

MACHINE TOOLS



Best solution for Accuracy, Rigidity, and Productivity

N/GATA

BEST SOLUTION FOR ALL OF “MONOZUKURI”, MANUFACTURING

The brand name NIIGATA on a machine tool has stood for Quality, Reliability, and Innovation for more than 125 years. Niigata Machine Techno Co., Ltd. continues the tradition as A World Leader in Horizontal Machining Centers. Eliminate risks and increase your profits! Choose machines from the accurate heavy duty Full Boxways, the Hybrid Boxway / Linear Guide Pallet Models “H” series or “SPN” series, that is the high-speed, rigid, stationary-column, linear-roller guide featured. Choose NIIGATA with confidence.



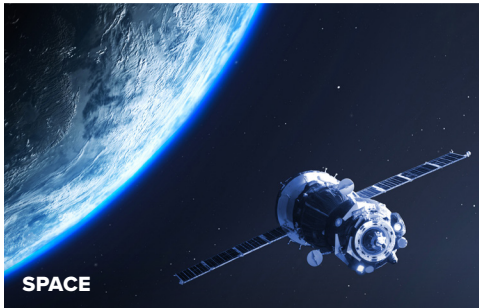
RAIL



AEROSPACE



AGRICULTURE



SPACE



TRANSPORTATION



DEFENSE



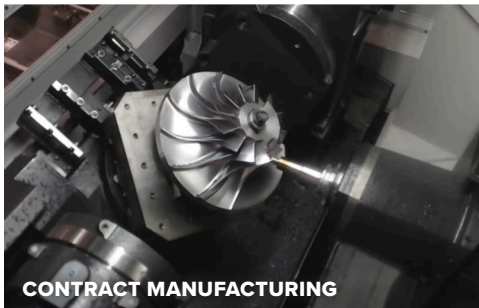
CONSTRUCTION



ENERGY



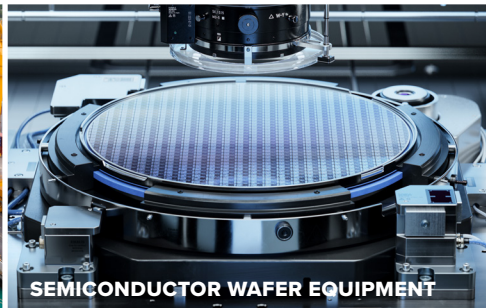
OIL & GAS



CONTRACT MANUFACTURING



SHIPPING



SEMICONDUCTOR WAFER EQUIPMENT

// SUMMARY OF NIIGATA MACHINE TECHNO CO., LTD.

- | | | | |
|-------------|--|-------------|--|
| 1895 | Niigata Engineering Co., Ltd. was established. | 1972 | Niigata Horizontal Machining Center Model: HN-series developed. (First column traverse style machining center in Japan.) |
| 1917 | The production of Universal head milling machine started. | 1976 | Machining center unmanned operational system developed. (A world leader in FMS technology.) |
| 1929 | Machine Tool production was moved to Niigata city. | 1977 | Sales in Europe started (first presence in Europe). |
| 1954 | Technical Partnership with Sundstrand (USA). | 1980 | Sales in USA started (first presence at Chicago show). |
| 1961 | NC milling machine Model: 22MVN developed. | 1987 | Total of 10,000 units of Universal milling machine (UM series) shipped. |
| 1968 | Machining center Model: 50 DIU (5 axis) developed. | | |
| 1969 | New Machine Tool Plant completed in Niigata-city (current location). | | |

// HN-S SERIES HYBRID GUIDE SYSTEM MACHINES

HIGH RIGIDITY • HIGH PRODUCTIVITY Large/Giant component envelope is achieved by longer axes travel. Niigata Hybrid Guide System, Column traverse structure enables unrivaled Heavy duty machining capability.

HN800-S



TRAVEL	X axis travel (longitudinal table)	1530mm (60.2")
	Y axis travel (spindle head up and down)	1230mm (48.4")
	Z axis travel (table front and rear)	1020mm (40.2")
TABLE	Pallet size	800 × 800mm (31.5 × 31.5")
	Table increments	1° [0.001"]
	Maximum mass on pallet (uniform load)	2500kg (5500 lbs)
SPINDLE	Spindle speeds	6000, 15000 RPM
	Spindle drive motor	40, 50, 60HP
	Spindle max. torque	866, 1033, 1438 ft.lbs
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z axis	50m/min (1968 ipm)
ATC	Tool magazine capacity	62 [88/128, Matrix 126/178/230/308]
MAXIMUM WORK ENVELOPE	Swing diameter x height	φ1750 × 1400mm (φ68.9 × 55.1")

[] Optional specifications *NC table only

HN1000-S



TRAVEL	X axis travel (longitudinal table)	2030mm (79.9")
	Y axis travel (spindle head up and down)	1650mm (64.9") [1800mm (70.87")]
	Z axis travel (table front and rear)	1200mm (47.24")
TABLE	Pallet size	1000 × 1000mm (39.4 × 39.4")
	Table increments	1° [0.001"]
	Maximum mass on pallet (uniform load)	3500kg (7700 lbs) [5000kg (11000 lbs)*]
SPINDLE	Spindle speeds	6000, 15000 RPM
	Spindle drive motor	40, 50, 60HP
	Spindle max. torque	866, 1033, 1438 ft.lbs
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z axis	40m/min (1575 ipm)
ATC	Tool magazine capacity	62 [88/128, Matrix 126/178/230/308]
MAXIMUM WORK ENVELOPE	Swing diameter x height	φ2300 × 1850mm (φ90.6 × 72.8")

[] Optional specifications *NC table only

HN1250-S



TRAVEL	X axis travel (longitudinal table)	2200mm (86.61")
	Y axis travel (spindle head up and down)	1800mm (70.87")
	Z axis travel (table front and rear)	1200mm (47.24")
TABLE	Pallet size	1250 × 1000mm (49.2 × 39.4")
	Table increments	1° [0.001"]
	Maximum mass on pallet (uniform load)	3500kg (7700 lbs) [5000kg (11000 lbs)*]
SPINDLE	Spindle speeds	6000, 15000 RPM
	Spindle drive motor	40, 50, 60HP
	Spindle max. torque	866, 1033, 1438 ft.lbs
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z axis	40m/min (1575 ipm)
ATC	Tool magazine capacity	62 [88/128, Matrix 126/178/230/308]
MAXIMUM WORK ENVELOPE	Swing diameter x height	φ2500 × 2000mm (φ98.4 × 78.7")

[] Optional specifications *NC table only

HN1600-S



TRAVEL	X axis travel (longitudinal table)	3050mm (120.1")
	Y axis travel (spindle head up and down)	86.6", 100"
	Z axis travel (table front and rear)	1420mm (55.9")
TABLE	Pallet size	1600 × 1320mm (62.99 × 51.97")
	Table increments	0.001"
	Maximum mass on pallet (uniform load)	17,600, 22,000, 31,000 lbs
SPINDLE	Spindle speeds	6000, 15000 RPM
	Spindle drive motor	40, 50, 60HP
	Spindle max. torque	866, 1033, 1438 ft.lbs
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z axis	30m/min (1181 ipm)
ATC	Tool magazine capacity	62 [88/128, Matrix 126/178/230]
MAXIMUM WORK ENVELOPE	Swing diameter x height	φ3200 × 3000mm (φ126 × 118.1")

[] Optional specifications *NC table only

- 1988** 100,000 rpm spindle Model UHS10 developed. (First 100,000 rpm spindle in the world)
- 1994** High Speed, Box in Box® construction, Horizontal Machining Center Model: SPN50 developed.
- 1999** High Speed, high output, Horizontal production center Model: SPN50-HO developed.
- 2002** 5th generation, Heavy Duty Boxway style Horizontal Machining center Model: HN80D developed.

- 2005** New world class productivity, High production center Model: SPN01 series developed.
- 2014** Horizontal Machining Center with V-slide Model: HN800-V developed.
- 2014** Simultaneous 5-axis Machining Center Model: HN50E-5X developed.
- 2015** Horizontal Machining Center for #40 spindle: PN series developed.
- 2016** Simultaneous 5-axis Machining Center Model: HN63E-5X developed.
- 2017** New BOX in BOX® machine, N7 developed.
- 2021** Simultaneous 5-Axis Machining Center Model: HN80E-5X

// HN SERIES BOXWAY MACHINES

LARGEST WORKPIECE SIZE IN MACHINING AREA • HEAVY DUTY CUTTING • HIGH RIGIDITY Large/Massive component envelope is achieved by longer axes travels. Niigata Boxway System, Column traverse structure enables unequaled Heavy duty machining capability.

HN50E



TRAVEL	X axis travel (longitudinal table)	800mm (31.5")
	Y axis travel (spindle head up and down)	700mm (27.6")
	Z axis travel (column in & out)	580mm (22.8")
TABLE	Pallet size	500 × 500mm (19.7 × 19.7")
	Table increments	1° [0.001°]
	Maximum mass on pallet (uniform load)	800kg (1760 lbs)
SPINDLE	Spindle speeds	6000 min ⁻¹ (rpm)
	Spindle drive motor	35HP
	Spindle max. torque	665 ft.lbs
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z axis	30m/min (1180 ipm)
ATC	Tool magazine capacity	60 [119/179, Matrix 126/178/230]
MAXIMUM WORK ENVELOPE	Swing diameter x height	φ800 × 800mm (φ31.5 × 31.5")

[] Optional specifications *NC table only

HN63E



TRAVEL	X axis travel (longitudinal table)	1080mm (42.5")
	Y axis travel (spindle head up and down)	930mm (36.6")
	Z axis travel (column in & out)	830mm (32.7")
TABLE	Pallet size	630 × 630mm (24.8×24.8")
	Table increments	1° [0.001°]
	Maximum mass on pallet (uniform load)	1200kg (2640 lbs)
SPINDLE	Spindle speeds	6000 min ⁻¹ (rpm)
	Spindle drive motor	35HP
	Spindle max. torque	665 ft.lbs
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z axis	30m/min (1180 ipm)
ATC	Tool magazine capacity	62 [88/128, Matrix 126/178/230]
MAXIMUM WORK ENVELOPE	Swing diameter x height	φ1080 × 1000mm (φ42.5×39.4")

[] Optional specifications *NC table only

HN800-V



TRAVEL	X axis travel (longitudinal table)	1530mm (60.2")
	Y axis travel (spindle head up and down)	1230mm (48.4")
	Z axis travel (column in & out)	1020mm (40.2")
TABLE	Pallet size	800 × 800mm (31.5 × 31.5")
	Table increments	1° [0.001°]
	Maximum mass on pallet (uniform load)	2500kg (5500 lbs)
SPINDLE	Spindle speeds	6000 min ⁻¹ (rpm) [15000 min ⁻¹ (rpm)]
	Spindle drive motor	35HP
	Spindle max. torque	665 ft.lbs
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z axis	50m/min (1968 ipm)
ATC	Tool magazine capacity	62 [88/128, Matrix 126/178/230/308]
MAXIMUM WORK ENVELOPE	Swing diameter x height	φ1750 × 1400mm (φ68.9 × 55.1")

[] Optional specifications *NC table only

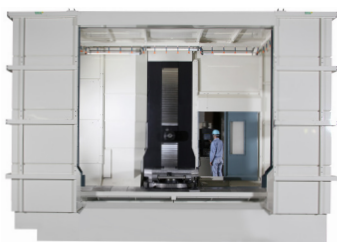
HN100D-II



TRAVEL	X axis travel (longitudinal table)	2030mm (79.9")
	Y axis travel (spindle head up and down)	1650mm (64.9")
	Z axis travel (column in & out)	1200mm (47.24") [1480mm (58.26")]
TABLE	Pallet size	1000 × 1000mm (39.4 × 39.4")
	Table increments	1° [0.001°]
	Maximum mass on pallet (uniform load)	3500kg (7700 lbs) [5000kg (11000 lbs)*]
SPINDLE	Spindle speeds	6000 min ⁻¹ (rpm) [15000 min ⁻¹ (rpm)]
	Spindle drive motor	35HP
	Spindle max. torque	665 ft.lbs
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z axis	20m/min (787 ipm)
ATC	Tool magazine capacity	62 [88/128, Matrix 126/178/230/308]
MAXIMUM WORK ENVELOPE	Swing diameter x height	φ2300 × 1850mm (φ90.6 × 72.8")

[] Optional specifications *NC table only

HN130D



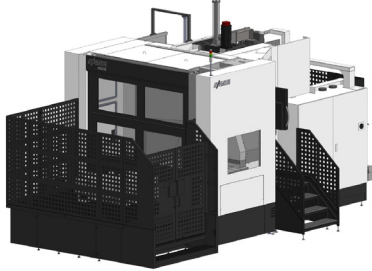
TRAVEL	X axis travel (longitudinal table)	3050mm (120.1")
	Y axis travel (spindle head up and down)	2200mm (86.61"), 2350mm (92.51")
	Z axis travel (column in & out)	1420mm (55.9")
TABLE	Pallet size	1320 × 1320mm (51.97 × 51.97")
	Table increments	0.001°
	Maximum mass on pallet (uniform load)	8000kg (17600 lbs)* [10000kg (22000 lbs)*]
SPINDLE	Spindle speeds	6000 min ⁻¹ (rpm) [15000 min ⁻¹ (rpm)]
	Spindle drive motor	35HP
	Spindle max. torque	665 ft.lbs
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z axis	18/12/12m/min (709/472/472 ipm)
ATC	Tool magazine capacity	62 [88/128, Matrix 126/178/230]
MAXIMUM WORK ENVELOPE	Swing diameter x height	φ3200 × 3000mm (φ126 × 118.1")

[] Optional specifications *NC table only

// HN-FC SERIES FACING CENTERS

VERSATILE MACHINING • HEAVY DUTY MACHINING • HIGH RIGIDITY Machine with versatile spindle, U axis and W axis function capability.

HN80E FC



TRAVEL	X axis travel (longitudinal table)	1530mm (60.2")
	Y axis travel (spindle head up and down)	900mm (35.4")
	Z axis travel (column in & out)	1020mm (40.2")
	U axis travel (facing slide)	130mm (5.1")
	W axis travel (bar spindle quill travel)	300mm (11.8")
TABLE	Pallet size	800 × 800mm (31.5 × 31.5")
	Table increments	1° [0.001°]
	Maximum mass on pallet (uniform load)	2500kg (5500 lbs)
SPINDLE	Spindle speeds (W axis)	2500 min ⁻¹ (rpm)
	Spindle drive motor	AC26/22kW (AC35/30HP)
	W axis quill diameter	φ130mm (5.2")
	Spindle max. torque (W axis)	659.5N·m (487 ft.lbs)
	Spindle taper (W axis)	No. 50
	Facing head speed (U axis)	600 min ⁻¹ (rpm)
	Spindle max. torque (U axis)	1486N·m (1097 ft.lbs)
	Spindle taper (U axis)	No. 50 short taper
RAPID TRAVERSE	X axis	32m/min (1260 ipm)
	Y axis	15m/min (591 ipm)
	Z axis	20m/min (787 ipm)
	U axis	5m/min (197 ipm)
	W axis	5m/min (197 ipm)
ATC	Tool magazine capacity	62 [88/128/175/230]
MAXIMUM WORK ENVELOPE	Swing diameter x height	φ1750 × 1400mm (φ68.9 × 55.1")

[] Optional specifications *NC table only

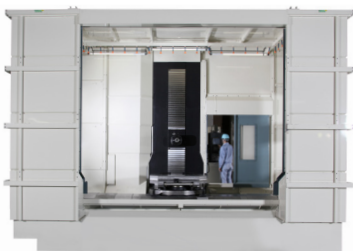
HN100D-II FC



TRAVEL	X axis travel (longitudinal table)	2030mm (79.9")
	Y axis travel (spindle head up and down)	1300mm (51.1")
	Z axis travel (column in & out)	1200mm (47.24")
	U axis travel (facing slide)	130mm (5.1") [230mm (9.0")]
	W axis travel (bar spindle quill travel)	300mm (11.8")
TABLE	Pallet size	1000 × 1000mm (39.4 × 39.4")
	Table increments	1° [0.001°]
	Maximum mass on pallet (uniform load)	3500kg (7700 lbs) [5000kg (11000 lbs)*]
SPINDLE	Spindle speeds (W axis)	2500 min ⁻¹ (rpm)
	Spindle drive motor	AC26/22kW (AC35/30HP)
	W axis diameter	φ130mm (5.2")
	Spindle max. torque (W axis)	659.5N·m (487 ft.lbs)
	Spindle taper (W axis)	No. 50
	Facing head speed (U axis)	600 min ⁻¹ (rpm)
	Spindle max. torque (U axis)	1486N·m (1097 ft.lbs)
	Spindle taper (U axis)	No.50 short taper
RAPID TRAVERSE	X axis	20m/min (787 ipm)
	Y axis	15m/min (591 ipm)
	Z axis	15m/min (591 ipm)
	U axis	5m/min (197 ipm)
	W axis	5m/min (197 ipm)
ATC	Tool magazine capacity	62 [88/128/175/255]
MAXIMUM WORK ENVELOPE	Swing diameter x height	φ2300 × 1850mm (φ90.6 × 72.8")

[] Optional specifications *NC table only

HN130D FC



TRAVEL	X axis travel (longitudinal table)	3050mm (120.1")
	Y axis travel (spindle head up and down)	1770mm (69.7")
	Z axis travel (column in & out)	1420mm (55.9")
	U axis travel (facing slide)	130mm (5.1") [230mm (9.0")]
	W axis travel (bar spindle quill travel)	300mm (11.8")
TABLE	Pallet size	1320 × 1320mm (51.97 × 51.97")
	Table increments	0.001°
	Maximum mass on pallet (uniform load)	8000kg (17600 lbs)* [10000kg (22000 lbs)*]
SPINDLE	Spindle speeds (W axis)	2500 min ⁻¹ (rpm)
	Spindle drive motor	AC26/22kW (AC35/30HP)
	W axis diameter	φ130mm (5.2")
	Spindle max. torque (W axis)	659.5N·m (487 ft.lbs)
	Spindle taper (W axis)	No. 50
	Facing head speed (U axis)	600 min ⁻¹ (rpm)
	Spindle max. torque (U axis)	1486N·m (1097 ft.lbs)
	Spindle taper (U axis)	No. 50 short taper
RAPID TRAVERSE	X axis	18m/min (709 ipm)
	Y axis	12m/min (472 ipm)
	Z axis	12m/min (472 ipm)
	U axis	5m/min (197 ipm)
	W axis	5m/min (197 ipm)
ATC	Tool magazine capacity	62 [88/128/175/255]
MAXIMUM WORK ENVELOPE	Swing diameter x height	φ3200 × 3000mm (φ126 × 118.1")

[] Optional specifications *NC table only

// HN-5X SERIES BOXWAY STYLE

HEAVY DUTY MACHINING TYPE 5-AXIS MACHINE 5-axis machine that accumulates the results of difficult-to-cut material processing and efficiently processes

HN50E-5X



TRAVEL	X axis travel (longitudinal table)	800mm (31.5")
	Y axis travel (spindle head up and down)	930mm (36.6")
	Z axis travel (column in and out)	830mm (32.7")
TABLE	A axis	10° ~ -100°
	B axis	360°
	Pallet size	500 × 500mm (19.7× 19.7")
	Table increments	0.001"
	Maximum mass on pallet (uniform load)	600kg (1320 lbs)
SPINDLE	Spindle speeds	6000 min ⁻¹ (rpm)
	Spindle drive motor	AC26/22kW (AC35/30HP)
	Spindle max. torque	901N·m (665 ft.lbs)
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z axis	30m/min (1180 ipm)
	A, B axis	A: 8 min ⁻¹ (rpm) B: 20 min ⁻¹ (rpm)
ATC	Tool magazine capacity	62 [88/128, Matrix 126/178/230]
MAXIMUM WORK ENVELOPE	Swing diameter × height	φ750 × 700mm (φ29.5 × 27.55")

[] Optional specifications *NC table only

HN63E-5X



TRAVEL	X axis travel (longitudinal table)	900mm (35.4")
	Y axis travel (spindle head up and down)	930mm (36.6")
	Z axis travel (column in and out)	830mm (32.7")
TABLE	A axis	10° ~ -100°
	B axis	360°
	Pallet size	630 × 630mm (24.8 × 24.8")
	Table increments	0.001"
	Maximum mass on pallet (uniform load)	1000kg (2200 lbs)
SPINDLE	Spindle speeds	6000 min ⁻¹ (rpm)
	Spindle drive motor	AC26/22kW (AC35/30HP)
	Spindle max. torque	901N·m (665 ft.lbs)
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z axis	30m/min (1180 ipm)
	A, B axis	A: 6 min ⁻¹ (rpm) B: 15 min ⁻¹ (rpm)
ATC	Tool magazine capacity	62 [88/128, Matrix 126/178/230]
MAXIMUM WORK ENVELOPE	Swing diameter × height	φ950 × 800mm (φ37.4 × 31.5")

[] Optional specifications *NC table only

HN80E-5X



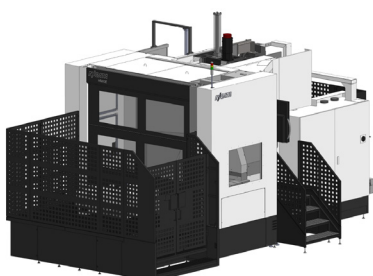
TRAVEL	X axis travel (longitudinal table)	1250mm (49.2")
	Y axis travel (spindle head up and down)	1230mm (48.4")
	Z axis travel (column in and out)	1200mm (47.2")
TABLE	A axis	10° ~ -100°
	B axis	360°
	Pallet size	800 × 800mm (31.5 × 31.5")
	Table increments	1" [0.001"]
	Maximum mass on pallet (uniform load)	1500g (3300 lbs)
SPINDLE	Spindle speeds	6000 min ⁻¹ (rpm)
	Spindle drive motor	AC30/22 kW (AC40/29HP)
	Spindle max. torque	1200N·m (886 ft.lbs)
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z axis	30m/min (1181 ipm)
	A, B axis	A: 6 min ⁻¹ (rpm) B: 11.1 min ⁻¹ (rpm)
ATC	Tool magazine capacity	62 [88/128, Matrix 126/178/230]
MAXIMUM WORK ENVELOPE	Swing diameter × height	φ1250 × 1000mm (φ49.2 × 39.3")

[] Optional specifications *NC table only

// HN-BAR SERIES BAR MACHINES

VERSATILE MACHINING • HEAVY DUTY MACHINING • HIGH RIGIDITY Boxway style machine with boring spindle.

HN80E BAR



TRAVEL	X axis travel (longitudinal table)	1530mm (60.2")
	Y axis travel (spindle head up and down)	1100mm (43.3")
	Z axis travel (column in & out)	1020mm (40.2") [1200mm (47.24")]
	W axis travel (BAR spindle quill travel)	535mm (21.1")
TABLE	Pallet size	800 × 800mm (31.5×31.5")
	Table increments	1" [0.001"]
	Maximum mass on pallet (uniform load)	2500kg (5500 lbs)
SPINDLE QUILL DIAMETER 130mm (5.2")	Spindle speeds	3500RPM
	Spindle drive motor	50HP
	Spindle max. torque	1354 ft.lbs [972 ft.lbs]
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z, W axis	1575/1575/1575/197 ipm
ATC	Tool magazine capacity	62 [88/128, Matrix 126/178/230]
MAXIMUM WORK ENVELOPE	Swing diameter x height	φ1750 × 1400mm (φ68.9 × 55.1")

() is 1250-S [] Optional specifications *NC table only

HN100D-II BAR



TRAVEL	X axis travel (longitudinal table)	2030mm (79.9")
	Y axis travel (spindle head up and down)	1500mm (59.06")
	Z axis travel (column in & out)	1200mm (47.24") [1480mm (58.26")]
	W axis travel (BAR spindle quill travel)	535mm (21.1")
TABLE	Pallet size	1000 × 1000mm (39.4 × 39.4")
	Table increments	1° [0.001"]
	Maximum mass on pallet (uniform load)	3500kg (7700 lbs) [5000kg (11000 lbs)*]
SPINDLE QUILL DIAMETER 130mm (5.2")	Spindle speeds	3500RPM
	Spindle drive motor	50HP
	Spindle max. torque	1836N-m (1354 ft.lbs) [1318N-m (972 ft.lbs)]
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z, W axis	15/20/20/5 m/min (590/787/787/197 ipm)
ATC	Tool magazine capacity	62 [88/128, Matrix 126/178/230]
MAXIMUM WORK ENVELOPE	Swing diameter x height	φ2300 × 1850mm (φ90.6 × 72.8")

[] is 1250-S [] Optional specifications *NC table only

HN130D BAR



TRAVEL	X axis travel (longitudinal table)	3050mm (120.1")
	Y axis travel (spindle head up and down)	2050mm (80.7"), 2200mm (86.61")
	Z axis travel (column in & out)	1420mm (55.9")
	W axis travel (BAR spindle quill travel)	535mm (21.1")
TABLE	Pallet size	1320 × 1320mm (51.97 × 51.97")
	Table increments	0.001°
	Maximum mass on pallet (uniform load)	8000kg (17600 lbs)* [10000kg (22000 lbs)*]
SPINDLE QUILL DIAMETER 130mm (5.2")	Spindle speeds	3500RPM
	Spindle drive motor	50HP
	Spindle max. torque	1836N-m (1354 ft.lbs) [1318N-m (972 ft.lbs)]
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z, W axis	18/12/12/5 m/min (709/472/472/197 ipm)
ATC	Tool magazine capacity	62 [88/128, Matrix 126/178/230]
MAXIMUM WORK ENVELOPE	Swing diameter x height	φ3200 × 3000mm (φ126 × 118.1")

[] is 1250-S [] Optional specifications *NC table only

HN-S BAR SERIES BAR MACHINES

VERSATILE MACHINING • HEAVY DUTY MACHINING • HIGH RIGIDITY Hybrid guide system machine with boring spindle.

HN800-S BAR



TRAVEL	X axis travel (longitudinal table)	1530mm (60.2")
	Y axis travel (spindle head up and down)	1100mm (43.3")
	Z axis travel (table front and rear)	1020mm (40.2")
	W axis travel (BAR spindle quill travel)	535mm (21.1")
TABLE	Table working surface	800 × 800mm (31.5×31.5")
	Table increments	1° [0.001"]
	Maximum mass on pallet (uniform load)	2500kg (5500 lbs)
SPINDLE QUILL DIAMETER 130mm (5.2")	Spindle speeds	3500RPM
	Spindle drive motor	AC 40 / 30 HP
	Spindle max. torque	1836N-m (1354 ft.lbs)
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z, W axis	50/5 m/min (1968/197 ipm)
ATC	Tool magazine capacity	62 [88/128/175/255, Matrix 126/178/230]
MAXIMUM WORK ENVELOPE	Swing diameter x height	φ1750 × 1400mm (φ68.9 × 55.1")

[] Optional specifications *NC table only

HN1000-S BAR



TRAVEL	X axis travel (longitudinal table)	2030mm (79.9")
	Y axis travel (spindle head up and down)	1500mm (59.06")
	Z axis travel (table front and rear)	1200mm (47.24")
	W axis travel (BAR spindle quill travel)	535mm (21.1")
TABLE	Pallet size	1000 × 1000mm (39.4×39.4")
	Table increments	1° [0.001"]
	Maximum mass on pallet (uniform load)	3500kg (7700 lbs) [5000kg (11000 lbs)*]
SPINDLE QUILL DIAMETER 130mm (5.2")	Spindle speeds	3500RPM
	Spindle drive motor	50HP
	Spindle max. torque	1836N-m (1354 ft.lbs) [1318N-m (972 ft.lbs)]
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z, W axis	40/5 m/min (1575/197 ipm)
ATC	Tool magazine capacity	62 [88/128, Matrix 126/178/230]
MAXIMUM WORK ENVELOPE	Swing diameter x height	φ2300 × 1850mm (φ90.6 × 72.8")

[] Optional specifications *NC table only

HN1250-S BAR



TRAVEL	X axis travel (longitudinal table)	2200mm (86.61")
	Y axis travel (spindle head up and down)	1650mm (64.96")
	Z axis travel (table front and rear)	1200mm (47.24")
	W axis travel (BAR spindle quill travel)	535mm (21.1")
TABLE	Pallet size	1250 × 1000mm (49.2 × 39.4")
	Table increments	1° [0.001"]
	Maximum mass on pallet (uniform load)	3500kg (7700 lbs) [5000kg (11000 lbs)*]
SPINDLE QUILL DIAMETER 130mm (5.2")	Spindle speeds	3500RPM
	Spindle drive motor	50HP
	Spindle max. torque	1836N-m (1354 ft.lbs) [1318N-m (972 ft.lbs)]
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z, W axis	40/5 m/min (1575/197 ipm)
ATC	Tool magazine capacity	62 [88/128, Matrix 126/178/230]
MAXIMUM WORK ENVELOPE	Swing diameter x height	φ2500 × 2000mm (φ98.4 × 78.7")

[] Optional specifications *NC table only

HN1600-S BAR

TRAVEL	X axis travel (longitudinal table)	3050mm (120.1")
	Y axis travel (spindle head up and down)	2050mm (80.7"), 2200mm (86.61")
	Z axis travel (table front and rear)	1420mm (55.9")
	W axis travel (BAR spindle quill travel)	535mm (21.1")
TABLE	Pallet size	1600 × 1320mm (62.99 × 51.97") (Larger options available)
	Table increments	0.001"
	Maximum mass on pallet (uniform load)	8000kg (17600 lbs)* [10000kg (22000 lbs)*] [14000kg (31000 lbs)*]
SPINDLE QUILL DIAMETER 130mm (5.2")	Spindle speeds	3500RPM
	Spindle drive motor	50HP
	Spindle max. torque	1836N-m (1354 ft.lbs) [1318N-m (972 ft.lbs)]
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z, W axis	30/5 m/min (1181/197 ipm)
ATC	Tool magazine capacity	62 [88/128, Matrix 126/178/230]
MAXIMUM WORK ENVELOPE	Swing diameter x height	φ3200 × 3000mm (φ126 × 118.1")

[] Optional specifications *NC table only

// SPN SERIES ROLLER GUIDE MACHINES

HIGH ACCURACY • HIGH PRODUCTIVITY Leading Horizontal Machining Center SPN series equipped with double Box Structure aims to achieve better longer volumetric accuracy & to maintain stable accuracy, even after many years of production. Main Rigid frame structure achieves Heavy duty & High Accuracy Machining by supporting Heavy Mass Rapid movement.

SPN-901

TRAVEL	X axis travel (saddle side to side)	1500mm (59.1")
	Y axis travel (spindle head up and down)	1300mm (51.2")
	Z axis travel (table front and rear)	1150mm (45.3")
TABLE	Pallet size	800 × 800mm (31.5 × 31.5")
	Table increments	1° [0.001"]
	Maximum mass on pallet (uniform load)	2500kg (5500 lbs)
SPINDLE	Spindle speeds	8000 min ⁻¹ (rpm) [15000 min ⁻¹ (rpm)]
	Spindle drive motor	AC30/22kW (AC40/29.5HP)
	Spindle max. torque	600N-m (443 ft.lbs) [1009N-m (744ft.lbs)]
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z axis	50m/min (1968 ipm)
ATC	Tool magazine capacity	60 [Matrix 126/178/230]
MAXIMUM WORK ENVELOPE	Swing diameter x height	φ1750 × 1400mm (φ68.9 × 55.1")

[] Optional specifications *NC table only

// HPN SERIES ROLLER GUIDE MACHINES

NEW HPN800 Niigata's Unique Design "Hybrid Style" Guideway System

HIGHER PRODUCTIVITY • HEAVIER DUTY • GREATER WORKPIECE ENVELOPE • VARIETY OF HIGH PERFORMANCE SPINDLES New HPN800 employs ultra-rigid roller-guide system on X and Z axes with hardened, ground true box-way system on Y axis to maximize damping characteristics in the cut. A one piece ultrarigid T-shape machine base with honeycomb structure and 3 point leveling. A horizontal machine for combined substantial rough machining with precision finish processes.

HPN-800

TRAVEL	X axis travel (column)	1529mm (60.2")
	Y axis travel (vertical head)	1229mm (48.4")
	Z axis travel (table)	1219mm (48.0")
TABLE	Pallet size	800 × 800mm (31.5 × 31.5")
	Table increments	1° [0.001"]
	Maximum load on pallet (centralized)	2500kg (5500 lbs)
SPINDLE	Spindle speeds	8000 min ⁻¹ (rpm) [15000 min ⁻¹ (rpm)]
	Spindle drive motor	AC55kW (AC73HP)
	Spindle max. torque	1202N-m (886 ft.lbs)
	Spindle taper	No. 50
RAPID TRAVERSE	X, Y, Z axis	60m/min (2361 ipm)
ATC	Tool magazine capacity	90 [128]
MAXIMUM WORK ENVELOPE	Maximum swing diameter	φ1750mm (φ68.8")

[] Optional specifications *NC table only



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All non-metric values are converted from metric measurements.

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