	Servo, BMT	Servo, BMT65
Max. No. of Tools	ea	8	8 X 2	12	12
Turning tool shank size	mm	25	25	25	25
Boring bar diameter	mm	32	32	50	50
Turret Indexing Time (1st swivel)	sec	0.2	0.2	0.2	0.2
Machine Weight	kgf	5,500	8,500	6,200	6,350
Floor Space	Height	mm	3,125	2,700	2,700
	Length	mm	1,210	1,500	1,500
	Width	mm	3,430	2,780	2,780
Power Capacity	kVA	32	57	57	41
Controller		F0i-TF	F0i-TF	F0i-TF	F0i-TF



( ) : Model / [ ] : Option

SPECIFICATIONS	UNIT	DL 80V(L)	DL 80V(L)M	DL 100V	DL 100VM
Swing over Bed(Max. swing dia.)	mm	800	800	1,000	1,000
Max. Turning Dia.	mm	730	730	920	920
Max. Turning Length	mm	750	750	850	850
Max. Spindle Speed	rpm	2,000	2,000	1,800	1,800
Spindle Nose	-	A2-11	A2-11	A2-15	A2-15
Spindle Bore diameter	mm	104	104	108	108
Standard Chuck Size	inch	15" [18",21",24"]	15" [18",21",24"]	21" [24"]	21" [24"]
Main Spindle Motor(Cont./30min)	kw	22/30	22/30	37/45	37/45
Mill Spindle Motor(Cont./30min)	kw	-	2.2/3.7	-	7.5/11
X/Z axis travel	mm	390/780	390/780	480/860	480/860
Guideway Type(X/Z)	-	BOX Way	BOX Way	BOX Way	BOX Way
X/Z axis rapid traverse rate	m/min	20/20	20/20	20/20	20/20
Turret Index Type	-	Servo, BMT	Servo, BMT 75	Servo, BMT	Servo, BMT 75
Max. No. of Tools	ea	12	12	12	12
Turning tool shank size	mm	32	32	32	32
Boring bar diameter	mm	50	50	80	80
Turret Indexing Time (1st swivel)	sec	0.2	0.2	0.3	0.3
Machine Weight	kgf	9,800	9,950	15,000	15,000
Floor Space	Height	mm	3,390	3,740	3,740
	Length	mm	1,950	2,170	2,170
	Width	mm	3,170	3,275	3,275
Power Capacity	kVA	47	50	69	79
Controller		F0i-TF	F0i-TF	F0i-TF	F0i-TF

DL G SERIES  
DL T SERIES  
DL TT SERIES  
DL R SERIES  
DL B SERIES  
DL S SERIES  
DL V SERIES  
DM V SERIES  
DM VC SERIES  
DT SERIES



## DM V series

High precision machining. The wide table that easily accommodates large workpiece, and the LM guide with greater speed and higher accuracy satisfy you with optimal productivity.

[ ]: option

SPECIFICATIONS	UNIT	DM 42V	DM 42VL	DM 52VL	DM 65V/40(BBT50)	FM 50V	
X/Y/Z-axis travel	mm	600/420/510	765/420/510	1020/520/510	1280/670/640	800/520/510	
Spindle nose to table surface	mm	150~660	150~660	150~660	150~790	150~660	
Distance from spindle center to column	mm	476	525	525	707	560	
X/Y/Z-axis rapid traverse	m/min	48/48/36	36/36/30	36/36/30	36/36/30	60/60/36	
Slide Type	-	LM Guide	LM Guide	ROLLER	ROLLER	ROLLER	
Table dimensions	mm	700x400	920x440	1,100x550	1,400x700	950x550	
Maximum load	kgf	250	600	700	1,500	700	
Spindle Taper	-	BBT40	BBT40	BBT40	BBT40(BBT50)	BBT40	
Spindle speed	rpm	8,000	8,000 [12,000]	8,000 [12,000]	8,000 [12,000](6,000)	15,000	
Spindle Power Output (Max./Cont.)	kW	7.5/11	11/15	11/15	11/15(11/15)	15/18.5/22	
Spindle drive method	-	Belt	Belt	Belt	Belt	Direct	
Tool changing time T.T/C.C	sec	1.8 / 3.9	1.8 / 3.9	1.8 / 3.9	1.8(2.45) / 3.9(5.5)	2.3 / 4.2	
Tool change type	type	Twin Arm[cam]	Twin Arm[cam]	Twin Arm[cam]	Twin Arm[cam]	Twin Arm[cam]	
Method of tool selection	type	Memory random	Memory random	Memory random	Memory random	Memory random	
Tool storage capacity	EA	24	24[30,40]	24[30,40]	30[40](24[30])	30	
Pull stud	type	PS 806	PS 806	PS 806	PS 806(MAS403 P50T-1)	PS 806	
Max. tool weight	kgf	7	7	7	7(15)	7	
Max. tool length	mm	300	300	300	300	300	
Max. tool diameter (without adjacent)	mm	80[125]	80[125]	80[125]	85[125] (127[200])	85[125]	
Machine Weight	kgf	4,000	5,200	5,700	7500(7700)	7,500	
Floor Space	Height	mm	2,660	2,700	2,725	2,940	3,175
	Length	mm	2,050	2,400	2,750	3,300	2,600
	Width	mm	2,595	2,100	2,189	2,350	2,200
Electric Power Supply	KVA	24	28	28	35(38)	47	
Controller		F0i-MF	F0i-MF	F0i-MF	F0i-MF	F0i-MF	



## DM VC series

- High productivity with rapid change of dual pallet
- Precised machining with BIG Plus system of Spindle
- High productivity with High power, Heavy duty cutting with Rapid travers

[ ]: option

SPECIFICATIONS	UNIT	DM 43VC	DM 43VCD
X/Y/Z-axis travel	mm	600/430/570	600/430/570
Spindle nose to table surface	mm	200~770	200~770
Distance from spindle center to column	mm	505	505
X/Y/Z-axis rapid traverse	m/min	48/48/36	48/48/36
Slide Type	-	LM Guide	LM Guide
Table dimensions	mm	700x450	2-700x475
Maximum load	kgf	1,000	2-300
Spindle Taper	-	BBT40	BBT40
Spindle speed	rpm	8,000 [12,000]	8,000 [12,000]
Spindle Power Output (Max./Cont.)	kW	11/15	11/15
Spindle drive method	-	Belt	Belt [Direct]
Tool changing time T.T/C.C	sec	1.8 / 3.9	1.8 / 3.9
Tool change type	type	Twin Arm[cam]	Twin Arm[cam]
Method of tool selection	type	Memory random	Memory random
Tool storage capacity	EA	30[24,40]	30[24,40]
Pull stud	type	PS 806	PS 806
Max. tool weight	kgf	7	7
Max. tool length	mm	300	300
Max. tool diameter (without adjacent)	mm	85[125]	85[125]
Machine Weight	kgf	6,500	7,000
Floor Space	Height	mm	2,735
	Length	mm	2,375
	Width	mm	3,500
Electric Power Supply	KVA	35	35
Controller		F0i-MF	F0i-MF

DL G SERIES  
DL T SERIES  
DL TT SERIES  
DL R SERIES  
DL B SERIES  
DL S SERIES  
DL V SERIES  
DM V SERIES  
DM VC SERIES  
DT SERIES



## DT series

The best in-class performance tapping center with powerful function

( ) : Model / [ ] : Option

SPECIFICATIONS		UNIT	DT 420(L)	DT 420A(L)	DT 360D
Size		mm	660 (800) × 400	660 (800) × 400	650 × 900
Max. loading capacity		kg	250 [300]	250 [300]	200 × 2
Pallet change time		sec.	-	-	4.5 [3.2]
X/Y/Z axis		mm	560 (700) / 420 / 300	560 (700) / 420 / 430	520 / 360 / 300
Distance from table surface to spindle nose		mm	200~500 (170~470)	200~630 (170~600)	200~500
Spindle taper		BT	ISO NO.30 (7/24)	ISO NO.30 (7/24)	ISO NO.30 (7/24)
Max. speed		rpm	10,000 [15,000 / 24,000]	10,000 [15,000 / 24,000]	10,000 [15,000 / 24,000]
Spindle motor (S6-10%) Max/Cont.		kW	21.2 / 4.8 (Std.)	21.2 / 4.8 (Std.)	21.2 / 4.8 (Std.)
Rapid Traverse rate	X/Y/Z	m/min	60 / 60 / 60 (50 / 50 / 60)	60 / 60 / 60 (50 / 50 / 60)	50 / 50 / 60
Tool shank type		-	MAS-BT30 [BBT30]	MAS-BT30 [BBT30]	MAS-BT30 [BBT30]
Pull stud type		-	MAS-P30T-1	MAS-P30T-1	MAS-P30T-1
Tool storage capacity		pcs	14 [21]	20 [26]	14
Max. tool diameter		mm	80	80 [64]	80
Max. tool length		mm	200	200	200
Max. tool weight		kg	3	4	3
Tool selection method		-	Turret (Fixed address)	Twin Arm (Random)	Turret (Fixed address)
Tool change time	T-T	sec	1.08	0.96	1.08
	C-C	sec	1.40	1.54	1.40
Power supply		-	AC380V ±10%, 55Hz ±5Hz	AC380V ±10%, 55Hz ±5Hz	AC380V ±10%, 55Hz ±5Hz
Power capacity		kVA	25	25	25
Size(including coolant tank)	WxLxH	mm	1,760 (2,064)×2,520×2,655	1,760 (2,064)×2,520×2,655	1,760×3,150×2,715
Weight		kg	2,300 (2,600)	2,500 (2,800)	4,300
Controller			S-828D [M70V / F 0i-MF]		



Establish 53 production bases of machine tools in the world and create 39 brands

# Technological FFG Drives the Future