

## OPTIMAL MACHINE SPECIFICATIONS

Model		Optimal 660	Optimal 810	Optimal 1100	Optimal 1250
<b>Travel</b>					
X * Y * Z Axis	mm	600*660*600	600*810*600	1100*650*600	1250*650*600
Spindle End to Table	mm	100~700	100~700	100~700	100~700
Spindle Center to Column	mm	240	240	700	700
Linear Ways Width X,Y,Z mm		35*45 *45	35*45 *45	45*45 *45	45*45 *45
Ball Screw Dia X,Y,Z mm	Axis	40*40*40	40*40*40	50*50*50	50*50*50
<b>Table</b>					
Table Size (X*Y)	mm	650*700	650*800	1200*650	1400*650
T-Slot (wide*no*distance)	mm	18*6*100	18*6*100	18*6*100	18*6*100
Max. Table Load	Kgs	500	600	800	1000
Table Height	mm	800	800	870	870
<b>Feed Rate</b>					
Rapid Traverse Rate (X , Y Axis)	mm/min	30 000	36 000	24,000 (30,000)	24,000 (30,000)
Rapid Traverse Rate (Z Axis)	mm/min	30 000	36 000	20 000	20 000
Cutting Feed Rate	mm/min	20 000	20 000	20 000	20 000
<b>Spindle</b>					
Spindle Nose Taper	ISO	BBT 40	BBT 40	BBT 40	BBT 40
Transmission		Built in	Built in	Direct drive	Direct drive
Bearing Lubrication		air oil	air oil	Grease (air oil)	Grease (air oil)
Spindle Speed	RPM	24,000 (30,000)	24,000 (30,000)	12000 (15000)	12000 (15000)
<b>Motors</b>					
Spindle Motor Cont./30 min.	KW	15/21	15/21	15/21	15/21
Servo Motor (X * Y * Z)	KW	4.8*4.8*4.8	4.8*4.8*4.8	4.8*5.3*5.3	4.8*5.3*5.3
<b>ATC</b>					
ATC Type BT40 (NBT 40)		Armless (Arm)	Armless (Arm)	Armless (Arm)	Armless (Arm)
Tool Storage Capacity		24 (30)	24 (30)	24 (30)	24 (30)
Max. Tool Diameter w/o adjacent	mm	125	125	125	125
Max. Tool Weight	Kgs	15	15	15	15
Max. Tool Length	mm	300	300	300	300
<b>Machine Accuracy</b>					
Positioning Accuracy	mm	±0.002/800	±0.002/800	±0.005/1000	±0.005/1000
Repeatability Accuracy	mm	±0.001/800	±0.001/800	±0.003/1000	±0.003/1000
<b>Others</b>					
Air Requirement	KG/cm <sup>2</sup>	7	7	7	7
Power Requirement	KVA	22KVA	22KVA	22KVA	22KVA
Machine Size (L *W* H)	mm			2300*2520*2500	2550*2520*2500
Machine Weight	Kgs	8 500	9 200	10 200	11 000
Shipment Loading	CTR	1/2 * 40' HQ	1/2 * 40' HQ	1/2 * 40' HQ	1/2 * 40' HQ

## OPTIMAL MACHINE SPECIFICATIONS

Model		Optimal 1320	Optimal 1500	Optimal 1700	Optimal 2000
<b>Travel</b>					
X * Y * Z Axis	mm	1320*760*600	1500*760*60	1700*900 *600	2000*900*600
Spindle End to Table	mm	100~700	100~700	100~700	100~700
Spindle Center to Column	mm	830	830	1000	1000
Linear Ways Width X,Y,Z mm		45*45 *45	45*45 *45	55*55 *45	55*55 *45
Ball Screw Dia X,Y,Z mm	Axis	50*50*50	50*50*50	63*63*50	63*63*50
<b>Table</b>					
Table Size (X*Y)	mm	1400*720	1600*720	1800*900	2100*900
T-Slot (wide*no*distance)	mm	<b>18*6*100</b>	<b>18*6*100</b>	<b>18*6*125</b>	<b>18*6*125</b>
Max. Table Load	Kgs	1200	1500	2500	3000
Table Height	mm	900	900	970	970
<b>Feed Rate</b>					
Rapid Traverse Rate (X , Y Axis)	mm/min	24000	24 000	20 000	20 000
Rapid Traverse Rate (Z Axis)	mm/min	20 000	20 000	20 000	20 000
Cutting Feed Rate	mm/min	<b>20 000</b>	<b>20 000</b>	<b>20 000</b>	<b>20 000</b>
<b>Spindle</b>					
Spindle Nose Taper	ISO	BBT 40 (BBT 50)	BBT 40 (BBT 50)	BBT 40 (BBT 50)	BBT 40 (BBT 50)
Transmission		Direct drive	Direct drive	Direct drive	Direct drive
Bearing Lubrication		Grease (air oil)	Grease (air oil)	Grease (air oil)	Grease (air oil)
Spindle Speed	RPM	12000 (15000)	12000 (15000)	12000 (15000)	12000 (15000)
<b>Motors</b>					
Spindle Motor Cont./30 min.	KW	15/21	15/21	15/21	15/21
Servo Motor (X * Y * Z)	KW	<b>5.3*7*8</b>	<b>5.3*7*8</b>	<b>9*9*8</b>	<b>9*9*8</b>
<b>ATC</b>					
ATC Type BT40 (NBT 40)		Armless (Arm)	Armless (Arm)	Armless (Arm)	Armless (Arm)
Tool Storage Capacity		<b>24 (30)</b>	<b>24 (30)</b>	<b>24 (30)</b>	<b>24 (30)</b>
Max. Tool Diameter w/o adjacent	mm	125	125	125	125
Max. Tool Weight	Kgs	15	15	15	15
Max. Tool Length	mm	300	300	300	300
<b>Machine Accuracy</b>					
Positioning Accuracy	mm	±0.005/1000	±0.005/1000	±0.005/1000	±0.005/1000
Repeatability Accuracy	mm	±0.003/1000	±0.003/1000	±0.003/1000	±0.003/1000
<b>Others</b>					
Air Requirement	KG/cm <sup>3</sup>	7	7	7	7
Power Requirement	KVA	40 KVA	40KVA	50KVA	50KVA
Machine Size (L *W* H )	mm	750*3230*3320	950*3230*3320	1250*3370*3430	1550*3370*3430
Machine Weight	Kgs	12 800	13 600	20 000	21 000
Shipment Loading	CTR	1 * 40' HQ	1 * 40' HQ	1*20' Flat Rack	1*20' Flat Rack