GS SERIES

Performance 2-Axis CNC Lathe



WWW.HARDINGE.COM



GS SERIES

Hardinge designed and built a complete range of GS series to suit various machining requirements.



GS 150 / GS 200



GS 150 A / GS 200 A



GS 200/66 GS 250



GS 200/66 L GS250 L

HIGHER EFFICIENCY

Faster machining duty cycle time, lower non-cutting time.

- Fast spindle speed 6,00 rpm on GS 150, 5,000 on GS 200, 4,200 200/66 (L), 3,500 rpm on GS 250 (L).
- \bullet Rapid traverse rate max. rapid and jog 30m/min. on X & Z axes.
- Quick turret index time 0.09-second (rotation only) for GS 150, GS 200. 0.1-second (rotation only) for GS 200/66 (L), GS 250 (L) turret tool change time (station to station) of servo driven turret.

RIGID STRUCTURE

Longer tool life and higher heavy cutting ability.

- Rigid and stable base strategically ribbed, 45-degree for GS 150, GS 200 and 30-degree for GS 200/66 (L), GS 250 (L), high quality one body casting iron base.
- FEA (Finite Element Analysis) techniques were used to design and build a rigid, structurally-balanced machine to assure optimum rigidity and life by Hardinge Engineering Team.
- C2 class ball screw, pre-tensioned, double nut hardened and ground for low noise and low thermal displacement.
- Heavy duty linear guideway and roller linear guide, 30% stiffness increased, longer machine life.

EXCELLENT AND STABLE ACCURACY

Stable static and cutting accuracy

- \bullet Accurate full stroke positioning accuracy 0.01mm (ISO 230-2) on X and Z axes.
- -Accurate full stroke repeatability accuracy 0.005mm (ISO 230-2) on X and Z axes.
- Actual machining results: Material: BsB / spindle rpm: 1250 rpm Roundness: 0.7µ Surface Finish: Ra 0.2µ

COMPACT EFFICIENCY

Smallest floor plan, largest working envelope.

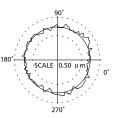
- Compact Layout: machine layout with small floor plan, machine length 1998mm only for GS 150, GS 200. 2988mm for GS 200/66, GS 250. 3792mm for GS 200/66 (L), GS 250 (L.)
- Efficient Compact Utilization: Working envelope / machine floor plan reaches to 3.5%, higher than general average 2.94% only.

AUTOMATIC GANTRY EXCHANGER (OPTION)

- Easy transportation and installation: GS Series Automatic Gantry Part Exchanger offers a unique compact design that harmoniously couples with the Hardinge Lathe for easy installation and transportation.
- Fast Part Exchange Time: GS Series Automation compact design reduces the travel of the part. No need to open the front door saves further part exchange time. The time to exchange parts, including the auto-door action occurs, within 9 sec.
- Patented Unique Module Pallet: The module pallet is flexible to cater for different workpiece sizes. Slant design and auto center adjustment enlarges the workpiece capacity and saves space.



GS 250 SHOWN



HEAVY-DUTY

LINEAR GU ROLLER



SURFACE FINISH

KEY FEATURES

RIGID TAILSTOCK (OPTION)

Fully programmable tailstock with MT#4 Morse Taper for GS 150, GS 200, MT #5 Morse Taper for GS 200/66 (L), GS 250 (L), front mounted, easy-view pressure gauge is easily adjusted through hinged access door. Fit variety of centers available.

HIGH PRODUCTIVITY

Optional 2-speed spindle (electronic type), provides the biggest diameter part cutting on small CNC horizontal lathe.

FANUC OITF CONTROLLER

8.4" color LCD / 1280 meter memory length / manual guide 0i / graphic display / dynamic stimulating / multi-point spindle orientation / rigid tapping

REDUCED NON-CUTTING TIME

- Both 30 m/min rapid traverse rate on X and Z axes, reduce non-cutting time.
- Servo driven turret (optional) equipped with I 2-station top plate, fuzzy shortest distance tool index, three-piece clutch gear prevents possible chip and coolant penetrating for guaranteeing turret accuracy and life.
- Fast 0.08-second (rotation only) for GS 150, GS 200. 0.1-second (rotation only) for GS 200/66 (L), GS 250 (L) turret tool change time (station to station) of servo driven turret.
- High turret repeatability accuracy improves cutting parts accuracy and surface finish.

ACTUAL MACHINING RESULTS

Model	GS 150	GS 200	GS 200/66 (L)	GS 250 (L)
Workpiece	Heavy Duty Cutting	Heavy Duty Cutting	Heavy Duty Cutting	Heavy Duty Cutting
Material	S45C	\$45C	\$45C	S45C
Line Speed	150 m/min	150 m/min	200 m/min	200 m/min
Cutting Depth	3.5 mm	4 mm	5 mm	6 mm
Feed Rate	0.45 mm/rv	0.45 mm/rv	0.4 mm/rv	0.4 mm/rv
Chip Removal Capacity	235 cc/min	270 cc/min	400 cc/min	480 cc/min

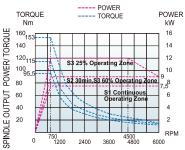
HIGH PRECISION AND HIGH STABILITY

Z Axis pre-load reduces temperature rises effectively during traveling. Direct drive with coupling maintained assembly accuracy and depress noise. Full stroke laser compensation on X and Z axes on every machine.



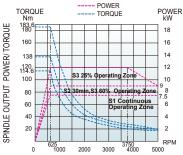
SPINDLE OUTPUT DIAGRAM

GS 150 6000 RPM



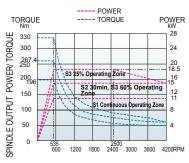
Fanuc αiIP15 / 6000 RPM Spindle Motor





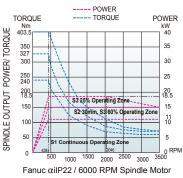
Fanuc $\alpha il P15$ / 6000 RPM Spindle Motor

GS 200-66(L) 4200 RPM



Fanuc α ilP22 / 6000 RPM Spindle Motor

GS 250(L) 3500 RPM





GS 150, GS 200



FANUC OITF



VERTICAL TOP PLATE

A A

VDI TOP PLATE

GS 200/66 (L), GS 250 (L)

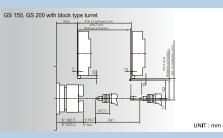
SPINDLE WITH COLLET

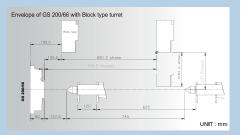
CHUCK (OPTION)

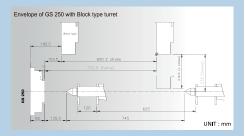
SIEMENS 828D (OPTION)

GS SERIES

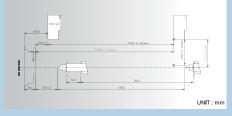
WORK ENVELOPE





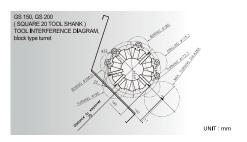


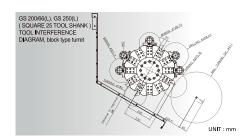
Envelope of GS 200/66L with Block type turret

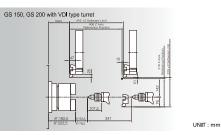


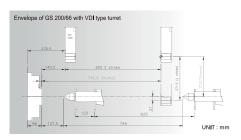
Envelope of GS 250L with Block type turret



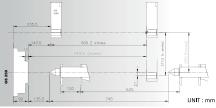


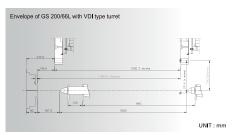


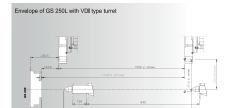


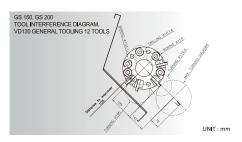


Envelope of GS 250 with VDI type turret

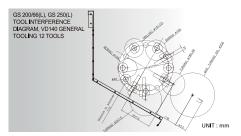








UNIT : mm



KEY FEATURES

ONE-PIECE BED AND BASE STRUCTURE

FEA-qualified structural components. Strategically ribbed, one body slant bed design, easy access and efficient chip removal, 45 degree for GS 150, GS 200 and 30-degree for GS 200/66 (L), GS 250 (L), high quality casting iron base integrated structure contributes to the overall stability, rigidity and durability of the machine. Special headstock design eliminates thermal displacement and assures continuous machining accuracy.

HYDRAULIC UNIT

Direct-drive high efficiency vane pump for long life, low noise and low temperature raise. The heat exchange system is able to reduce the oil temperature efficiently.



HIGH PRECISION AND STIFFNESS SPINDLE

High performance spindle with powerful 4-bearing spindle design, two tapered roller bearings and two 40° angular contact bearings. Best spindle bearings design for both higher axial and radial stiffness and cutting accuracy.

COOLANT/AIR THROUGH TURRET (OPTION)

Suitable for better surface finishes on deep hole or workpiece material like stainless steel, coolant through turret with 20 bar high pressure, and air blast increase tool life and good chip removal.

HEAVY-DUTY ROLLER LINEAR GUIDEWAYS

X and Z axis roller linear guideways feature maximum static and dynamic stiffness, longer machine life as well as overall machining consistency.

LIVE TOOL & C-AXIS (OPTION)

Servo-driven, live tooling function available on all 12-station VDI turret, powered tools for milling, drilling, tapping & boring.

PARTS CATCHER (OPTION)

Arm type and slide type parts catcher. The maximum part diameter 52 mm (GS 150, GS 200) or 76 mm (GS 200/66 (L), GS 250 (L)).

STEADY REST (OPTION FOR GS 200/66 L & GS 250 (L))

AUTOBLOK-SLU-M2 self centering work system; centering range from 8 - 101 mm with power centering and manual movement.

BAR FEEDER (OPTION)

The max. bar diameter 65 mm, max. length two types - 1250 and 3200 mm.

CHIP CONVEYOR (OPTION)



HINGE TYPE

Suitable for long chips or workpiece materials such as casting iron, steel and aluminum

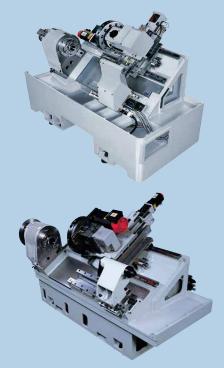


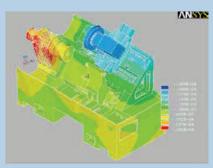


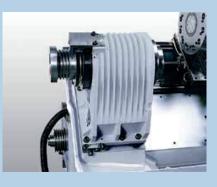
SCRAPER TYPE Suitable for fine or crushed chips of workpiece materials such as brass and casting iron.

 Not suitable for chips longer than 5 mm.

HEAVY-DUTY STRUCTURE AND STABLE ACCURACY







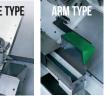








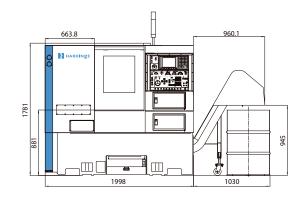


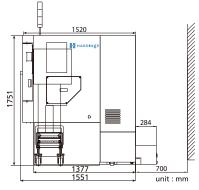






DIMENSIONAL DRAWINGS GS 150 / GS 200





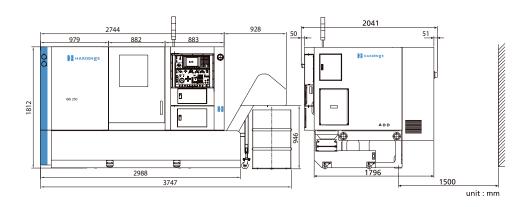
Machine Configur	ation	GS 150	GS 200	
Spindle	Spindle Nose	A2-5	A2-6	
	Spindle Bore Thru Dia.	56	62	mm
	Chuck Size of 3 Jaw Dia.	6 in / Ø169	8 in / Ø210	mm
	Spindle Center Height to Floor	1000	1000	mm
	Spindle Center Dis. to Front Door	280	280	mm
	Draw Bar Clamping	Hydraulic	Hydraulic	
	Spinde Motor Rating (S3 25%)	12	12	kW
FANUC Drive System	Max Spindle Speed	6000	5000	rpm
2	Spindle Torque Rating (S3 25%)	153	183	N-m
	Swing Over Way Covers (Dia.)	457	457	mm
Machining	Max Turning Length	406	406	mm
Capacity	Max Machining Dia.	284	284	mm
	Through Draw Tube Bore Dia.	Ø45	Ø52	mm
	X Axis Travel (VDI)	218	218	mm
	Z Axis Travel	406	406	mm
X, Z Axis Travel	X and Z Axis Rapid Traverse Rate	30	30	m/mir
	X Axis Servo Motor	1.6	1.6	kW
	Z Axis Servo Motor	1.6	1.6	kW
	Drive of Turret	Hydraulic Motor	Hydraulic Motor	
Turret / Top	Number of Stations (Standard)	12	12	
Turret / Top Plate	Square Shank Size	20	20	mm
	Round Shank Size Dia.	32	32	mm
	Index Time (Station to Station)	.35 (Servo Motor 0.09)	.35 (Servo Motor 0.09)	sec
Coolant	Coolant Tank Capacity	156	156	liter
	Coolant Pressure	2.8	2.8	bar
Machine Size /	Machine Dimension (L x W x H)	1998 x 1551 x 1781	1998 x 1551 x 1781	mm
Weight	Machine Weight	2700	2800	
	Machine Floor Plan	3.3	3.3	m ²
Siemens 828D	Spindle Motor Rating (S6 40%)	13	12	kW
Control	Max Spindle Speed	6000	5000	rpm
System	Spindle Torque Rating (S6 40%)	104	125	N-m
Accuracy ISO 230	-2			
Accuracy	X, Z Axis Positioning	0.01 / Full Stroke	0.01 / Full Stoke	mm
	X, Z Axis Repeatability	0.005	0.005	mm
Options		GS 150 A	GS 200 A	
	Max. Turning Length	100	100	mm
Automation	Max. Madining Dia.	120	120	mm

Options						
Collet Adaption Chuck	A2-5	A2-6	Through Hole Dia. 42	mm		
2-Speed Range Spindle	Fanuc OiTF					
	Morse Taper Center		MT#4			
Fully	Tail Stock Travel		341	mm		
Programmable	Max. Part Length		341	mm		
Tail Stock	Min. Part Length		17.3	mm		
	Rapid Traverse Rate		5.5	m/min		
Parts Catcher						
Slide Type	Max. Part Diameter		Ø52	mm		
Silde Type	Max. Part Length		110	mm		
Arm Type	Max. Part Diameter		Ø52	mm		
,	Max. Part Length		150	mm		
Part Conveyor						
Chip Conveyor		Hinge Type (for long roll				
	Scr	aper Type (for fine or cr	ushed chips)			
Tool Probe Setter	Automatic Type					
Part Probe						
Oil Mist			1/2	hp		
Collector				·		
		Bar Length	1250	mm		
Bar Feeder		Bar Length	3200	mm		
High Pressure						
Coolant Thru.	Coolant Pressure		20	bar		
Turret						
Live Center						
Stack Light	Red-Yellow-Green Color					
Auto Door						
Live Tooling and C Axis	12 Stations Live Tooling Available					
Optical Scale X, Z Axis						
Accuracy ISO 230)-2					
Color LCD			8.4	in		
3 Jaw Chuck /						
One Set of Soft Jaw						
Bar Feeder						
Interface						
Coolant			2.8	bar		
Through Turret						
Work Lighting Foot Switch						
Tool Bag						
Tool Bag						

* To keep improvement and developing new functions, Hardinge Taiwan reserves the rights to change specifications without further notice

 \ast Due to varying conditions, actual results may be greater or less than those listed,

DIMENSIONAL DRAWINGS GS 200/66 / GS 250



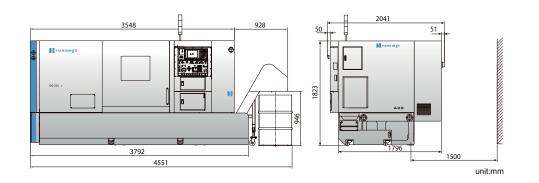
Spindle NoseA2-6A2-8Spindle Bore Thru Dia.7689mmChuck Size of Jaw Dia.8in / 021010 in / 0254mmSpindle Center Dis. to Finor Dorbin.10141041mmSpindle Center Dis. to Finor Dorbin.431311mmFANUC Drive SystemSpindle Center Dis. to Finor Dorbin.18.5kWFANUC Drive SystemSpindle Motor Rating (\$3.25%)18.5sinorMachine Dora. Spindle Motor Rating (\$3.25%)300300mmMachine Dia. Spindle Motor Rating (Dia.)595595.00mmMachine Dia. CapacitySpindle Motor Rating (Dia.)300000mmMachine Dia. CapacitySpindle Motor Rating (Dia.)2015356mmMachine Dia. CapacitySpindle Motor Rating (Dia.)2015300mmMachine Dia. CapacitySpindle Motor Rating (Dia.)2015300mmMachine Dia. CapacitySpindle Motor Multic (Dia.)2015300mmZANS TravelGold600mmmmZANS Travel1616KWMmMaxie Spindle Speed1616KWMaxie Spindle Speed2121mmMachine Spindle Speed3031mmZANS Travel1616KWMachine Spindle Speed3131mmMachine Spindle Speed3235mmMachine Spindle Speed3	Machine Configu	ration	GS 200/66	GS 250			
Product Size of Jaw Dia.8 in / Ø21010 in / Ø254mmSpindle Center Height in Front Door43131mmSpindle Center Dis. in Front Door431431mmFANUC Drive SystemDraw Bar ClampingHydraulicHydraulicHydraulicFANUC Drive SystemSigndle Speed42003500mmMax Spindle Speed42003500mmMax Spindle Speed300603.5mmMax Machining Dia. Signdle Draw Data356mmmmMax Machining Dia. Ibrow, Draw Tube Chab.606078mmMax Machining Dia. Chab.271.5271.5mmMax Machining Dia. Chab.271.5100mmMax Machining Dia. Chab.271.5100mmMax Machining Dia. Chab.271.5100mmMax Machining Dia. Chab.271.5100mmMax Machining Dia. Chab.271.5100mmMax Machining Dia. Chab.271.5100mmMax Machining Dia. Chab.271.5271.5mmMax Machining Dia. Chab.271.5100mmMax Machining Dia. Chab.271.5100mmMax Machining Dia. Chab.271.5100mmMax Machining Dia. Chab.271.5100mmMax Machining Dia. Chab.271.5100mmMax Machining Dia. Chab.271.5100mmMax Machining Dia. Chab. <th></th> <th></th> <th></th> <th>A2-8</th> <th></th>				A2-8			
SpindleSpindle Center Height to FloorIo41Io41ImmDraw Bar ClampingHydraulicHydraulicHydraulicDraw Bar ClampingHydraulicHydraulicHydraulicFANUC Drive SystemSignolde Motor Rating Signolde Torque Rating Signolde Torque Rating Signolde Torque Rating Signolde Torque Rating Max Turning LengthSignolde ConcerSignolde ConcerMaching DiaSignolde Torque Rating Signolde Torque Rating Signolde Torque Rating Max Turning LengthSignolde ConcerSignoldMaching DiaSignolde ConcerSignolde ConcerSignoldMarcMax Tarving LengthO60600mmMax Maching DiaSignoldSignoldm/minAxis Travel (VDI)2/1.5Signoldm/minX, X Axis Travel (VDI)SignoldSignoldm/minAxis Servo Motor33MarcmmMarcel Torque Rating Signold Scareo RationSignoldMarcmmMax Diribut Scareo RationSignoldSignoldmmMarcel Torque TorqueHydraulic MotorHydraulic MotorHydraulic MotorFurger StationsSignold Scareo Motor 0.09SignoldSignoldmmMarchine Size Dia30SignoldMinminMachine DimensionSignold Scareo Motor 0.09SignoldminMarchine Size DiaSignold Scareo Motor 0.09Signold Scareo Motor 0.09SignoldminMarchine RationSignold Scareo Motor 0.01Signold Scareo Motor 0.01Signo		Spindle Bore Thru Dia.	76	89	mm		
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in Front DoorPish </th <td>Spindle</td> <td></td> <td>1041</td> <td>1041</td> <td>mm</td>	Spindle		1041	1041	mm		
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Machining CapacityD3D3D3MinMax Turning Length600600mmMax Machining Dia.356356mmThrough Draw Tube Dia.066078mmXAxis Travel (VDI)271.571.5mmXAxis Travel (VDI)271.5000mmXAxis Travel (VDI)271.5mmXAxis Servo Motor1.61.6kWXAxis Servo Motor1.61.6kWXAxis Servo Motor1.61.6kWYang Constrained1212100Square Shank Size2525mmNumber of Stations (Standard)319110mmMachine Size Dia40mmmmMachine Size Dia288298319secCoolant Tank Capacity319319mmMachine Floor Plan5.1mmmmMachine Floor Plan5.1mmmmSiemens 282D ControlSpindle Motor Rating (Sé 40%)3200mmAccuracy ISO 270-170 SystemX, Z Axis Ropidining0.01 / Full Stroke0.01 / Full StokemmAccuracyX, Z Axis Ropidining Dia0.01 / Full StokemmmmAccuracyMax Funding Dia0.01 / Full StokemmmmAccuracyMax Funding Dia0.01 / Full StokemmmmMax Indining Dia1000.00mmmmMachine DromesinoColar Are Colar Are Colar Are Colar Are Colar Are Colar A			330	403.5	N-m		
Animary CapacityMax Machining Dia.356356mmThrough Draw Tube Bore Dia.Ø66Ø78mmX Axis Travel (VDI)271.5271.5mmZ Axis Travel600600mmX Axis Travel3030mmX Axis Servo Motor1.61.6kWX Axis Servo Motor1.61.6kWX Axis Servo Motor1.61.6kWX Axis Servo Motor1.61.6kWMumber of Stations (Standard)1212mmNumber of Stations (Standard)1235mmNumber of Stations (Standard)3535mmMachine Size / WeightCoolant Tank Capacity319319literMachine Dimension (Lx W x H)2988 x 2041 x 1812 (Staton Capacity988 x 2041 x 1812 (Staton CapacitymmMachine Floor Plan5.15.1mmSiemens 828D Control SystemSpindle More Rating (Sd (Sd 0%)343skiAccuracyXA Spindle Speed42003000mmAccuracyXA Spindle Speed343skimmAccuracyXA Spindle Speed0.01 / Full StrokemmAccuracyMax Turning Length1000.005mmMax Madining Dia100100mmmmMax Madining Dia100100mmmmMachine Dimension100100mmAccuracySpindle More Rating (Sd (Sd 40%)			595	595	mm		
Number of Energy Lange Number of Energy Lange<	Machining	Max Turning Length	600	600	mm		
Bore Dia.DoeDoeDoeDoeBore Dia.SoloSoloInimA Axis Travel (VDI)271.5SoloMmZ Axis Travel (XDI)600600mmX Axis Travel (XDI)3030m/minX and Z Axis Rapid Traverse Rate3030m/minX Axis Servo Motor1.61.6kWZ Axis Servo Motor1.61.6kWMumber of Stations (Standard)1212mmNumber of Stations (Station to Station)12mmmmIndex Time (Station to Station)3535servoMachine Dimension (L x W x H)319319literMachine Dimension (L x W x H)2988 x 2041 x 1812gmsmmSiemens 2380 ControlSpindle Motor Rating (Sé 40%)183500rpmAccuracy ISO 23V-X Z Axis Repeatibility0.01 / Full StrokemmAccuracyX Z Axis Repeatibility0.01 / Full StrokemmAccuracyMax. Turning Length100100mmMax. Madning Dia100100mmMax. Madning Dia	Capacity	Max Machining Dia.	356	356	mm		
X, Z Axis TravelControlControlControlZ Axis Travel600600mmX, Z Axis Travel3030m/minX, Z Axis Servo Motor1.61.6kWZ Axis Servo Motor1.61.6kWZ Axis Servo Motor33kWMumber of Stations (Standard)1212kmmNumber of Stations (Standard)1212mmRound Shank Size2525mmRound Shank Size Dia4040mmIndex Time (Station to Station)35Servo Motor 0.09)Servo Motor 0.09CoolantCoolant Tank Capacity319319literCoolant Tank Capacity319319literMachine Dimension (L W X H)2988 × 2041 x 1812PasepaseMachine Floor Plan5.15.1mmSiemens 828D Control SystemSpindle Motor Rating (Sé 40%)343343N-mAccuracy ISO 230-VX Z Axis Repeatability0.001 / Full Stroke0.01 / Full StrokemmAccuracyX, Z Axis Repeatability0.0050.005mmAutomation120100mmmmMax. Turning Length100100mmMax. Madining Dia120120120mmAutomationMax. Madining Dia120120mmMaxtine Dimension120120120mmMax. Spindle Speed510A65 100Amm <tr< th=""><th></th><td></td><td>Ø66</td><td>Ø78</td><td>mm</td></tr<>			Ø66	Ø78	mm		
X, Z Axis TravelX and Z Axis Rapid Traverse Rate3030m/minX Axis Servo Motor1.61.6kWZ Axis Servo Motor33kWMumber of Stations (Standard)12Hydraulic MotorHydraulic MotorMumber of Stations (Standard)1212mmSquare Shank Size Dia.4040mmIndex Time (Station to Station)35 (Servo Motor 0.09)35 (Servo Motor 0.09)secCoolantCoolant Tank Capacity319319literMachine Dimension (Lx W X H)2988 x 2041 x 1812988 x 2041 x 1812mmMachine Dimension (Station Floor Plan5.15.1mmSiemens 828B Control SystemSpindle Motor Rating (Sc (640%)183.3kWAccuracy ISO 2U-UX.Z Axis Repetability0.01 / Full StrokemmAccuracyX.Z Axis Repetability0.005mmAttoming Dia0.01 / Full Stroke100mmMathine Dimension (S du%)0.015 / Ull StrokemmMachine Size (Marcy ISO 2U-U0.005mmMax Spindle Speed42003500mmAccuracyX.Z Axis Repetability0.005mmMax Spindle Speed0.01 / Full StrokemmMax Madining Dia0.01100mmMax Madining Dia120100mmMathine Dimension120100mm		X Axis Travel (VDI)	271.5	271.5	mm		
X, Z Axis TraverTraverse Rate3030m/minY Axis Servo Motor1.61.6kWZ Axis Servo Motor33kWMather of TurretHydraulic MotorHydraulic MotorHydraulic MotorNumber of Stations (Standard)1212mmSquare Shank Size Dia.4040mmIndex Time (Station to Station) (Station to Station)3535(Station to Station) (Station to Station)31911erCoolantCoolant Tank Capacity319319Machine Dimension (Lx W x H)2988 x 2041 x 1812mmMachine Floor Plan5.15.1mmSiemens 228D ControlSpindle Motor Rating (Sc (640%)3500rpmAccuracy ISO 23U-VX, Z Axis Repeatability0.01 / Full Stroke0.01 / Full StrokemmMathine Dimension (Control0.0150.005mmmmSiemens 228D ControlSpindle Motor Rating (Sc (640%)3500rpmAccuracy ISO 23U-VV0.0050.005mmAccuracy ISO 23U-VGS 150 AGS 200 AmmMathine Dimension (Cotons120mmmmMathine Dimension (Sc 40%)0.01 / Full StrokemmMachine Dimension (Sc 40%)0.01 / Full StrokemmMathing Dia100mmmmMathine Dimension (Sc 40%)0.01 / Full StrokemmMathine Dimension (Sc 150 AGS 200 AmmMathi			600	600	mm		
Z Axis Servo Motor33kWDrive of TurretHydraulic MotorHydraulic MotorHydraulic MotorNumber of Stations12121Square Shank Size2525mmRound Shank Size Dia.4040mmIndex Time (Station to Station)35 (Servo Motor 0.09)35 (Servo Motor 0.09)aliterCoolantCoolant Tank Capacity31931911erMachine Dimension (L w W x H)2988 x 2041 x 18129mmMachine Horor Plan5.15.000mmSiemens a28D Control SystemSpindle Motor Rating (S6 40%)18363xWAccuracy ISO 23UTX.Z Axis Repeatability0.01 / Full Stroke0.01 / Full StrokemmAttomation0.01 / Full Stroke0.01 / Full StrokemmmmAttomation100mmmmmmMax. Turning Length100100mmMachine Dimension (S 40%)121120mmMax Sindle Speed100100mmMax Sindle Speed100100mmMax Sindle Speed0.01 / Full Stroke0.01 / Full StrokemmMax. Turning Length100100mmMachine Dimension120100mm	X, Z Axis Travel		30	30	m/min		
Drive of Turret Hydraulic Motor Hydraulic Motor Number of Stations (standard) 12 12 Square Shank Size 25 25 mm Round Shank Size Dia. 40 40 mm Round Shank Size Dia. 40 40 mm Index Time (Station to Station) 35 (Servo Motor 0.09) 35 (Servo Motor 0.09) sec Coolant Coolant Tank Capacity 319 319 liter Coolant Pressure 2.8 2.8 bar Machine Dimension (L×W×H) 2988 × 2041 × 1812 mm Machine Floor Plan 5.1 5.1 mm Siemens a28D Control Spindle Motor Rating (S6 40%) 18 18 kW Accuracy ISO 23U-U X.Z Axis Rostioning (S 40%) 0.01 / Full Stroke 0.01 / Full Stoke mm Accuracy ISO 23U-U X.Z Axis Repeatability 0.005 0.005 mm Accuracy Max. Turning Length 100 100 mm Matione Dimension 120 120 mm		X Axis Servo Motor	1.6	1.6	kW		
Number of Stations (standard) 12 12 Square Shank Size 25 25 mm Round Shank Size Dia. 40 40 mm Index Time (Station to Station) 35 (Servo Motor 0.09) 35 (Servo Motor 0.09) sec Coolant Coolant Tank Capacity 319 319 liter Coolant Pressure 2.8 2.8 bar Machine Dimension (L×W×H) 2988 × 2041 × 1812 mm Machine Floor Plan 5.1 5.1 mm Siemens 828D Control Spindle Motor Rating (S6 40%) 18 18 kW Accuracy ISO 23U-U X.Z Axis Repeatability 0.005 0.005 mm Accuracy X.Z Axis Repeatability 0.005 0.005 mm Options Kax. Turning Length 100 mm mm Mathing Dia. 120 mm mm mm		Z Axis Servo Motor	3	3	kW		
Turret / Top Plate(Standard)1212Square Shank Size2525mmRound Shank Size Dia.40mmIndex Time (Station to Station)35 (Servo Motor 0.09)35 (Servo Motor 0.09)CoolantCoolant Tank Capacity319319Coolant Coolant Pressure2.82.8barMachine Dimension (L×W×H)2988 x 2041 x 1812mmMachine Floor Plan5.15.1mmSiemens 828D ControlSpindle Motor Rating (S6 40%)1818kWSiemens 828D ControlSpindle Motor Rating (S6 40%)343343N-mAccuracy ISO 23U-UX.Z Axis Repeatability0.0050.005mmAccuracyMax. Turning Length100mmmmMax. Madining Dia.120mm120mm			Hydraulic Motor	Hydraulic Motor			
Plate Square Shark Size 25 25 25 10 Round Shank Size Dia. 40 40 mm Index Time .35 .35 (servo Motor 0.09) sec Coolant Coolant Tank Capacity 319 319 11er Coolant Tank Capacity 319 319 11er Machine Size / Coolant Tank Capacity 2988 x 2041 x 1812 2988 x 2041 x 1812 mm Machine Size / Machine Dimension 2988 x 2041 x 1812 2988 x 2041 x 1812 mm Machine Size / Machine Weight 4950 5000 mm Siemens Spindle Motor Rating (Se 40%) 18 18 kW Siemens Spindle Motor Rating (Se 40%) 3500 rpm System Spindle Torque Rating (Se 40%) 343 343 nm Accuracy ISO 23J-U X Z Axis Repetability 0.005 0.005 mm Qptions Kax, Turning Length 100 100 mm Max, Madining Dia. 120 mm mm	Turret / Top		12	12			
Index Time (Station to Station) 35 (Servo Motor 0.09) 35 (Servo Motor 0.09) sec Coolant Coolant Tank Capacity 319 1iter Coolant Tank Capacity 319 319 liter Coolant Tank Capacity 2.8 2.8 bar Machine Dimension (L × W × H) 2988 × 2041 × 1812 2988 × 2041 × 1812 mm Machine Horo Plan 5.1 5000 mm Siemens 828D Control System Spindle Motor Rating (S6 40%) 18 18 kW Accuracy ISO 230-C Max Spindle Speed 4200 3500 nm Accuracy ISO 230-C Spindle Torque Rating (S6 40%) 343 343 N-m Accuracy ISO 230-C Max Spindle Speed 0.01 / Full Stroke 0.01 / Full Stoke mm Accuracy ISO 230-C GS 150 A GS 200 A mm Max. Turning Length 100 100 mm Max. Madining Dia. 120 120 mm					mm		
Image: state					mm		
Coolant Coolant Presure 2.8 2.8 bar Machine Dimension (L×W×H) 2988 × 2041 × 1812 2988 × 2041 × 1812 mm Machine Dimension (L×W×H) 4950 5000 mm Machine Floor Plan 5.1 5.1 m² Siemens 828D Control System Spindle Motor Rating (S6 40%) 18 18 kW Max Spindle Speed 4200 3500 rpm System Spindle Torque Rating (S6 40%) 343 343 N-m Accuracy ISO 230-C X, Z Axis Positioning X, Z Axis Repeatability 0.01 / Full Stroke 0.01 / Full Stoke mm Options GS 150 A GS 200 A mm Max. Turning Length 100 100 mm Max. Madining Dia. 120 120 mm		(Station to Station)	(Servo Motor 0.09)	(Servo Motor 0.09)	sec		
Machine Dimension (L×W×H) 2988 × 2041 × 1812 2988 × 2041 × 1812 nm Machine Weight 4950 5000 mm Machine Floor Plan 5.1 5.1 m² Siemens 828D Control System Spindle Motor Rating (S6 40%) 18 18 kW Accuracy ISO 230-2 Max Spindle Speed 4200 3500 rpm Accuracy ISO 230-2 X, Z Axis Ropeatability 0.01 / Full Stroke 0.01 / Full Stroke mm Options GS I50 A GS 200 A mm Max. Maching Dia. 120 100 mm	Coolant	. ,			liter		
Machine Size / Weight (L × W × H) 2988 × 2041 × 1812 2988 × 2041 × 1812 mm Machine Weight 4950 5000 mm Machine Floor Plan 5.1 5.1 mm Siemens 828D Control Spindle Motor Rating (S6 40%) 18 18 kW System Spindle Torque Rating (S6 40%) 343 3500 rpm Accuracy ISO 230-7 X, Z Axis Positioning X, Z Axis Repeatability 0.01 / Full Stroke 0.01 / Full Stoke mm Options GS 150 A GS 200 A mm Max. Machining Dia. 120 120 mm			2.8	2.8	bar		
Machine Floor Plan 5.1 m ² Siemens 828D Control System Spindle Motor Rating (Sé 40%) 18 18 kW Max Spindle Speed 4200 3500 rpm System Spindle Torque Rating (Sé 40%) 343 343 N-m Accuracy ISO 230-2 V V Mm Mm Accuracy ISO 230-2 0.01 / Full Stroke 0.01 / Full Stroke mm Accuracy ISO 230-2 0.005 0.005 mm Options GS 150 A GS 200 A Mm Max. Turning Length 100 100 mm Machine Dimension 120 mm Mm	Machine Size /	(L x W x H)			mm		
Siemens 828D Control System Spindle Motor Rating (S6 40%) 18 18 kW Max Spindle Speed 4200 3500 rpm System Spindle Torque Rating (S6 40%) 343 343 N-m Accuracy ISO 230-2 Accuracy ISO 230-2 V V Mm Accuracy X, Z Axis Positioning X, Z Axis Repeatability 0.01 / Full Stroke 0.01 / Full Stoke mm Options GS I50 A GS 200 A V Max. Turning Length 100 100 mm Machine Dimension 120 mm Mm	Weight	ÿ					
Siemens 828D Control System 40% 40% 16 16 16 KVV Max Spindle Speed 4200 3500 rpm System Spindle Torque Rating (S6 40%) 343 343 N-m Accuracy ISO 230-2 X, Z Axis Positioning X, Z Axis Repeatability 0.01 / Full Stroke 0.01 / Full Stoke mm Options GS 150 A GS 200 A Automation Max. Turning Length 100 100 mm			5.1	5.1	m ²		
Control System Max Spindle Speed 4200 3500 rpm Spindle Torque Rating (S6 40%) 343 343 N-m Accuracy ISO 23U-2 X, Z Axis Positioning 0.01 / Full Stroke 0.01 / Full Stroke mm Accuracy X, Z Axis Repeatability 0.005 0.005 mm Options GS 150 A GS 200 A mm Max. Turning Length 100 100 mm Max. Madining Dia. 120 120 mm			18	18	kW		
Accuracy ISO 230-2 Accuracy ISO 230-2 Accuracy ISO 230-2 Accuracy ISO 230-2 X, Z Axis Positioning X, Z Axis Repeatability 0.01 / Full Stroke 0.01 / Full Stroke mm Options GS 150 A GS 200 A mm Automation Max. Turning Length 100 100 mm		Max Spindle Speed	4200	3500	rpm		
Accuracy X, Z Axis Positioning X, Z Axis Repeatability 0.01 / Full Stroke 0.01 / Full Stroke mm Options GS 150 A GS 200 A Mm Max. Turning Length 100 100 mm Max. Madining Dia. 120 120 mm	System		343	343	N-m		
Accuracy X, Z Axis Repeatability 0.005 0.005 mm Options GS 150 A GS 200 A mm Max. Turning Length 100 100 mm Automation Max. Madining Dia. 120 120 mm	Accuracy ISO 230-2						
Options GS 150 A GS 200 A Max. Turning Length 100 100 mm Max. Madining Dia. 120 120 mm	Accuracy						
Max. Turning Length 100 100 mm Automation Max. Madining Dia. 120 120 mm	Options						
Automation Max. Madining Dia. 120 120 mm Machine Dimension		Max. Turning Length			mm		
Automation Machine Dimension							
(L xW x H) 1038 x 1356 x 2286 3058 x 1356 x 2286 mm	Automation	Machine Dimension	1038 × 1356 × 2286	3058 × 1356 × 2286	mm		

Options					
Collet Adaption Chuck	A2-6	A2-8	Through Dia. 60	Hole	mm
2-Speed Range Spindle		Fanuc 0iTF			
	Morse Taper Center		MT#5		
Fully	Tail Stock Travel		625		mm
Programmable	Max. Part Length		578	545	mm
Tail Stock	Min. Part Length		20	0	mm
	Rapid Traverse Rate		5.5		m/min
Parts Catcher	Catching M	ethod	Arm	п Туре	
	Max. Part Diameter		Ø76		mm
Arm Type	Max. Part Length		160		mm
Part Conveyor	0				
Chip Conveyor		nge Type (for long rolle			
	Scrap	er Type (for fine or cru	ushed chips))	
Tool Probe Setter	Automatic Type				
Part Probe					
Oil Mist Collector			1		hp
		Bar Length	1250		mm
Bar Feeder		Bar Length	3200		mm
High Pressure Coolant Thru. Turret	Coolant Pressure		20		bar
Live Center					
Stack Light	Red-Yellow-Green Color				
Auto Door					
Live Tooling and C Axis	12 Stations Live Tooling Available				
Standard Accesso	ories				
Color LCD			8.4		in
3 Jaw Chuck / One Set of Soft					
Jaw Bar Feeder Interface					
Coolant Through Turret			2.8		bar
Work Lighting					
Foot Switch					
Tool Bag					

*To keep improvement and developing new functions, Hardinge Taiwan reserves the rights to change specifications without further notice

* Due to varying conditions, actual results may be greater or less than those listed,

DIMENSIONAL DRAWINGS GS 200/66 L / GS 250 L



Machine Configuration GS 200/66 L GS 250 L Spindle Nose A2-6 A2-8 Spindle Bore Thru Dia. 76 89 Chuck Size of 3 Jaw Dia. 8 in / Ø210 10 in. / Ø23 Spindle Spindle Center Height 1041 1041	mm
Spindle Bore Thru Dia. 76 89 Chuck Size of 3 Jaw Dia. 8 in / Ø210 10 in. / Ø25	mm
Chuck Size of 3 Jaw Dia. 8 in / Ø210 10 in. / Ø25	mm
Spindle Conter Height	
Spindle Spindle Center Height	54 mm
to Floor 1041 1041	mm
Spindle Center Dis. 431 431 to Front Door 431	mm
Draw Bar Clamping Hydraulic Hydraulic	
Spinde Motor Rating 18.5 18.5 (\$3 25%)	kW
FANUC Drive System Max Spindle Speed 4200 3500	rpm
Spindle Torque Rating (S3 25%) 330 403.5	N-m
Swing Over Way Covers 595 595	mm
Machining Max Turning Length 1050 1050	mm
Capacity Max Machining Dia. 356 356	mm
Through Draw Tube Ø66 Ø78 Bore Dia.	mm
X Axis Travel (VDI) 271.5 271.5	mm
Z Axis Travel 1050 1050	mm
X, Z Axis Travel X and Z Axis Rapid Traverse Rate 30 30	m/min
X Axis Servo Motor I.6 I.6	kW
Z Axis Servo Motor 3 3	kW
Drive of Turret Hydraulic Motor Hydraulic M	1otor
Number of Stations 12 12	
Turret / Top Plate Square Shank Size 25 25	mm
Round Shank Size Dia. 40 40	mm
Index Time .35 .35 (Station to Station) (Servo Motor 0.09) (Servo Motor	or 0.09) sec
Coolant Tank Capacity 379 379	liter
Coolant Pressure 2.8 2.8	bar
Machine Dimension (L × W × H) 3792 × 2041 × 1823 3792 × 2041	I x 1823 mm
Weight Machine Weight 5550 5600	
Machine Floor Plan 8.5 8.5	m ²
Siemens Spindle Motor Rating (S6 18 18	kW
828D Max Spindle Speed 4200 3500	rpm
System Spindle Torque Rating 343 343 (S6 40%)	N-m
Accuracy ISO 230-2	
X, Z Axis Positioning 0.01 / Full Stroke 0.01 / Full S	Stroke mm
Accuracy X, Z Axis Repeatability 0.005 0.005	mm

Options					
Collet Adaption Chuck	A2-6	A2-8	Through Dia. 60	Hole	mm
2-Speed Range Spindle		Fanuc 0iTF			
	Morse Taper Center		MT#5		
Fully	Tail Stock Travel		940		mm
Programmable	Max. Part Length		1012.5	995	mm
Tail Stock	Min. Part Length		20	20	mm
	Rapid Traverse Rate		5.5		m/min
Parts Catcher	Catching M	lethod	Arm	п Туре	
	Max. Part Diameter		Ø76		mm
Arm Type	Max. Part Length		160		mm
Part Conveyor					
Chip Conveyor	Н	inge Type (for long roll	ed chips)		
Chip Conveyor	Scrap	per Type (for fine or cru	ushed chips)	1	
Tool Probe Setter	Automatic Type				
Part Probe					
Oil Mist Collector			ļ		hp
		Bar Length	1250		mm
Bar Feeder		Bar Length	3200		mm
High Pressure Coolant Thru. Turret	Coolant Pressure		20		bar
Live Center					
Stack Light	Red-Yellow-Green Color				
Auto Door					
Live Tooling and C Axis	12 Stations Live Tooling Available				
Standard Accesso	ories				
Color LCD			8.4		in
3 Jaw Chuck / One Set of Soft					
Jaw Bar Feeder					
Interface					
Coolant			2.8		bar
Through Turret			2.0		Udi
Work Lighting					
Foot Switch					
Tool Bag					

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*To keep improvement and developing new functions, Hardinge Taiwan reserves the rights to change specifications without further notice

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