



expandmachinery.com | 818.349.9166
888-542-6374 (US Only) | Fax: 818-349-7286
20869 Plummer St, Chatsworth, CA 91311



GEN TURN MULTI AXIS CNC SWISS AND MILL TURN MACHINES



GEN TURN

2026 MACHINE CATALOG



GEN TURN

GEN TURN MULTI AXIS CNC SWISS AND MILL TURN MACHINES

C24 G	5
C52 MYS	7
CW52 MY	9
SL-20Y2	11
SL-42Y2	13
32-GT	15
36-CS	17
52-CS Y2	19
52-GTS	21
52-BY2	23
78-MSV	25
78-TTMY	27



HEADQUARTERS LOCATED IN CHATSWORTH, CA



FEATURING A LARGE 4,000 SQ. Ft SHOWROOM



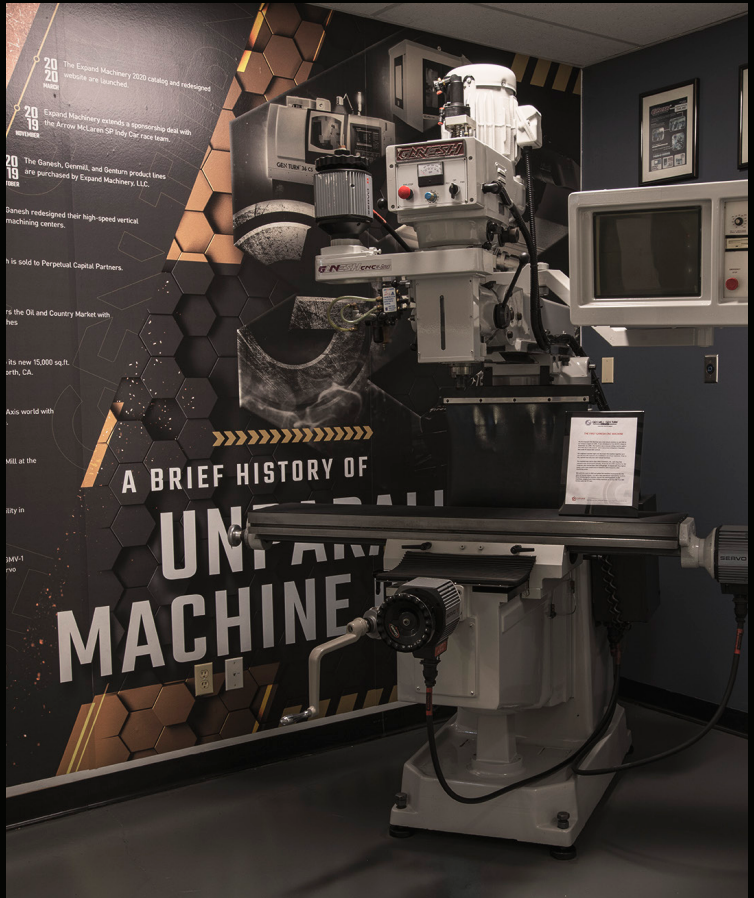
FULLY STOCKED PARTS ROOM



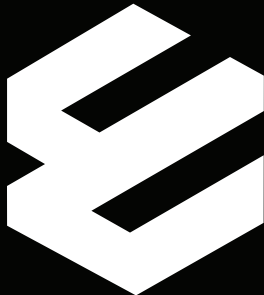
TRAINING CENTER



PRODUCTION AREA



COMPANY HISTORY ROOM



It began with a dream in 1985 to deliver superior quality machine tools to the market that provided the highest value and productivity available. We are still driven by this same commitment to you.



RACING SPONSORSHIPS WITH ARROW MCLAREN INDYCAR TEAM

“

At Arrow McLaren, we're focused on building a high-performing team that competes for wins, poles and the championship. We're always looking for any way we can improve our race cars each and every race weekend. Our partners at Expand Machinery help give us the tools and machinery we need to push forward and fight to be at the top of the NTT INDYCAR SERIES.”

Gavin Ward
Team Principal, Arrow McLaren

PROUD PARTNER OF





MADE IN JAPAN

C24 G

CNC Turning Center with 5C Collet Chuck and Built in Gantry Loader

- +

6,000 RPM Spindle
- +

Built in 2-Axis or 3-Axis Gantry Loader
- +

8 Station High Speed Turret
- +

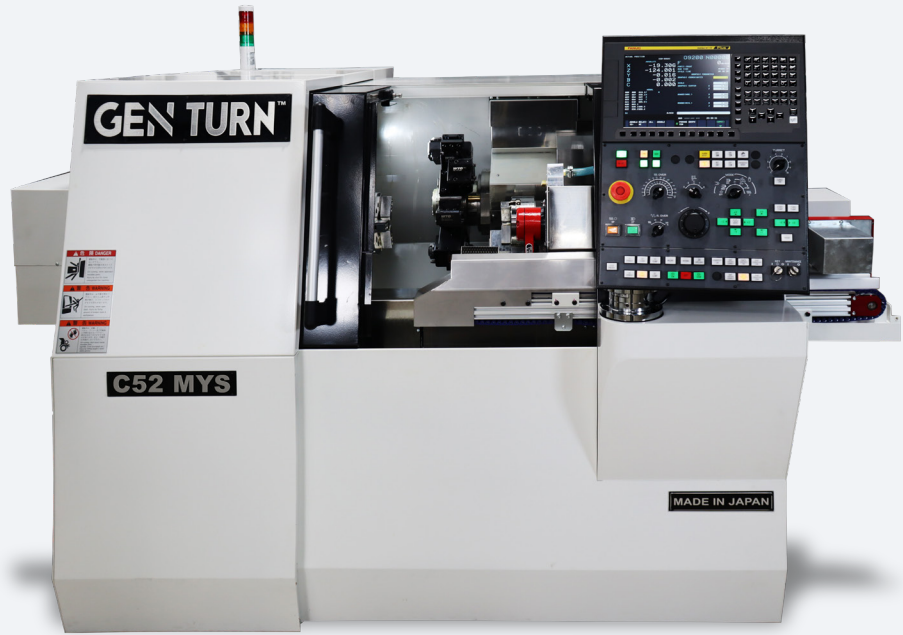
Built in 5C Collet Chuck
- +

Fanuc CNC Control
- +

Optional Bowl Feeders
- +

Ideal for High Production of Fasteners

Spindle	Maximum Chucking Diameter	5"	125 mm
	Maximum Swing Diameter	10"	250 mm
	Maximum Bar Diameter	1"	25 mm
	Spindle Nose / Through Hole	A2-4	35 mm 1.37"
	Maximum Spindle Speed	6,000 rpm	
	Spindle Motor	7-HP 30-minute duty rated / 5-HP constant duty – 5 / 3.7 kW	
Tool Turret	Number of tool stations	8-station hydraulic-driven octagonal tool turret (Available as a Gang tool machine)	
	Tool Index Time	0.8-second	
	Tailstock Stroke	4"	100 mm hydraulic driven
Axis Travels	X-Axis Maximum Travel	3.937"	100 mm
	Z-Axis Maximum Travel	9.448"	240 mm
	X & Z Axis Rapid Traverse Rate	468 IPM	12 m / min
	X & Z Axis Feed Motor Power	0.66 HP / 1.0 HP	0.5 kW / 0.75 kW
Specifications	Machine Weight	3,087 lbs.	1,400 kg
	Machine Dimensions (W x D x H)	55" x 40" x 64"	1,390 x 1,000 x 1,625 mm
	Coolant Tank Capacity	68-gallons	100 liters
	Electrical Power Requirements	220 vac +/- 5%, 3-phase	
	Air Pressure Requirements	0.4 – 0.5 MPa air filtered & lubricated at a 150 L/min. flow rate	
Part Loader Specifications (optional)	Workpiece Loader	12-rotary stacking loading stations & a lifter station	
	Workpiece Thickness	2.0 mm thickness or more	
	Workpiece Size Minimum	3/8"	10 mm diameter
	Workpiece Size Maximum	3.15"	80 mm diameter
	Total Pallet Weight	100 lbs.	45 kg



MADE IN JAPAN

C52 MYS

6-Axis CNC Twin Spindle Single Turret with “Y” Axis

- +

5,000 RPM Built in Main and Sub Spindle

+

12 Station BMT 44 Live Tool Turret

+

2” Bar Capacity

+

Full “Y” Axis for Milling off Centerline
- +

Marposs Tool Probe for Ease of Setup

+

6” Chucks for Main and Sub Spindle

+

Parts Catcher with Conveyor Included

Main Spindle	Maximum rpm	5,000 rpm	Built-in integral spindle motor
	Spindle Motor	12-HP	9.0 kW 30-minute duty rated
	Spindle Nose Mount	A2-6	
	Maximum Barstock Diameter	2.04"	52 mm
	Spindle Through Hole Diameter	2.32"	60 mm
	Maximum Chucking Diameter	8"	203 mm
	Maximum Swing Diameter	9.84"	250 mm
Sub Spindle	Maximum rpm	5,000 rpm	Built-in integral spindle motor
	Spindle Motor	10-HP	7.5 kW 30-minute duty rated
	Spindle Nose Mount	A2-6	
	Maximum Chucking Diameter	6"	152 mm
	Maximum Travel Distance	14.76"	375 mm
Axis Travels	X-Axis Travel	6.693"	170 mm
	Z-Axis Travel	12.598"	320 mm
	X, Z & B Rapid Traverse Rates	787 IPM	20 m / min
	Y-Axis Travel	2.362"	60 mm, ± 30 mm = 1.181"
	Y-Axis Rapid Traverse Rate	118 IPM	3 m / min
	X-Axis Servo Motor Power	1.0-HP	0.75 kW
	Y & B Axis Servo Motor Power	1.0-HP	0.75 kW
	Z-Axis Servo Motor Power	2.4-HP	1.8 kW with 52 mm bore
Tool Turret	Number of Tool Stations	12-Driven Tool Stations e.g. WTO Quick-Flex toolholders	
	Driven Tool Speed	6,000 rpm	higher with speeder tools
	Driven Tool Servo Motor	1.34-HP	1.0 kW
	Indexing Drive	Hydraulic Motor	
	Indexing Time	1-Seconds	
	Coolant Pressure	135 PSI	
Specifications	Machine Weight	8,377 lbs.	3,800 kg
	Machine Dimensions (W x D x H)	84" x 65" x 76"	w/ rear discharge chip conveyor
	Coolant Capacity	43.5 gallons	165 liters
	Voltage Requirements	220 vac ±10%	38 kVA 3-PH
	Air Pressure Requirement	0.4-0.5 MPa 150 L / min.	



MADE IN JAPAN

CW52 MY

8-Axis CNC Twin Spindle Twin Turret with Dual “Y” Axis

- +

5,000 RPM Built in Main and Sub Spindle

+

12 Station BMT 44 Turret for Main and Sub Spindle

+

2” Bar Capacity for Main and Sub Spindle

+

Full “Y” Axis for Milling off Centerline on both turrets
- +

Marposs Tool Probe for Ease of Setup for each turret

+

6” Kitagawa Chucks for Main and Sub Spindle

+

Parts Catcher with Conveyor Included

+

Dual 135 PSI High Pressure Coolant Pumps

Main Spindle	Maximum rpm	5,000 rpm	Built-in integral spindle motor
	Spindle Motor	12-HP	9.0 kW 30-minute duty rated
	Spindle Nose Mount	A2-6	
	Maximum Barstock Diameter	2.04"	52 mm
	Spindle Through Hole Diameter	2.36"	60 mm
	Maximum Chucking Diameter	8"	203 mm
	Maximum Swing Diameter	14.76"	375 mm
Sub Spindle	Maximum rpm	5,000 rpm	Built-in integral spindle motor
	Spindle Motor	12-HP	9.0 kW 30-minute duty rated
	Spindle Nose	A2-6	
	Maximum Barstock	2.04"	52 mm
	Spindle Through Hole	2.36"	60 mm
	Maximum Chucking	6"	
	Maximum Swing	14.76"	375 mm
Axis Travels	X-Axis Travel (both turrets)	6.693"	170 mm
	Z-Axis Travel (both turrets)	12.598"	320 mm
	X, Z & B Rapid Traverse Rates	787 IPM	20 m / min
	Y-Axis Travel (both turrets)	2.362"	60 mm, ± 30 mm = 1.181"
	Y-Axis Rapid Traverse Rate	315 IPM	8 m / min
	X & Y Feed Motor Power	1.0-HP	0.75 kW
	Z-Axis Servo Motor Power	1.6-HP	1.2 kW
Tool Turret	Number of Tool Stations	12-Driven Tool Stations e.g. WTO Quick-Flex toolholders	
	Driven Tool Speed	6,000 rpm	higher with speeder tools
	Driven Tool Power	1.34-HP	1.0 kW
	Indexing Drive	Servo Motor	
	Indexing Time	1-Seconds	
	Coolant Pressure (both turrets)	135 PSI	
Specifications	Machine Weight	10,584 lbs.	4,800 kg
	Machine Dimensions (W x D x H)	113" x 93" x 65"	2.6 x 2.02 x 1.63 m
	Coolant Capacity	80 gallons	300 liters
	Voltage Requirements	220 volts +- 5%	40 kVA 3-PH
	Air Pressure Requirement	0.4-0.5 MPa 150 L / min.	



SL-20Y2

Hybrid 20 mm 8-Axis CNC Swiss Machine

- + Double “Y” Axis and Double “C” Axis
 - + Simultaneous Main & Sub-Spindle Machining
 - + 30-Tools with 8-Driven Tools Standard
 - + Removable Rotary Synchronous Guide-Bushing
- + Cutting Oil Chiller for Consistent Thermal Stability
 - + High-Performance Mitsubishi M-830 Control

Main Spindle	Maximum rpm/ Spindle Bearing	10,000 rpm/ 5-Bearing Spindle, 3-front, 2-Rear Ball Bearings	
	Main Spindle Servo Motor (2.2 / 3.7 kW)	5-Horsepower 15-minute duty-rated (3-HP constant duty-rated)	
	Collet Style for main & subspindle	Hardinge TF-25S / Southwick & Meister TS-25 / Star SR-20	
	Collet Actuation System	Pneumatic Piston-driven toggle clamp feed-finger style	
	Synchronous Rotary Guide-Bushing	TD25S (20 mm round, 16 mm hex, 12 mm square)	
	Maximum Barstock Diameter	20 mm (collet range - 1/16" - 13/16" / 0.0200" - 0.813")	
	Maximum Turning Length – Rotary Bushing	7.48" Single Stroke	190 mm
	Maximum Turning Length – Without Bushing	2.36"	60 mm
	Maximum Distance between Spindles	23.6"	600 mm
	Maximum Swing Diameter	42"	1,060 mm
Main Spindle Tooling	O.D. Turning Tool Holders – S1	6 – 12 mm square shank turning tool holders	
	I.D. Internal Tool Holders – S1	4 – 22 mm shank round tool sleeve bores	
	I.D. Deep Hole Drill Positions – S1	2 – 22 mm shank round tool sleeve bores	
	Cross slide live tools – S1	5 - ER-16 cross slide live tools, 4,000 rpm, 1.6 HP (1.2 kW)	
	Axial front slide live tool option – S1	3 - ER-16 front slide live tools - optional in lieu of 1 cross tool	
	Maximum Drilling / Tapping Capacity	10 mm drilling capacity / M8 tapping - main spindle	
	Cross Drilling / Tapping Capacity	8 mm drilling capacity / M6 tapping - driven cross tools	
Sub Spindle	Sub spindle rpm / spindle bearing	8,000 rpm / 4-bearing - Quad-Duplex pair configuration	
	Sub Spindle Servo Motor (2.2 / 3.7 kw)	5-Horsepower 15-minute duty-rated (3-HP constant duty-rated)	
	Collet Style for main & subspindle	Hardinge TF-25S / Southwick & Meister TS-25 / Star-SR-20	
	Collet Actuation System	Pneumatic Piston-driven toggle clamp feed-finger style	
	Maximum Barstock Diameter	20 mm (collet range - 1/16" - 13/16" / 0.0200" - 0.813")	
	Finished Parts Ejector & Air Blast	Standard (optional long parts through the sub spindle)	
	Maximum workpiece length for front ejection	110 mm maximum part length for front ejection from subspindle	
Sub Spindle 13 Back-Working Tooling	O.D. Turning Tool Holders – S2	3 – 10 mm square shank turning tool holders	
	I.D. Internal Tool Holders – S2	4 – 22 mm shank round tool sleeve bores	
	I.D. Internal Tool Holders – S2 (8 possible)	3 - ER-16 Fixed tools – Ø3/8" max.	
	Subspindle axial live tools – S2 (8 possible)	3 - ER-16 Axial live tools, 4,000 rpm, 1.0 HP (0.75 kW)	
	(2 radial live tools are available – one for each inboard axial driven tool on subspindle tool block)		
	Back-working machining length	6.1" maximum turning length / 3.14" maximum boring length	
	Maximum Drilling / Tapping Capacity	10 mm drilling capacity / M8 tap - sub-spindle	
Maximum Cross Drilling / Tapping Capacity	8 mm drilling capacity / M6 tap - driven cross tools		
Axis Travels	Main Spindle Stroke	9.840" Single Stroke	250 mm
	X ¹ , Y ¹ , Z ¹ , X ² , Y ² , Z ² Rapid Traverse Rate	944 IPM	24 m / minute
	X ¹ , Y ¹ , Z ¹ Axis Motor Power	1-Horsepower	.75 kW
	X ² , Y ² , Z ² Axis Motor Power	.67-Horsepower	.5 kW
	Minimum input unit	0.0001"	0.001 mm = 40 millionths / inch
Specifications	Machine Weight – Heaviest in Class	5,954 lbs.	2,700 kgs
	Coolant Pump Power	1.5-Horsepower	1.2 kW
	Coolant Tank Capacity	58-gallon coolant tank	(220 L) (cutting oil only, no coolant)
	Lubrication distribution – 2-liter capacity	Way lube distributed at 3-6 cc / 15-minute cycle	
	Machine Power Requirements	220 vac ±5%, 53-amps, 20 kVA, 3-phase, 60 Hz	
	Air Requirements	85-PSI at 6-CFM for parts catcher, parts ejector, & air blast	



SL-42Y2

Hybrid 42 mm 8-Axis CNC Swiss Machine

- + Bar Capacity to Ø 1-5/8"
 - + Double "Y" Axis and Double "C" Axis
 - + Simultaneous Main & Sub-Spindle Machining
 - + 33-Tools with 9-Driven Tools Standard
- + Optional Rotary Synchronous Guide-Bushing
 - + High-Performance Mitsubishi M-830 Control

Main Spindle	Maximum rpm/ Spindle Bearing	6,000 rpm/ 5-Bearing Spindle, 3-front, 2-Rear Ball Bearings	
	Main Spindle Servo Motor (5.5 / 7.5 kW)	10-Horsepower 15-minute duty-rated (7.5-HP constant duty-rated)	
	Collet Style for main & subspindle	Traub-42 / 173E	
	Collet Closer Style	Lever action collet closer – driven by hydraulic piston	
	Guide-Bushing Type	Optional Rotary Guide-Bushing uses Hardinge STM38 bushings	
	Bar Diameter – Without Guide Bushing	Ø1/4" - 1-5/8" (Ø5-42 mm) without Guide-Bushing	
	Maximum Turning Length – Rotary Bushing	12.20" Single Stroke	310 mm
	Maximum Turning Length – Without Bushing	4.13"	105 mm
	Spindle Bore	Ø1.732" (Ø44 mm)	
Main Spindle Tooling	O.D. Turning Tool Holders – S1	6 - 16 mm (5/8") square shank tool holders	
	I.D. Internal Tool Holders – S1	5 - 25 mm shank round tool sleeve bores	
	I.D. Deep Hole Drill Positions – S1	2 - 25 mm shank round tool sleeve bores	
	Cross slide live tools – S1	6 - ER-20 collet chuck spindles, 4,000 rpm, 2-HP (1.6 kW)	
	Axial front slide live tool option – S1	3 - ER-20 front axial live tools - optional in lieu of 1 cross tool	
	Maximum Drilling / Tapping Capacity	13 mm drilling capacity / M10 tapping	
	Cross Drilling / Tapping Capacity (option)	10 mm drilling capacity / M6 tapping	
	Sub Spindle	Sub spindle rpm / spindle bearing	6,000 rpm / 4-bearing - Quad-Duplex pair configuration
Sub Spindle Servo Motor (5.5 / 7.5 kW)		10-Horsepower 15-minute duty-rated (7.5-HP constant duty-rated)	
Collet Style for main & subspindle		Traub-42 / 173E	
Maximum Barstock Diameter		1-5/8"	42 mm
Spindle Bore		Ø1.732" (Ø44 mm) (uses hydraulic piston lever action collet closer)	
Finished Parts Ejector & Air Blast		Standard (optional long parts through the sub spindle)	
Maximum workpiece length for front ejection		110 mm maximum part length for front ejection from subspindle	
Sub Spindle 13 Back-Working Tooling	O.D. Turning Tool Holders – S2	3 - 16 mm square shank turning tool holders	
	I.D. Internal Tool Holders – S2	5 - 25 mm shank round tool bores (shared with main spindle)	
	I.D. Internal Tool Holders – S2 (8 possible)	3 - ER -16 fixed tools – Ø3/8" max.	
	Subspindle axial live tools – S2 (8 possible)	3 - ER -16 axial live tools, 4,000 rpm, 1.0 HP (0.75 kW)	
	(8-subspindle tool block can mix live & fixed tools, or 2 radial live tools can be substituted for 2 axial tools on subspindle tool block)		
	Maximum Drilling / Tapping Capacity	13 mm drilling capacity / M10 tapping on sub-spindle	
	Maximum Cross Drilling / Tapping Capacity	8 mm drilling capacity / M6 tapping	
Axis Travels	Main Spindle Stroke	12.20"	310 mm
	X ¹ , Y ¹ , Z ¹ , X ² , Y ² , Z ² Rapid Traverse Rate	944 IPM	24 m / minute
	X ¹ , Z ¹ Axis Motor Power	2-Horsepower	1.4 kW
	X ² , Y ¹ , Y ² , Z ² Axis Motor Power	1-Horsepower	.75 kW
	Linear Ways – X ¹ , Y ²	Ball-Bearing Linear Ways (point contact)	
	Linear Ways – X ² , Y ¹ , Z ¹ , Z ²	Roller-Bearing Linear Ways (line contact - twice as rigid)	
	Minimum input unit	0.0001"	0.001 mm = 40 millionths / inch
Specifications	Machine Weight	11,024 lbs.	5,000 kgs
	Coolant Pump Power	1.75-Horsepower	(1.3 kW) with flow confirmation monitor
	Coolant Tank Capacity	65-gallon coolant tank	(250 L) (cutting oil only, no coolant)
	Lubrication distribution – 2-liter capacity	Way lube distributed at 3-6 cc / 15-minute cycle	
	Machine Power Requirements	220 vac ±5%, 80-amps, 30 kVA, 3-phase, 60Hz	
	Air Requirements	85-PSI at 6-CFM for parts catcher, parts ejector, & air blast	



32-GT

2 or 3-Axis CNC Gang-Tooled Lathe

- +

32 mm 1-1/4" Bar Capacity
- +

6,000 RPM A2-5 Spindle
- +

7.5 Horsepower
- +

Parts Catcher Standard
- +

Live Tooling Options
- +

8-Station Turret Optional

Axis Travel	X-Travel	8.46"	215 mm
	Z-Travel	5.98"	152 mm
	Maximum Turning Diameter	7.87"	200 mm
	Maximum Turning Length	5.5"	140 mm
	Swing over Bed ways	12.59"	320 mm
Axis Feeds	Rapid Traverse - X / Z	787 ipm	20 m / minute
	Rated Cutting Feedrate	236 ipm	6 m / minute
	Mechanical Way System - X / Z	Box Ways	Turcite® coated & pressure lubricated
	Slant Bed Angle	20°	Slant Bed Angle for Tooling
	Axis Drive Motor Power - X-axis	1.0-HP	.75 kW
	Axis Drive Motor Power - Z-axis	1-1/3-HP	1.0 kW
	Ballscrew Diameter - X / Z	32 mm	
	Positioning Accuracy - X / Z	±0.00015"	±0.004 mm
	Positioning Repeatability - X / Z	±0.00008"	±0.002 mm
	Least Input Command Increment	0.0001"/ 0.000040"	0.001 mm / (40-millionths in metric)
Spindle	Spindle Nose Mount	A2-5	
	Spindle Speed	6,000 rpm	
	Maximum Tapping Spindle Speed	2,000 rpm	
	Maximum Bar Capacity	1-1/4"	32 mm
	Spindle Bore	34 mm	
	Spindle Bearing – inside diameter	70 mm	
	Spindle Motor Power	7.5-HP	3.7 / 5.5 kW
	Spindle Motor Torque	26 ft. lbs.	35 Nm
	Spindle Motor Drive Coupling	Belt Drive	
	Spindle Runout	≤ 0.000040" T.I.R.	
Tooling Plate & Tool System	Tool Plate Overall Dimensions	8.66" x 36.45"	220 mm x 706 mm
	Tool Plate T-Slot Dimensions	21 mm base & 12 mm neck width, 8 mm base height / 17 mm total	
	T-Slots	3 T-Slots on 63 mm centers	
	Turning Tool Shank Size	20 mm	¾" square shank
	Internal Tool Shank Size	32 mm	1-1/4"
	Optional Driven Tool Horsepower	.75 kW	
	Optional Driven Tool Collet Size	1-Horsepower with 2:1 speed reduction for increased torque (1/2") 2-ER20 collets in a hydraulic positioned upper/lower format	
Specifications	Air Service Requirements	85 psi @ 5-scfm	5.5 Kg/cm²
	Electrical Requirements - connected load	10 kVA, 28-Amps	220 vac ±5%, 60-Hz
	Coolant Tank Capacity / Motor Power	21-gallons / ½-HP	80-liters / 2-amps
	Lubrication Pump	150 watts	
	Hydraulic Pump Motor / Pressure	1-HP / 500 PSI	.75 kW / 32-bar
	Machine Weight	4,850 lbs.	2,200 kg
	Warranty – 1-year machine warranty	3-year Mitsubishi control, motors, & drive warranty	



36-CS

7-Axis CNC Swiss Machine without guide bushing

- 36 mm 1-3/8" Bar Capacity

Dual "C" Axis and "Y" Axis with 19" Travel

27-Tools with 11-Driven Tools

Simultaneous Main & Sub-Spindle Machining

Parts Catcher and Chip Conveyor Included

1,181 IPM Rapid Rates

Main Spindle	Maximum rpm / spindle bearing	6,000 rpm / 5-bearing spindle, 3-front, 2-rear ø110 mm	
	Spindle Motor	10.6-HP	7.9 kW
	Collet Chucks (2-included with machine)	Traub-32 (mounted)	Traub-36 packed w/machine
	Drawtube Bore	1.456"	37 mm
	Maximum Barstock Diameter	1.375"	36 mm
	X-axis Travel	7.28"	185 mm
	Y-axis Travel (true Y-axis, not compound Y)	19.3"	490 mm
	Z-axis Travel	6.50"	165 mm
	Rapid Travel Speed: X, Y, Z	1,181 IPM	30 m/minute
	Minimum positioning input unit	40-millionths (0.00004")	0.001 mm
	C-Axis Spindle Positioning	0.001°	
	OD Turning Tool Positions	6 OD Tools (½" or 12 mm) (5-5/8" tool plate available)	
	ID Turning Tool Positions	5 ID Tools	
	OD Turning Tool size	½" or 12 mm	(5/8" or 16 mm Optional)
	ID Turning Tool Bore Size	25 mm	
	Spindle Center Height	40.63"	1,032 mm
Sub Spindle	Sub spindle rpm / spindle bearing	6,000 rpm / 4-bearing Quad-Duplex pair configuration	
	Sub spindle Motor	10.6-HP	7.9 kW
	Collet Chucks (2-included with machine)	Traub-32 (mounted)	Traub-36 packed w/machine
	Drawtube Bore	1.456"	37 mm
	Maximum Barstock Diameter	1.375"	36 mm
	X-axis Travel	11.41"	290 mm
	Z-axis Travel	11.22"	285 mm
	C-Axis Spindle Positioning	0.001°	
	Minimum input unit	0.0001"	(0.001 mm = 40 millionths inch)
	ID Turning Tool Bore Size	25 mm	
	Air Blast Nozzle	Included	
	Finished Parts Ejector	Included, along with parts catcher & parts conveyor belt	
Live Tooling	Cross slide live tools	4-ER-20 cross slide live tools, 3,000 rpm, 2.0 HP (1.5 kW)	
	Front slide live tools	3-ER-20 front slide live tools, 3,000 rpm, 1.0 HP (0.75 kW)	
	Live tool collet size	ER-20 collet, Ø1/2" (0.5-13 mm) tool shank capacity	
Specifications	Machine Weight	8,818 lbs.	4,000 kgs
	Coolant Pump	Dual 50psi 1-HP Coolant Pumps for main and subspindle	
	Coolant Tank Capacity - 260 liters	63-gallon coolant tank, with flow confirmation sensor	
	Hydraulic Motor Power / Tank Capacity	1-HP	(0.75 kW / 12.15 gallons (46 L))
	Lubrication distribution	Way lube distributed at 3-6 cc / 15-minute cycle	
	Air Requirements	85-PSI at 10-CFM for parts catcher, parts ejector, & air blast	
	Machine Power Requirements	220 vac ±5%, 63-amps, 3-phase, 60Hz, 20-kVA	



52-CS Y2

8-Axis CNC Swiss Machine with 2” Bar Capacity

- +

2” Bar Capacity with 6,000 RPM Spindle
- +

Full “C” Axis on Main Spindle and Sub Spindle
- +

Full “Y” Axis on Main Spindle and Sub Spindle
- +

33 Total Tool Positions with 13 Live Tools
- +

Simultaneous Main and Sub-Spindle Machining
- +

Parts Catcher and Chip Conveyor

Main Spindle	Maximum rpm / spindle bearing	6,000 rpm	
	Spindle Motor	15-HP	11.0 kW
	Collet Nose / Spindle Bore	Traub TRB-52 / 51 mm	(uses TRB-52 collet)
	Maximum Barstock Diameter	2"	51 mm
	Maximum Cut Length	14"	
	Spindle Center Height	43.3"	1,100 mm
Sub Spindle	Sub spindle rpm / spindle bearing	6,000 rpm / 4-bearing Quad-Duplex pair configuration	
	Sub spindle Motor	15-HP	11.0 kW
	Collet Nose / Spindle Bore	Traub TRB-42 / 43 mm	(uses TRB-42 collet)
	External Air Blast Nozzle	Included for both main & sub spindle	
	Finished Parts Ejector & air blast	Max 7.5" part front eject	Included for sub spindle
Axis Travels	X ¹ -axis Travel	8.66"	220 mm
	Y ¹ -axis Travel (true Y-axis, not compound Y)	24.41"	620 mm
	Z ¹ -axis Travel	16.0"	406 mm
	X ² -axis Travel	14.9"	380 mm
	Y ² -axis Travel (true Y-axis, not compound Y)	5.11"	130 mm
	Z ² -axis Travel	18.1"	460 mm
	Rapid Traverse Rate – X ¹ , X ² , Y ¹ , Z ¹ , Z ²	1,181 IPM	30 m / min
	Rapid Traverse Rate – Y ²	196 IPM	5 m / min
	Axis Drive Servo Horsepower: X ¹ / Y ¹ / Z ¹	1-3/4 / 1-3/4 / 1-1/8 HP	(1.3 kW / 1.3 kW / .85 kW)
	Axis Drive Servo Horsepower: X ² / Y ² / Z ²	1-1/8 / 1.0 / 1-1/8 HP	(.85 kW / .75 kW / .85 kW)
	Minimum input unit	0.0001"	(0.001 mm = 40 millionths inch)
Tooling	33-Tool Positions Standard	All live tools are gear driven w/ ø42 mm bearings – no belts!	
	Main Spindle Cross Slide Radial live tools	6-ER-20 cross slide live tools, 4,000 rpm, 2.0 HP (1.5 kW)	
	Main Spindle Front Slide Axial live tools	3-ER-20 front slide live tools, 4,000 rpm, 1.0 HP (0.75 kW)	
	Main Spindle OD Turning Tool Positions	6 [5 x 5/8" + 1 x 3/4"]	(5 x 16 mm) + [1 x 20 mm]
	Main Spindle ID Turning Tool Positions	5 ID Tool Bores	25 mm
	Sub Spindle ID Turning Tool Positions	5 ID Tool Bores	25 mm (back of main tool bores)
	Sub Spindle ID Turning Tool Positions	4 ID Tool Bores	(Static holders in sub spindle tool block)
	Sub Spindle Back Slide Axial Live Tools	4-ER-20 (can add 4 more) 4,000 rpm, 4.0 HP (3 kW) (1 radial live tool can be substituted on Sub Spindle tool block)	
Specifications	Machine Weight	13,880 lbs.	6,300 kgs
	Coolant Pump	Dual 50psi 1-HP Coolant Pumps for Main and Sub Spindle	
	Coolant Tank Capacity	74-gallon coolant tank, with Coolant Flow Confirmation Sensor	
	Lubrication distribution	Way lube distributed at 3-6 cc / 15-minute cycle	
	Hydraulic System – power / capacity	1-HP / 12-gallons	(0.75 kW / 46 L)
	Machine Power Requirements	220 vac ±5%, 35 kva, 3-phase, 60 Hz, 92 amps	
	Air Requirements	85-PSI at 10-CFM for parts catcher, parts ejector, & air blast	



52-GTS

6-Axis CNC Dual Gang-Tooled Lathe

- +

52 mm 2" Bar Capacity

+

Twin 15-HP 6,000 RPM Opposed Spindles

+

Dual Parallel Gang-Tooled Cross-Slides

+

Simultaneous Main & Sub-Spindle Machining
- +

"C"-Axis on both spindles for Live Tooling Options

+

Faster than a Twin-Spindle Twin-Turret Lathe

Main Spindle & Sub Spindle	Spindle Motors: 11 kW 30-minute rated	15 HP (spindle motor chiller included)
	Maximum rpm	6,000 rpm with spindle orient
	Spindle Bearing	5-bearing spindle, 3-front ball bearings, 2-rear
	Spindle Nose	A2-5
	Collet Nose	Traub A-52 (3J, 16C, adapters available)
	Drawtube ID	2.086"53 mm
	Collet Capacity	2.047"52 mm
	Spindle Center Height to Cross-Slide	3.464"88 mm
Axis Travels	Spindle Center Height to Floor	42.2"1,070 mm
	Axis Drives & Motors (1.0 kW)	1.35-HP Mitsubishi Mel-Pro Motors and Drives
	X-Axis Travel: Twin cross-slides	13"(330 mm) on both gang slides
	Z ¹ -Axis Travel	9.1"232 mm
	Z ² -Axis Travel	12.44"316 mm
	X-Axis Servo Motor Power	2.0 HP1.5 kW
	Z-Axis Servo Motor Power	1.5 HP1.0 kW
	Rapid Travel Speed – X & Z	1,181 IPM30 m / minute
Tooling	Z-Axis Thrust	714 lbs. thrust8,574 in / lbs.
	Minimum input unit	0.0001"(0.001 mm = 40 millionths of an inch)
	OD Turning Tool Size	3/4" standard
	ID Turning Tool Size	20 mm3/4" available
Fluid Systems	Cross-Slide T-Slot dimensions	5-T-Slots on 32 mm centers (10 mm slot, 18 mm base)
	Coolant Tank Capacity	83 Gallons(315 L) with coolant flow monitor
	Coolant Pump	Dual 3/4-HP, 45-PSI pumps (for main and subspindle)
	Hydraulic System: (550psi)	10.5-gallons (40 liters) ISO VG32 (Mobil DTE-24)
	Spindle Oil Cooler System	5.5-gallons (25 liters) ISO 10 (Mobil Velocite No. 6)
Specifications	Way Lubrication distribution (ISO-VG68)	0.5-gallon (2-liters) distributed at 3-6 cc / 15-minute cycle
	Power Requirements	220 vac ±5%, 3-phase, 60-Hz, 63 Amps, 24 kVA
	Air Requirements	85-psi, 10-cfm (parts catcher, parts ejector, air blast)
	Net Weight	9,922 lbs.4,500 kg



52-BY2

9-Axis Mill / Turn Lathe with 12-Angle Tools

- 52 mm 2" Bar Capacity

Twin 15-HP 6,000 RPM Opposed Spindles

36-Tool Positions - 18-Driven Tools

Machine at Any Angle with 12-Tool "B"-Axis
- "B" Axis and Dual "Y" Axis for Front & Back Work

Simultaneous Main & Sub-Spindle Machining

Main Spindle	Maximum bar diameter	A2-5 Spindle with 2.008" (51 mm) bar capacity	
	Collet size / Spindle bearings	Traub TRB-52 / 5 x 90 mm ball bearings, 3-front, 2-rear	
	Maximum spindle speed	6,000 rpm (Integral Motor Spindle)	
	Servo Spindle motor horsepower	15-HP (11 kW) peak, 10-HP (7.5 kW) 30-min. rated	
X ¹ , Y ¹ , Z ¹ Axis	X ¹ , Y ¹ , Z ¹ Axis servo motor	X ¹ = 1.3 HP (1.0 kW) Y ¹ / Z ¹ = 2.0 HP (1.5 kW)	
	X ¹ Axis travel	10.63"	270 mm
	Y ¹ Axis travel	18.11"	460 mm
	Z ¹ Axis travel	9.84"	250 mm
	Minimum programmable input	0.00004" resolution (0.001 mm)	
	X ¹ , Y ¹ , Z ¹ Rapid Travel Rate	1,181 IPM (30 m/min) / 0.0001 mm resolution	
Main Spindle Tooling	NOTE: 12 Main Spindle driven tools can be shared with Subspindle		
	Number of driven tools	6 axial & 6 radial driven and "Any-Angle" tools	
	Driven tool motor power	5-HP	3.5 kW
	Driven tool spindle speed	2,500 rpm maximum driven tool spindle speed	
	Driven tool collet size	ER-20 collet spindles (up to 1/2" tool shank)	
	O.D. turning tools	20 mm OD Turning 5 - 20 mm O.D. turning tool holders available	
	I.D. boring tools	5 - 25 mm I.D. bores available for tool bushings	
Sub Spindle	Maximum bar diameter	2.008"	51 mm
	Collet size	Traub TRB-52	
	Maximum spindle speed	6,000 rpm (Integral Motor Spindle)	
	Servo Spindle motor horsepower	15-HP (11 kW) peak, 10-HP (7.5 kW) 30-min. rated	
X ² , Y ² , Z ² Axis	X ² , Y ² , Z ² axis servo motor	X ² / Z ² = 1.3 HP (1.0 kW), Y ² = 2.0 HP (1.5 kW)	
	X ² axis travel	18.89"	480 mm
	Y ² axis travel	18.11"	460 mm
	Z ² axis travel	10.63"	270 mm
	X ² , Y ² , Z ² rapid travel rate	1,181 IPM	30 m / min
	Minimum programmable input	0.0001" (0.001 mm = 40 millionths of an inch)	
	Ball screw diameter	25 mm diameter with 10 mm pitch for all axes	
Sub Spindle Tooling	Number of axial driven tools	3 axial driven tools, uses ER-20 collets	
	Number of radial driven tools	3 radial driven tools, uses ER-20 collets	
	Driven tool motor power	2.7-HP	2.0 kW
	Driven tool spindle speed	2,500 RPM maximum driven tool spindle speed	
	Driven tool collet size	ER-20 collet spindles (up to 1/2" tool shank)	
	O.D. turning tools	4 - 20 mm O.D. turning tool holders available	
	I.D. boring tools	4 - 25 mm I.D. bores available for tool bushings	
Specifications	Coolant System	80 Gallon tank, 4-coolant pumps with flow control	
	Electrical Requirements	110-Amps, 42 kVA 220 vac ±5%, 3-phase	
	Air Requirements	85 psi, 20-cfm, for parts catcher, ejector, oil mist unit	
	Machine Weight	12,345 lbs.	5,600 kgs



78-MSY

6-Axis Mill / Turn Lathe with 16-Tool Turret

- 78 mm 3" Bar Capacity

Twin 4,000 RPM Opposed Spindles

16-Driven Tool Positions each station can mount multiple tools

"Y" Axis with ±1.968" Travel

Full "C" Axis on Main and Sub-Spindle

Complete Front & Back Work

Capacity	Turning Diameter Maximum / Standard Turning Length	12.79" (325 mm) 22.04"	8.26" (210 mm) 560 mm
Main Spindle	Spindle nose Spindle Bar Capacity Chuck Size - optional Spindle Center Height Maximum spindle speed Main Spindle motor horsepower 15 / 22 kW	A2-6 3.070" 10" (with 78 mm bore) 39.37" 60 - 4,000 rpm (Integral Refrigerated Spindle) 30-HP (30-minute duty rating) / 20-HP (constant duty rating)	78 mm drawtube I.D. 1,000 mm
Sub Spindle	Spindle nose Spindle Bar Capacity Chuck Size - optional Maximum spindle speed Main Spindle motor power 11 / 15 kW	A2-6 70 mm 8" (Ø10" optional) 60 - 4,000 rpm (Integral Spindle) 15-HP (30-minute duty rating) / 10-HP (constant duty rating)	
Live Tool Turret	Number of turret stations Index time (adjacent tool / 180° index) Live Tool Power / rpm 3.7 / 5.5 kW Tool Size / Collet Size Tool Holder Type & Size Turret Thru-The-Tool-Coolant	16 (Any combination of 16 ID, OD or Live tool stations) 0.2 seconds / 1.2 seconds High-Speed Servo Indexing 7.5-HP / 6,000 rpm, 14.75 ft. lbs. torque (20 Nm) 1" (25 mm) (for square tool & 32 mm round tools) / ER-32 collets BMT-65 Base Mount Tooling Rated for High Pressure coolant option	
C¹ & C² Axis	Spindle Radial Resolution / Speed	360,000 radial positions with full contouring capability / 600 rpm	
B-Axis (sub spindle travel)	B Axis Rapid Traverse Rate B Axis Travel	1,573 Inch Per Minute 27.16"	40 m / minute 690 mm
Axis Travels	Axis Travel – X / Y / Z Axis Rapid Travers Rate – X / Y / Z Axis Axis Motor Power Axis Continuous Thrust Rating Minimum Programmable Input	X = 9.05 / Y = ±1.968" / Z = 23.7" (230 mm) / (±50 mm) / (700 mm) 630 / 236 / 1,574 ipm (16 / 6 / 40 m/minute) 3-HP in X, Y, Z axis X = 2,142, Y = 2,924, Z = 1,425 pounds of thrust force 0.0001" (0.001 mm = 40 millionths of an inch)	
Specifications	Hydraulic System Coolant Pumps – Dual Coolant Pumps Coolant Tank Machine Weight Electrical Requirements Air Requirements	8- gallons (30 Liters) with 5-HP (3.5 kW) pump motor 2 x 1.7 HP pumps for tooling / 2 pumps for chip flushing 74-gallon (280 Liters) coolant tank 17,650 lbs. 8,000 kgs 56 kVA, 220 vac ±5%, 3-phase, 60 Hz, 130 amps 85-psi @ 8-cfm for parts catcher, ejector, oil mist lubricator	



+ 78 mm 3" Bar Capacity	+ "Y" Axis with 3.936" Travel
+ Twin 4,000 RPM Opposed Spindles	+ Simultaneous Main & Sub-Spindle Machining
+ Glass Scale Feedback on X1 & X2 Axes	
+ 32-Driven Tool Positions each station can mount multiple tools	+ Full "C" Axis on Main and Sub-Spindle

GEN TURN / 78-TTMY