



# Heavy Duty Series

## **CNC VERTICAL LATHES** (HEAVY DUTY Series)

TKV - 760 / TKV - 900 / TKV - 1100 / TKV - 1600

TKV - 2000 / TKV - 2500 / TKV - 3000 / TKV - 3500

TKV - 4500 / TKV - 6000 / TKV - 7000

**CNC-TAKANG**

**CNC-TAKANG CO., LTD.**  
MANUFACTURER & EXPORTER

# VL

# TKV HEAVY DUTY SERIES



**TKV-1100**



Crossed roller bearing



Gear box

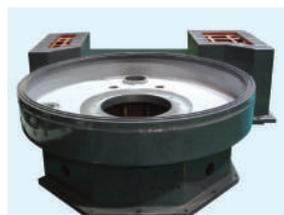


**TKV-2000M**

# TKV HEAVY DUTY SERIES



One-piece column with wide span  
Box structure casting for better rigidity



One-piece machine base with built-in gearbox and spindle



Roller gear driver



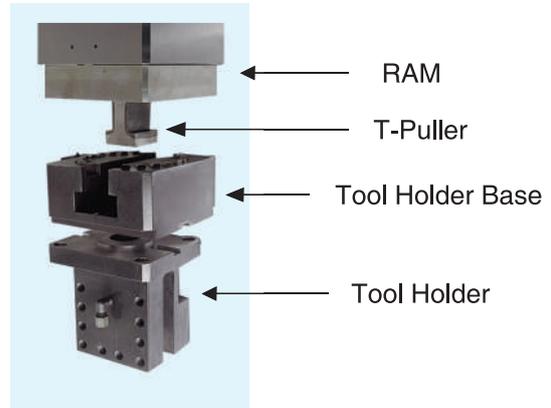
Cross-rail ensures parallelism and stability by positioning lock with hydraulic clamping

# TKV HEAVY DUTY SERIES

## ▼Heavy duty tool assembly for turning



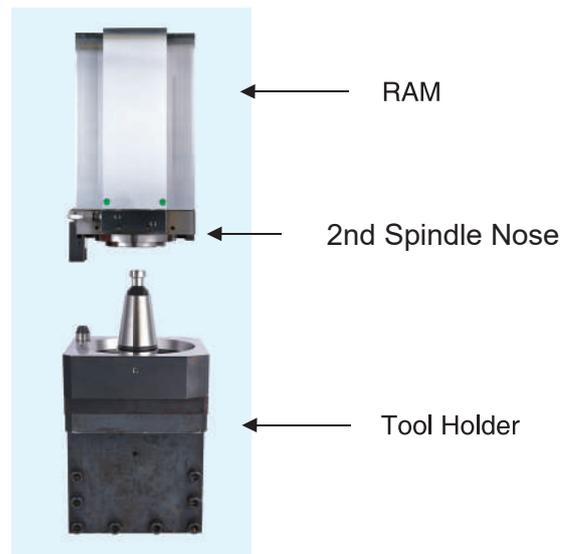
Standard Type ATC



Rigid tool system with T-puller and hydraulic clamping



M-Type ATC

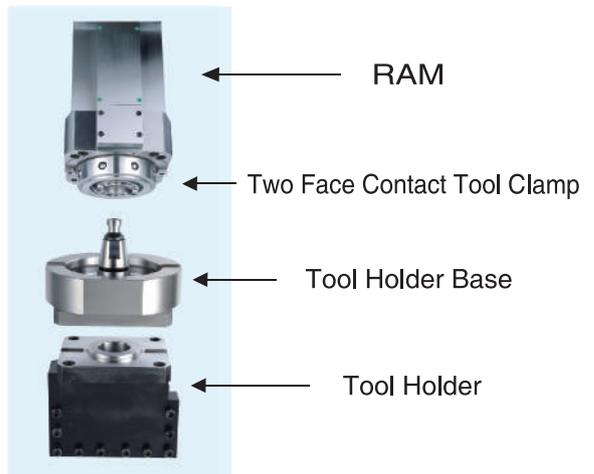


BT50-200

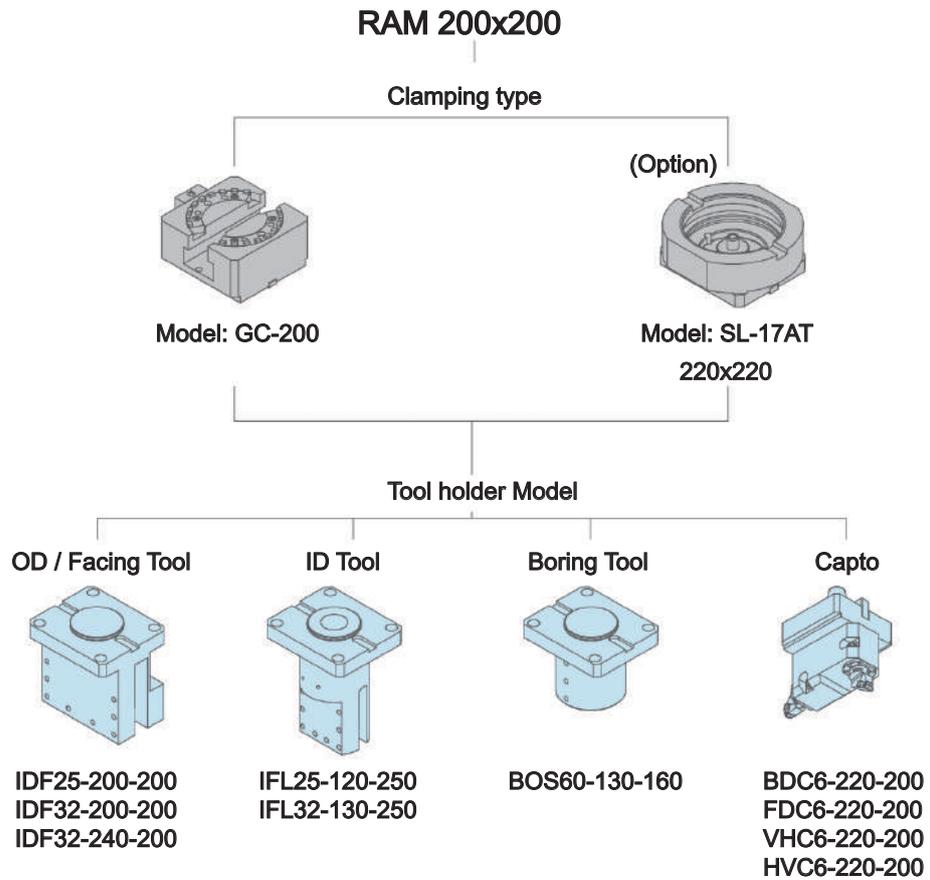
(Two face contact tooling) (Option)



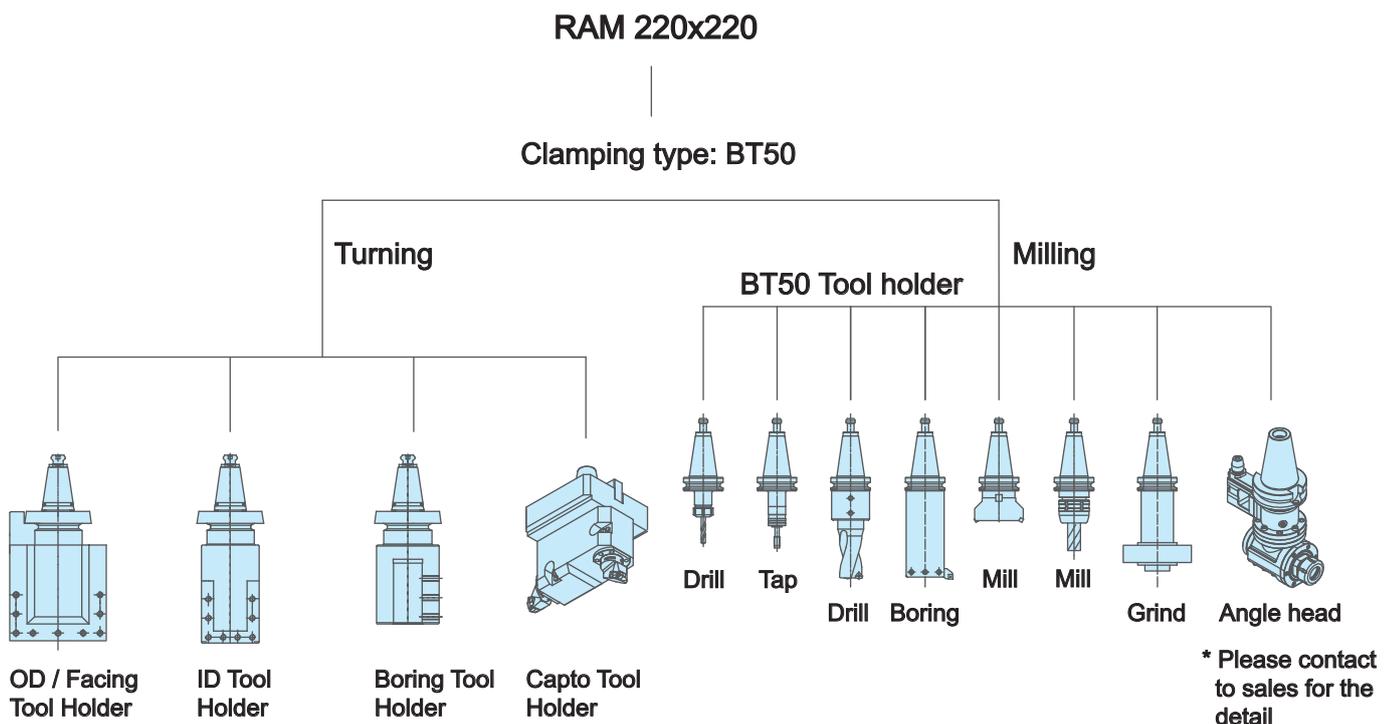
M-Type ATC (Solid Lock)



## ▼Standard ATC tooling system

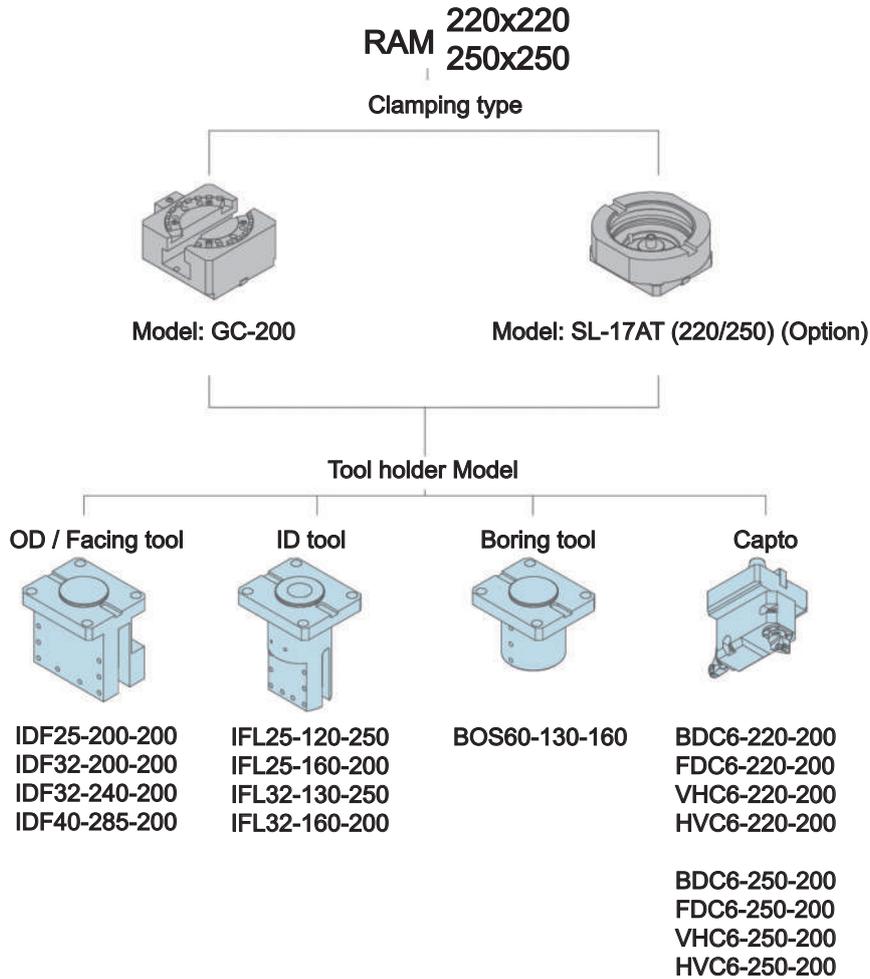


## ▼M-type ATC tooling system

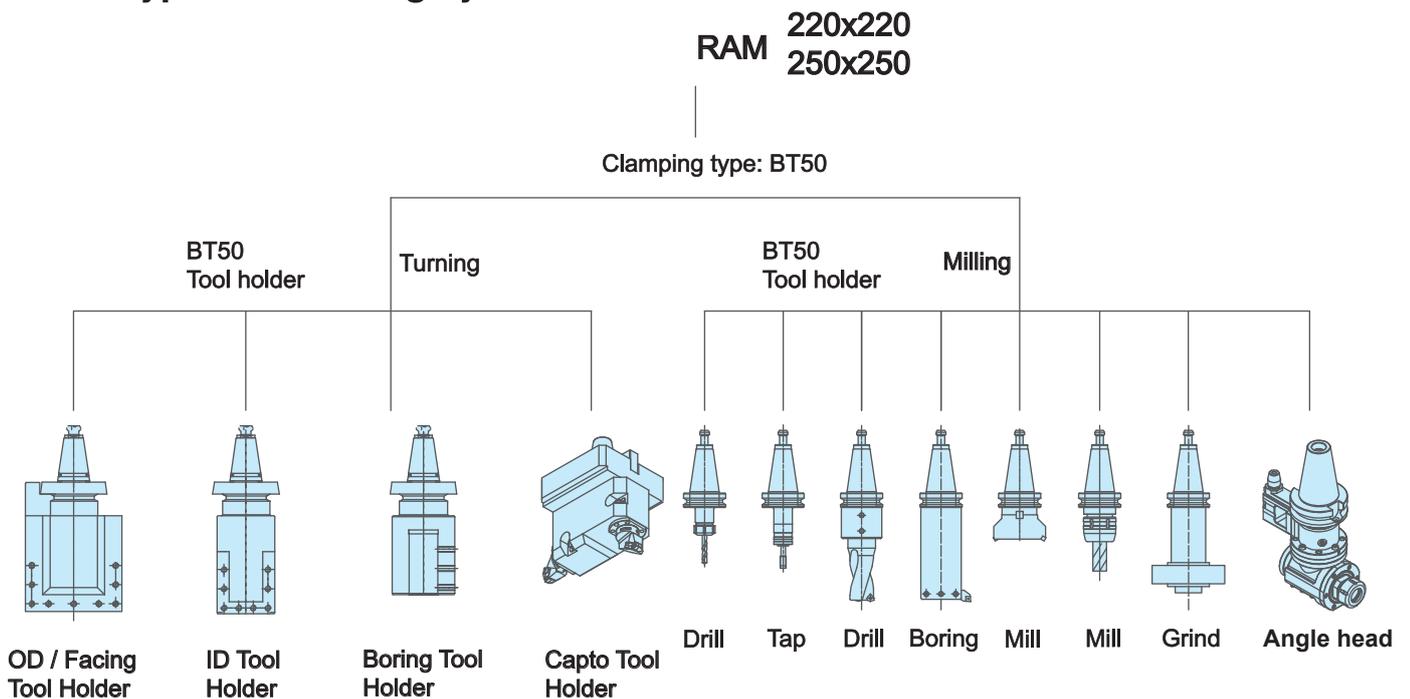


# TKV-1600 / 2000 / 2500 / 3000

## ▼Standard ATC tooling system



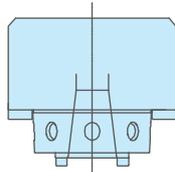
## ▼M-type ATC tooling system



# TKV HEAVY DUTY SERIES

## ▼ Solid-Lock ATC tool system (Option)

RAM

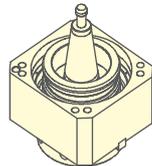
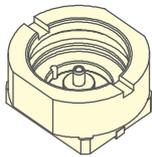


220x220  
250x250  
300x300

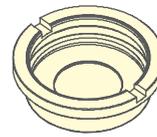
Turning

Milling

Tool holder base

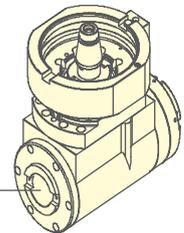


SL-17AT / SL-22AT SL-17AM / SL-22AM



Cover

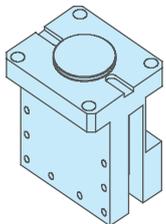
Angle head  
ATCM90 / ATCM90-2



Tool holder

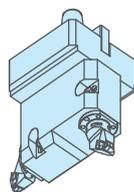
BT50 Tool holder

OD / Facing tool



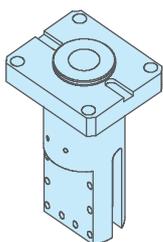
IDF25-200-200  
IDF32-200-200  
IDF32-240-200  
IDF32-285-200  
IDF40-285-200

Capto

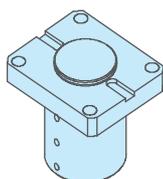


BDC6-220-200  
FDC6-220-200  
VHC6-220-200  
HVC6-220-200  
BDC6-250-200  
FDC6-250-200  
VHC6-250-200  
HVC6-250-200  
BDC6-300-250  
FDC6-300-250  
VHC6-300-250  
HVC6-300-250

ID tool

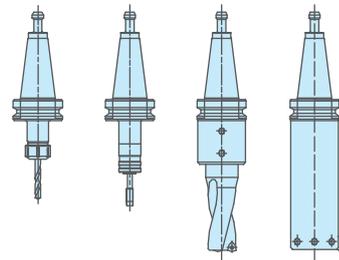


Boring tool

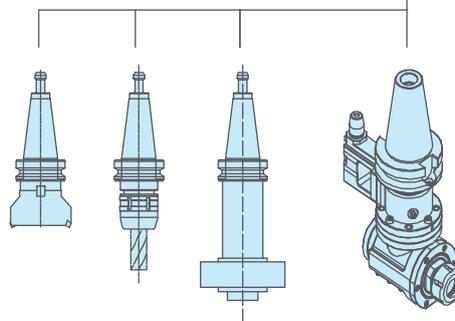


IFL25-120-250  
IFL25-160-200  
IFL32-130-250  
IFL32-160-200

BOS60-130-160

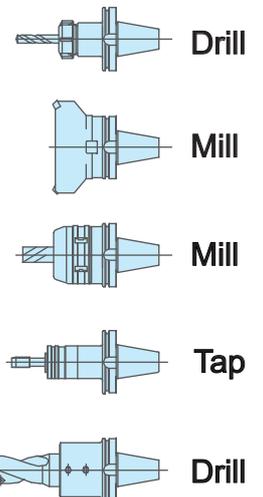


Drill Tap Drill Boring



Mill Mill Grind Angle head

Tool holder BT40 /  
Tool holder BT50



# TKV HEAVY DUTY SERIES

## ▼ Tool holder and dimension (Unit: mm)

### Tool holder base

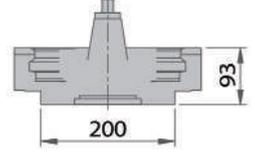
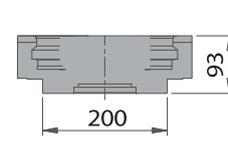
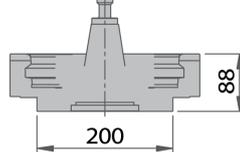
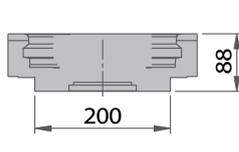
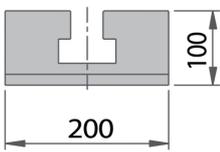
GC-200  
(Gear Coupling)

SL-17AT (220 / 250)  
(Two face contact tooling)

SL-17AM (220)  
(Two face contact tooling)

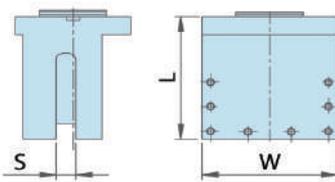
SL-22AT (300)  
(Two face contact tooling)

SL-22AM (250 / 300)  
(Two face contact tooling)

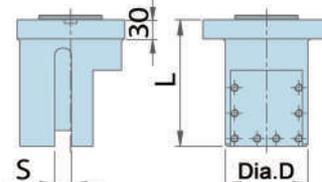


## GC-200 / RG250 / SL-17AT / SL-17AM / SL-22AT / SL-22AM

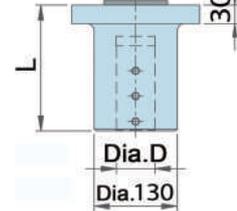
### OD / Facing tool holder



### ID / Facing tool holder



### Boring tool holder

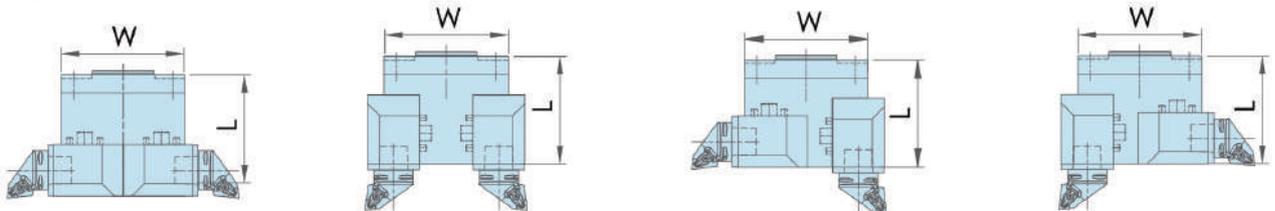


Model	L	S	W
IDF25-200-200	200	25	200
IDF32-200-200	200	32	200
IDF32-240-200	200	32	240
IDF32-285-200	200	32	285
IDF40-285-200	200	40	285

Model	L	D	S
IFL25-120-250	250	120	25
IFL25-160-200	200	160	25
IFL32-130-250	250	130	32
IFL32-160-200	200	160	32

Model	L	D	W
BOS40-120-200	200	40	120
BOS50-120-200	200	50	120
BOS60-120-200	200	60	120
BOS60-130-160	160	60	130

## Capto Tool holder



Model	L	W
BDC6-220-200	200	220
BDC6-250-200	200	250
BDC6-300-250	250	300

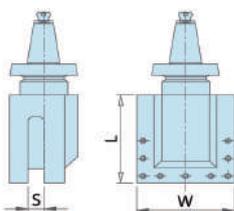
Model	L	W
FDC6-220-200	200	220
FDC6-250-200	200	250
FDC6-300-250	250	300

Model	L	W
VHC6-220-200	200	220
VHC6-250-200	200	250
VHC6-300-250	250	300

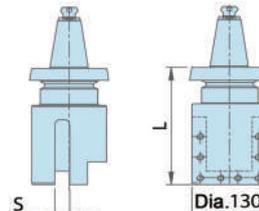
Model	L	W
HVC6-220-200	200	220
HVC6-250-200	200	250
HVC6-300-250	250	300

## BT50 Tool holder

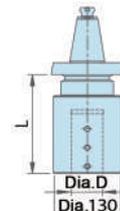
### OD / Facing tool holder



### ID / Facing tool holder



### Boring tool holder



Model	L	S	W
BT50-IDF25-200-200	200	25	200
BT50-IDF32-200-200	200	32	200
BT50-IDF32-240-200	200	32	240

Model	L	S
BT50-IFL25-130-200	200	25
BT50-IFL32-130-200	200	32

Model	L	D
BT50-BOS40-130-200	200	40
BT50-BOS50-130-200	200	50
BT50-BOS60-130-200	200	60

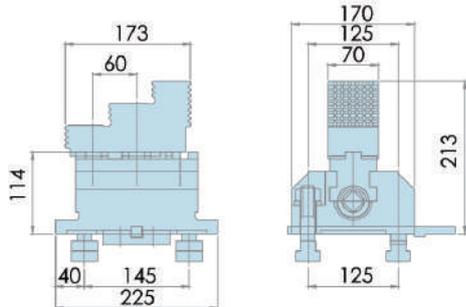
Note: W200 is only for □220 / W240 is only for □250

# TKV HEAVY DUTY SERIES

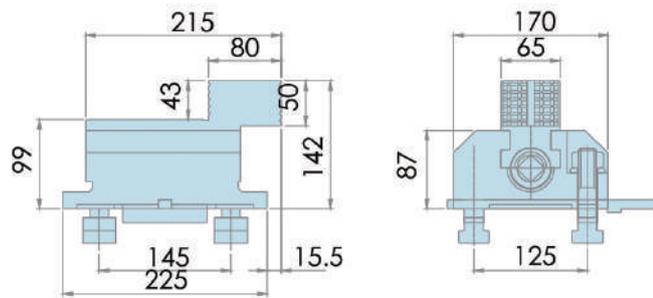
## ▼ Jaw Dimension (Unit: mm)

### TKV-900, TKV-1100 Series (Manual)

#### C Type (Standard)

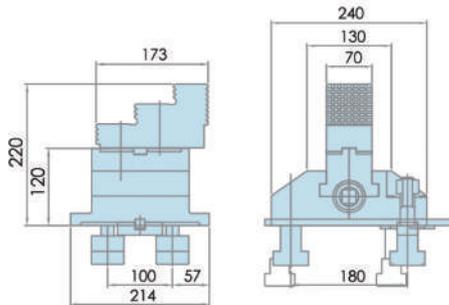


#### F Type

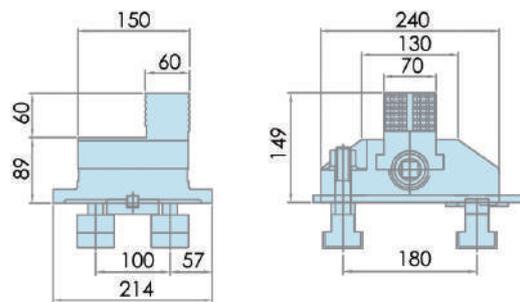


### TKV-1600, TKV-2000 Series (Manual)

#### C Type (Standard)

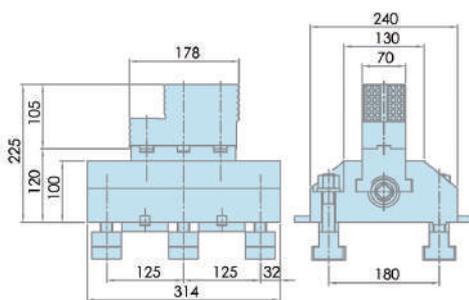


#### F Type

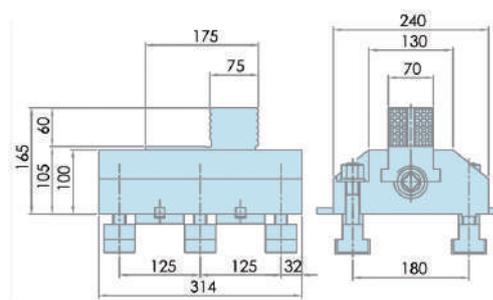


### TKV-2500, TKV-3000, TKV-3500, TKV-4500, TKV-6000, TKV-7000 Series (Manual)

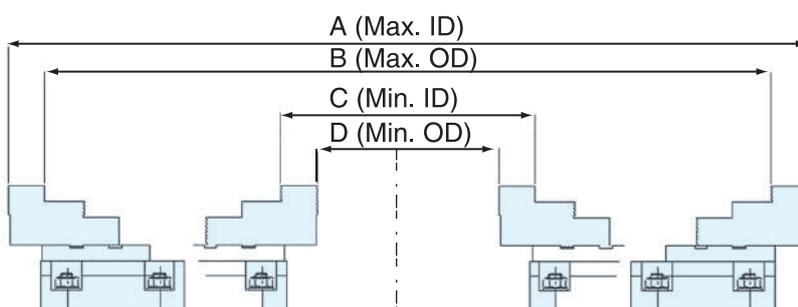
#### C Type (Standard)



#### F Type

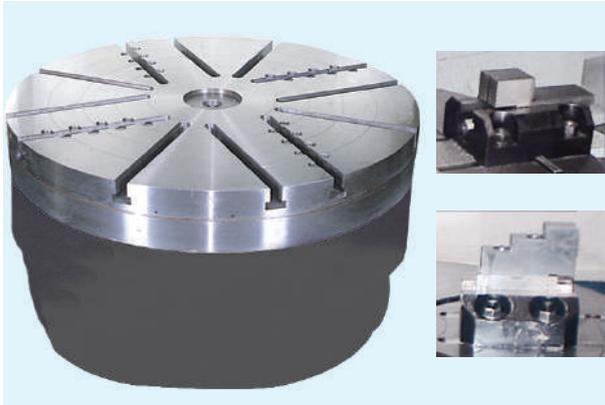


## ▼Clamping Capacity with jaws

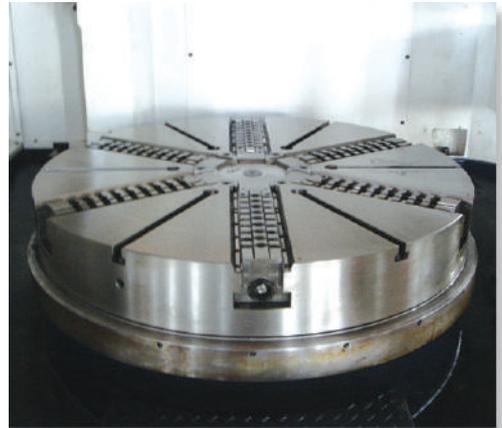


MODEL	A	B	C	D
TKV-900	1050	900	160	50
TKV-1100	1150	1040	300	190
TKV-1600	1340	1230	370	250
TKV-2000	1720	1600	420	300
TKV-2500	2120	2000	750	530
TKV-3000	2500	2220	750	530
TKV-3500	2980	2770	980	700
TKV-4500	4020	3740	980	700
TKV-6000	5000	4750	1350	1100
TKV-7000	6000	5750	1350	1100

# TKV HEAVY DUTY SERIES



Manual 4-jaw table



Hydraulic chuck (Option)



Milling attachment  
(Option)



Tool presetter  
(Option)

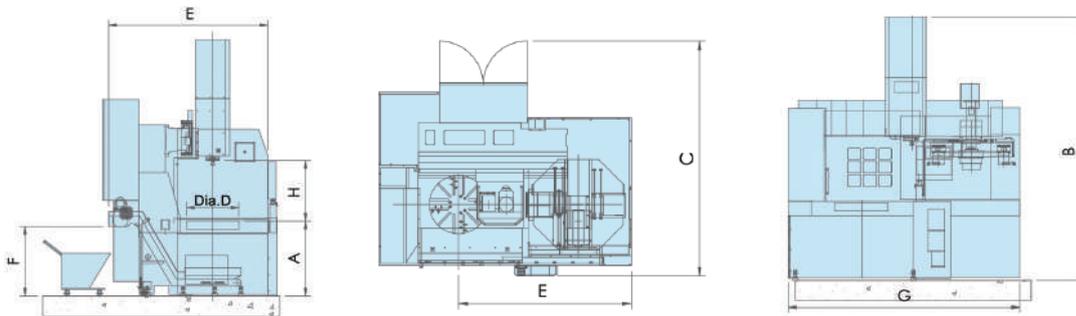


Solid Lock System (Option)

# TKV HEAVY DUTY SERIES

## ▼ Machine dimension (Unit: mm)

### TKV-760 / TKV-900 / TKV-1100 series

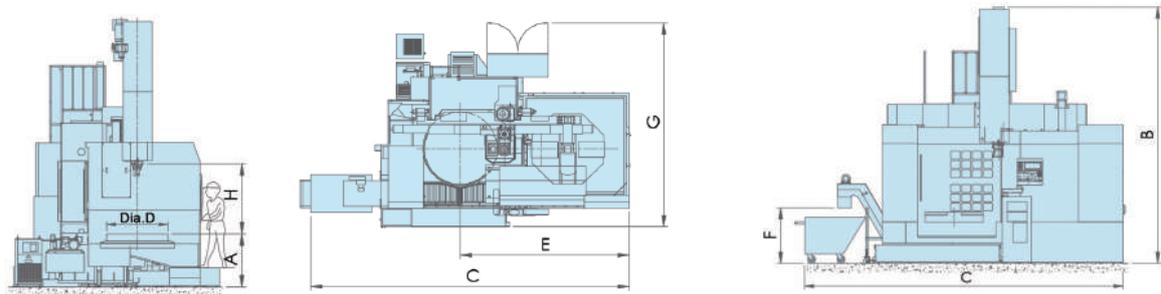


	A	B	C	D	E	F	G	H
TKV-760	1170	4200	3650	610	2350	1000	3450	900
TKV-760M	1170	4800	3650	610	2350	1000	3450	880
TKV-900	1170	4200	3650	610	2350	1000	3450	900
TKV-900M	1150	4800	3650	610	2350	1000	3450	880
TKV-1100	990	4100	3960	1000	2735	1000	4100	930
TKV-1100M	1025	4700	3960	1000	2735	1000	4100	870

Movable cross-rail (Option)

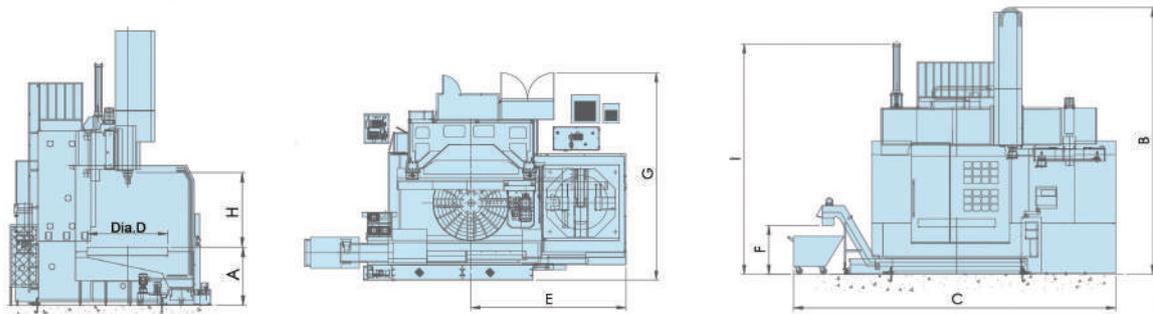
	A	B	C	D	E	F	G	H
TKV-1100	990	4300	3960	1000	2735	1000	4100	530 - 1130
TKV-1100M	1025	4900	3960	1000	2735	1000	4100	480 - 1080

### TKV-1600 / TKV-2000 series



	A	B	C	D	E	F	G	H
TKV-1600	1100	5330	6540	1250	3280	1200	5065	650 - 1450
TKV-1600M	1100	5670	6880	1250	3630	1200	5065	635 - 1435
TKV-2000	1100	5350	7030	1600	3480	1200	5200	650 - 1450
TKV-2000M	1100	5700	7380	1600	3830	1200	5200	635 - 1435

### TKV-2500 / TKV-3000 series

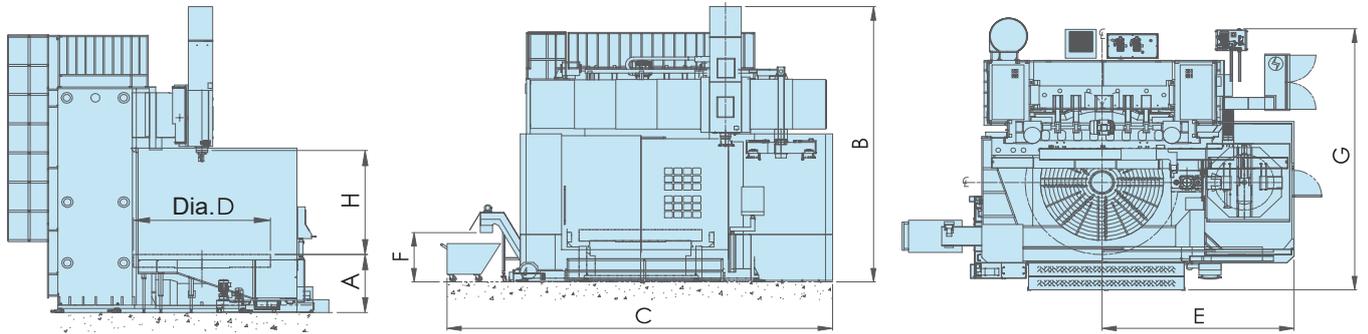


	A	B	C	D	E	F	G	H	I
TKV-2500	1290	6445	7970	2000	3960	1280	6305	785 - 1785	5865
TKV-2500M	1290	6785	8400	2000	4120	1280	6305	785 - 1785	5865
TKV-3000	1290	6445	8295	2500	3915	1280	6335	785 - 1785	5865
TKV-3000M	1290	6785	8620	2500	4240	1280	6335	785 - 1785	5865

# TKV HEAVY DUTY SERIES

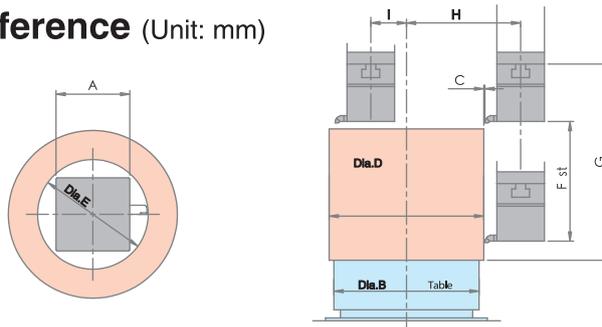
## ▼ Machine dimension (Unit: mm)

TKV-3500 / TKV-4500 / TKV-6000 / TKV-7000



	A	B	C	D	E	F	G	H
TKV-3500	1365	7430	9400	3000	4700	1280	7250	880 - 2380
TKV-3500M	1365	7920	9710	3000	5010	1280	7250	880 - 2380
TKV-4500	1365	7430	12000	4000	5180	1280	7650	2380
TKV-4500M	1365	7920	12310	4000	5490	1280	7650	2380
TKV-6000	1565	9400	12400	5000	6400	N/A	9000	3000
TKV-6000M	1565	10000	13000	5000	6900	N/A	9000	3000
TKV-7000	1565	9400	13400	6000	6900	N/A	9500	3000
TKV-7000M	1565	10000	14000	6000	7400	N/A	9500	3000

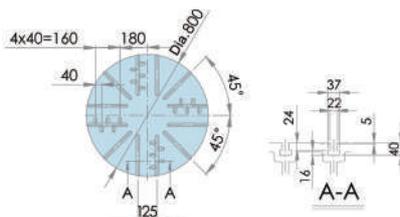
## ▼ Work range and interference (Unit: mm)



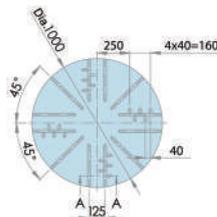
MODEL	A	B	C	D	E	F	G	H	I
TK-760	200	610	10	800	300	600	900	650	100
TK-900	200	610	15	900	300	600	900	750	100
TK-1100	200	1000	20	1200	300	700	930	750	100
TKV-1600	220	1250	20	1600	340	900	650 - 1450	950	200
TKV-2000	220	1600	20	2000	340	900	650 - 1450	1150	200
TKV-2500	250	2000	40	2500	360	1200	785 - 1785	1450	300
TKV-3000	250	2500	5	2970	360	1200	785 - 1785	1650	300
TKV-3500	300	3000	37	3600	450	1500	880 - 2380	2000	300
TKV-4500	300	4000	37	4500	450	1500	880 - 2380	2450	300
TKV-6000	400	5000	50	6000	580	2200	1200 - 3000	3500	100
TKV-7000	400	6000	50	7000	580	2200	1200 - 3000	4000	100

## ▼ Work table and T-Slot dimension (Unit: mm)

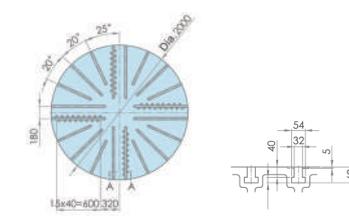
TKV-900 series



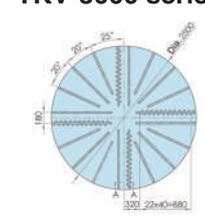
TKV-1100 series



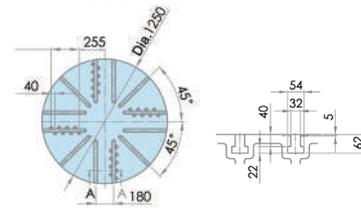
TKV-2500 series



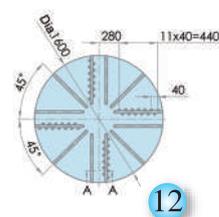
TKV-3000 series



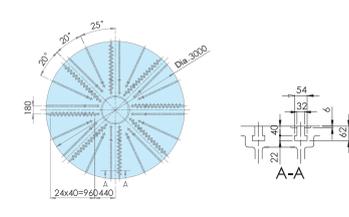
TKV-1600 series



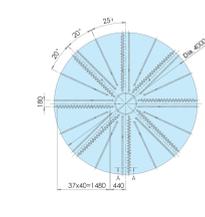
TKV-2000 series



TKV-3500 series



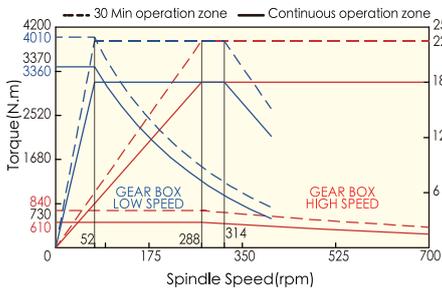
TKV-4500 series



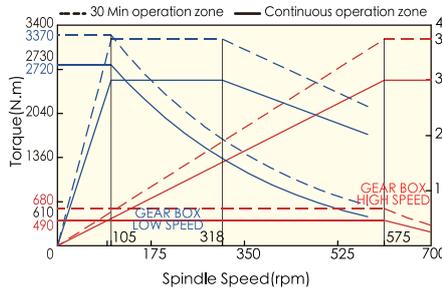
# TKV HEAVY DUTY SERIES

## ▼ Table-speed and torque

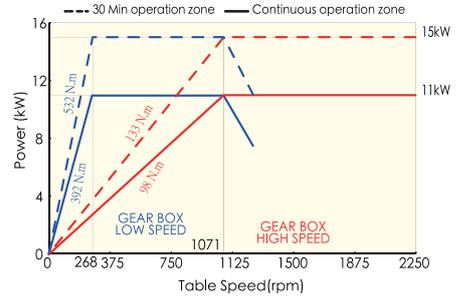
**TKV-760 18.5/22kw, 2steps**



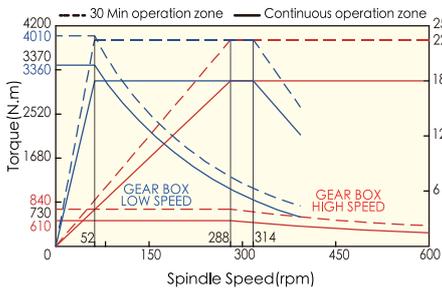
**TKV-760M 30/37kw, 2steps**



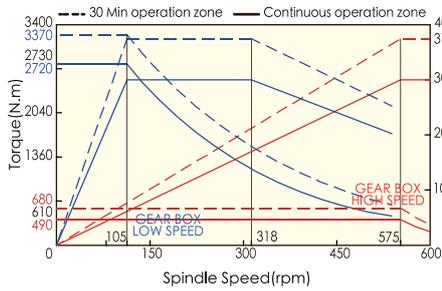
**Live tool spindle 11/15kw, 2steps**



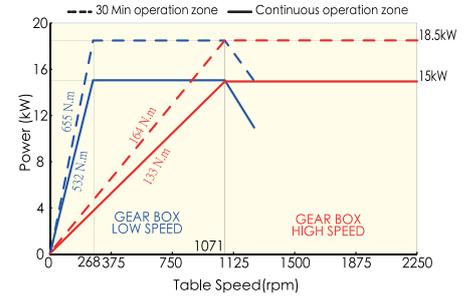
**TKV-900 18.5/22kw, 2steps**



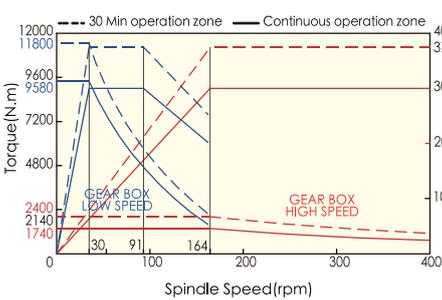
**TKV-900M 30/37kw, 2steps**



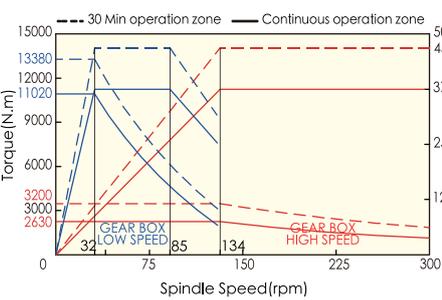
**Live tool spindle 15/18.5kw, 2steps**



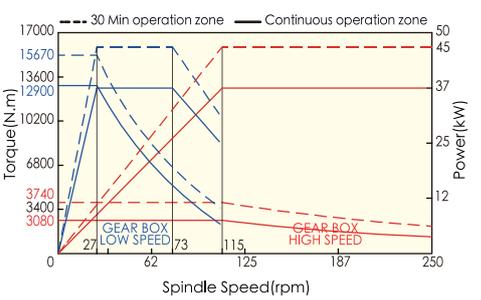
**TKV-1100 series 30/37kw, 2steps**



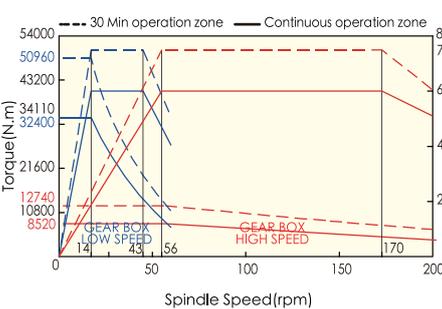
**TKV-1600 series 37/45kw, 2steps**



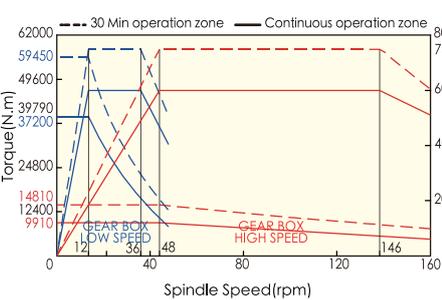
**TKV-2000 series 37/45kw, 2steps**



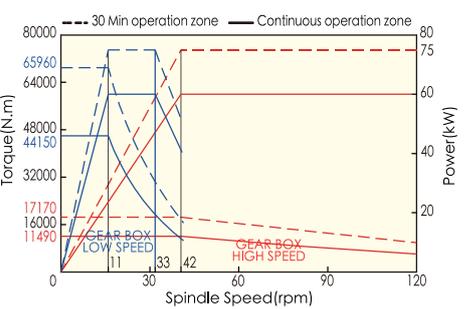
**TKV-2500 series 60/75kw, 2steps**



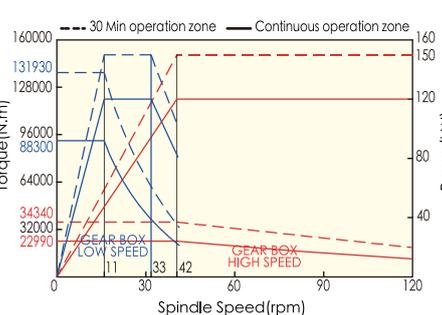
**TKV-3000 series 60/75kw, 2steps**



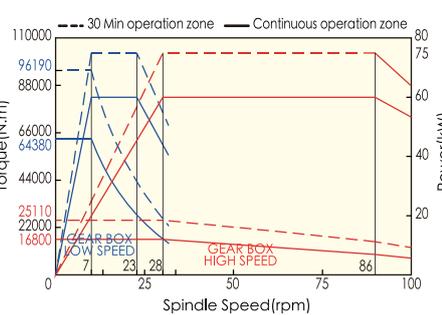
**TKV-3500 60/75kw**



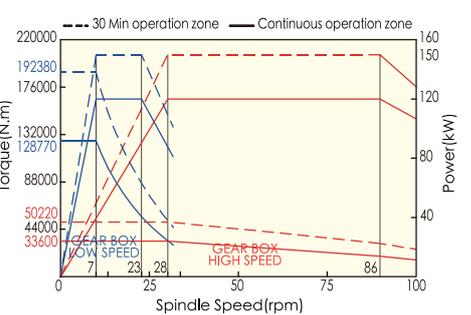
**TKV-3500M 60/75kw x 2 motors**



**TKV-4500 60/75kw**



**TKV-4500M 60/75kw x 2 motors**



# TKV-760 / 900 / 1100 / 1600

## SPECIFICATIONS

MODEL	DESCRIPTION	TKV-760	TKV-760M	TKV-900	TKV-900M	TKV-1100	TKV-1100M	TKV-1600	TKV-1600M	
Capacity	Max. swing diameter	850 mm (33.4")		950 mm (37.4")		1200 mm (47.2")		1600 mm (63")		
	Max. turning diameter	850 mm (33.4")		950 mm (37.4")		1200 mm (47.2")		1600 mm (63")		
	Distance from ram to table	900 mm (35.4")	880 mm (34.6")	900 mm (35.4")	880 mm (34.6")	930 mm (36.6")	870 mm (34.2")	650-1450 mm (25"-57")	635-1435mm (25"-56")	
	Max. turning height	650 mm (25.5")				650 mm (25.5")		800 mm		
	Max. workpiece weight	1500 kgs		2000 kgs		3500 kgs		5000 kgs		
Spindle	Table diameter (Manual chuck)	610 mm (24")		800 mm (31.4")		1000 mm (39.3")		1250 mm (49.2")		
	Range of table speed	1-700 rpm		1-600 rpm		1-400 rpm		1-300 rpm		
	Change gear speed	2 Steps	-	2 Steps	-	2 Steps				
	Spindle nose	A2-11				-				
	Driving tool spindle speed	-	50-2250 rpm	-	50-2250 rpm	-	50-2250 rpm	-	50-2250 rpm	
ACT	Number of tool station	12						12	16	
	Tool size	□ 25 mm, □ 32 mm								
	Cross-section of ram	200 x 200 mm	220 x 220 mm	200 x 200 mm	220 x 220 mm	200 x 200 mm	220 x 220 mm	220 x 220 mm	220 x 220 mm 250 x 250 mm	
Feed	Rapid rate (X-axis)	10 M / min								
	Rapid rate (Z-axis)	10 M / min								
	Horizontal travel (X-axis)	-100 + 650 mm		-100 + 750 mm		-100 + 750 mm		-200 + 950 mm		
	Vertical travel (Z- axis)	600 mm (23.6")				700 mm (27.6")		900 mm (35.4")		
	Cutting federate	1-5000 mm / min								
	Feed override	0-150 %								
	Cross-tail travel	Fixed				Fixed / OPT. 200 x 3 steps		800 (200 x 4 steps)		
	CNC controller system	Fanuc 0iTF		Fanuc 0iTF		Fanuc 0iTF		Fanuc 0iTF		
Motor	Spindle motor (Cont. / 30 min)	18.5 / 22 kw	30 / 37 kw	18.5 / 22 kw	30 / 37 kw	30 / 37 kw		37 / 45 kw		
	Feed motor (X / Z axis)	4 / 4 kw		4 / 4 kw		4 / 4 kw		7 / 7 kw		
	Driving tool motor	-	11 / 15 kw	-	11 / 15 kw	-	11 / 15 kw	-	11 / 15 kw	
	Power requirement	40 KVA	55 KVA	40 KVA	55 KVA	75 KVA	90 KVA	75 KVA	90 KVA	
Machine Size	Floor space (L x W)	3450 x 3650 mm		3450 x 3650 mm		4100 x 3960 mm		6540 x 5065 mm	6880 x 5065 mm	
	Max. height	4200 mm	4800 mm	4200 mm	4800 mm	4100 mm	4700 mm	5330 mm	5670 mm	
	Net weight	12500 kgs	12500 kgs	13500 kgs	13500 kgs	17800 kgs	18600 kgs	24500 kgs	25300 kgs	

※THE SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

### STANDARD ACCESSORIES:

- Spindle orientation
- Hydraulic 3-jaw solid chuck, cylinder and soft jaw x 1 set (For TKV-760~TKV-900 series)
- Table with manual 4-jaw chuck (For TKV-1100~TKV-3000)
- Table with manual 8-jaw chuck (For TKV-3500~TKV-7000)
- Hydraulic power unit
- Foot switch for hydraulic chuck
- Automatic lubrication system
- Coolant system through tool holder to inserts (3 bar)
- Coolant system with tank
- Protection door
- Hinge type chip conveyor and chip trolley
- Heat exchanger for electrical cabinet
- Splash guard
- Work light
- Warning light (R/Y/G)
- Workpiece counter
- Manual for operation and maintenance
- Manual for electrical and hydraulic circuit diagram
- Electronic manual for controller
- Tool box with tools
- Leveling bolts and pads

# TKV-2000 / 2500 / 3000 / 3500

## SPECIFICATIONS

MODEL	DESCRIPTION	TKV-2000	TKV-2000M	TKV-2500	TKV-2500M	TKV-3000	TKV-3000M	TKV-3500	TKV-3500M
Capacity	Max. swing diameter	2000 mm (78.7")		2500 mm (98.4")		3000 mm (118.1")		3600 mm (141.7")	
	Max. turning diameter	2000 mm (78.7")		2500 mm (98.4")		2970 mm (116.9")		3600 mm (141.7")	
	Distance from ram to table	650-1450 mm (25.5"-57")	635-1435 mm (25"-56")	785-1785 mm (31"-70.2")		805-1805 mm (31.6"-71")	785-1785 mm (30.9"-70")	880-2380 mm (34.6"-93.7")	
	Max. turning height	1200 mm (47.2")	1170 mm (46.1")	1480 mm (58.2")		1600 mm (62.9")		2000 mm (78.7")	
	Max. workpiece weight	8000 kgs		12000 kgs		15000 kgs		30000 kgs	
Spindle	Table diameter (Manual chuck)	1600 mm (63")		2000 mm (78")		2500 mm (98")		3000 mm (118.1")	
	Range of table speed	1-250 rpm		1-200 rpm		1-160 rpm		1-120 rpm	
	Change gear speed	2 Steps							
	Spindle nose	-							
	Driving tool spindle speed	-	50-2250 rpm	-	50-2250 rpm	-	50-2250 rpm	-	50-2250 rpm
ATC	Number of tool station	12	16	12	16	12	16	16	20
	Tool size	□25 mm, □32 mm, □40 mm						□32 mm, □40 mm	
	Cross-section of ram	220 x 220 mm	220 x 220 mm 250 x 250 mm	250 x 250 mm		250 x 250 mm		300 x 300 mm	
Feed	Rapid rate (X-axis)	10 M / min							
	Rapid rate (Z-axis)	10 M / min							
	Horizontal travel (X-axis)	-200 + 1150 mm		-300 + 1450 mm		-300 + 1650 mm		-300 + 2000 mm	
	Vertical travel (Z- axis)	900 mm (35.4")		1200 mm (47.2")		1200 mm (47.2")		1500 mm (59.1")	
	Cutting federate	1-5000 mm / min							
	Feed override	0-150 %							
	Cross-rail travel	800 (200 x 4 steps)		1000 (250 x 4 steps)		1000 (250 x 4 steps)		1500 (250 x 6 steps)	
	CNC controller system	Fanuc 0iTF		Fanuc 0iTF		Fanuc 0iTF		Fanuc 0iTF	
Motor	Spindle motor (Cont. / 30 min)	37 / 45 kw		60 / 75 kw		60 / 75 kw		60 / 75 kw	37 / 45 kw x 2
	Feed motor (X / Z axis)	7 / 7 kw		5.5 / 5.5 kw		5.5 / 5.5 kw		5.5 / 5.5 kw	7 / 7 kw
	Driving tool motor	-	11 / 15 kw	-	11 / 15 kw	-	11 / 15 kw	-	15 / 18.5 kw
	Power requirement	75 KVA	90 KVA	90 KVA	105 KVA	90 KVA	105 KVA	120 KVA	210 KVA
Dimension And Weight	Floor space (L x W)	7030 x 5200 mm	7380 x 5200 mm	7970 x 6305 mm	8400 x 6305 mm	8295 x 6335 mm	8620 x 6335 mm	9800 x 7300 mm	
	Max. height	5350 mm	5700 mm	6445 mm	6785 mm	6445 mm	6785 mm	7500 mm	8000 mm
	Net weight	30600 kgs	31400 kgs	53700 kgs	54500 kgs	55700 kgs	56500 kgs	83500 kgs	85000 kgs

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### OPTIONS:

- Higher power motor
- Extra hydraulic chuck and cylinder
- Dual speed gear box for driving tool spindle
- High and low pressure chucking
- Table with manual 4-jaw chuck (For TKV-760, TKV-900 series)
- Hard jaws of hydraulic chuck
- Manual guide i
- Linear scale on X / Z axis
- Lubricant chiller for spindle bearing and gear
- Special tool holder
- Tool presetter
- Higher pressure coolant through tool holder
- Tool holder base
- Extend vertical travel (Z axis)
- Air condition for electrical cabinet (STD for M series)
- Oil skimmer (Disk type)
- Scrap type chip conveyor with chip trolley
- Jig and fixture
- Turnkey project
- External power transformer
- CE mark

## SPECIFICATIONS

MODEL	DESCRIPTION	TKV-4500	TKV-4500M	TKV-6000	TKV-6000M	TKV-7000	TKV-7000M
<b>Capacity</b>	Max. swing diameter	4500 mm (177.2")		6000 mm (236.2")		7000 mm (275.6")	
	Max. turning diameter	4500 mm (177.2")		6000 mm (236.2")		7000 mm (275.6")	
	Distance from ram to table	880-2380 mm (34.6"-93.7")		1200-3000 mm (47.2"-118")		1200-3000 mm (47.2"-118")	
	Max. turning height	2000 mm (78.7")		2600 mm (102.3")		2600 mm (102.3")	
	Max. workpiece weight	40000 kgs		80000 kgs		100000 kgs	
<b>Spindle</b>	Table diameter (Manual chuck)	4000 mm (157.5")		5000 mm (196.8")		6000 mm (236.2")	
	Range of table speed	1-85 rpm		1-50 rpm		1-20 rpm	
	Change gear speed	2 Steps					
	Spindle nose	-					
	Driving tool spindle speed	-	50-2250 rpm	-	50-2250 rpm	-	50-2250 rpm
<b>ATC</b>	Number of tool station	16	20	16	24	16	24
	Tool size	□32 mm, □40 mm					
	Cross-section of ram	300 x 300 mm		300 x 300 mm		300 x 300 mm	
<b>Feed</b>	Rapid rate (X-axis)	10 M / min					
	Rapid rate (Z-axis)	10 M / min					
	Horizontal travel (X-axis)	-300 + 2450 mm		-100 + 3000 mm		-100 + 4000 mm	
	Vertical travel (Z- axis)	1500 mm (59.1")		2200 mm (86.6")		2200 mm (86.6")	
	Cutting federate	1-5000 mm / min					
	Feed override	0-150 %					
	Cross-rail travel	1500 (250 x 6 steps)		1800 (300 x 6 steps)		1800 (300 x 6 steps)	
	CNC controller system	Fanuc 0iTF		Fanuc 0iTF		Fanuc 0iTF	
<b>Motor</b>	Spindle motor (Cont. / 30 min)	60 / 75 kw	45 / 55 kw x 2	60 / 75 kw	45 / 55 kw x 2	60 / 75 kw	60 / 75 kw x 2
	Feed motor (X / Z axis)	5.5 / 5.5 kw		5.5 / 5.5 kw		5.5 / 5.5 kw	
	Driving tool motor		15 / 18.5 kw	-	15 / 18.5 kw	-	15 / 18.5 kw
	Power requirement	130 KVA	230 KVA	140 KVA	250 KVA	150 KVA	270 KVA
<b>Dimension And Weight</b>	Floor space (L x W)	12400 x 7700 mm		13000 x 9000 mm		14000 x 9500 mm	
	Max. height	7500 mm	8000 mm	9500 mm	10000 mm	9500 mm	10000 mm
	Net weight	132000 kgs	133500 kgs	139000 kgs	140000 kgs	169000 kgs	170000 kgs

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## CNC-TAKANG CO., LTD.

No. 72, Alley 7, Lane 98, 1st Road, Taichung Industry Park,  
Taichung 40767, TAIWAN  
FAX: +886-4-2359 6064 E-mail: takang@ms17.hinet.net  
TEL: (04)2359 6056 Web site: www.cnctakang.com

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