Campro

CNC Vertical

Machining Center

CNV Series

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QAC11-01

• Machine specifications and design are subject to change without prior notice due to on-going innovation.

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CE ISO 9001

Campro Precision Machinery Co., Ltd.
www.campro.com.tw

Line Up

Campro CNV Series is designed for economy and efficiency that fits both entry level and advanced users.

The cast iron construction was designed using "Finite Element Analysis (FEA) and Advanced 3D Software and is extremely rigid and provides extremely accurate machining capabilities as well as high metal removal rates.

The CNV series was ergonomically designed from the movable control panel to chip disposal and many other design features to reduce operator fatigue and increase working efficiency.

CNV-1300

CNV-1100

CNV-1050

CNV-550

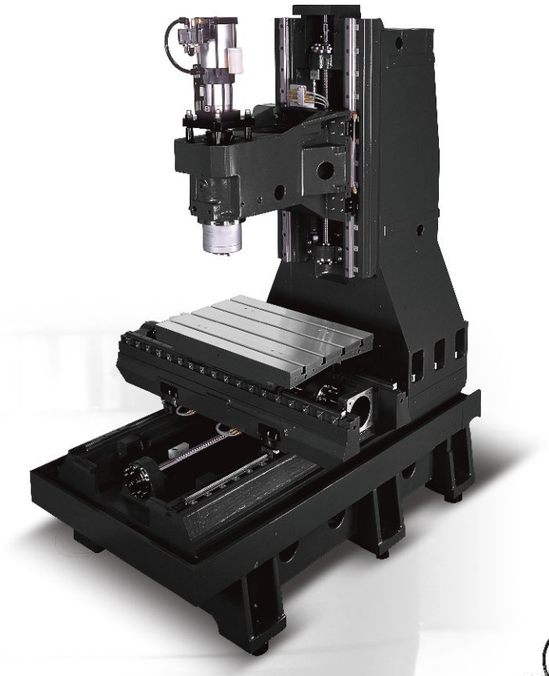
CNV-750

CNV-850

Automatic Loading / Unloading System

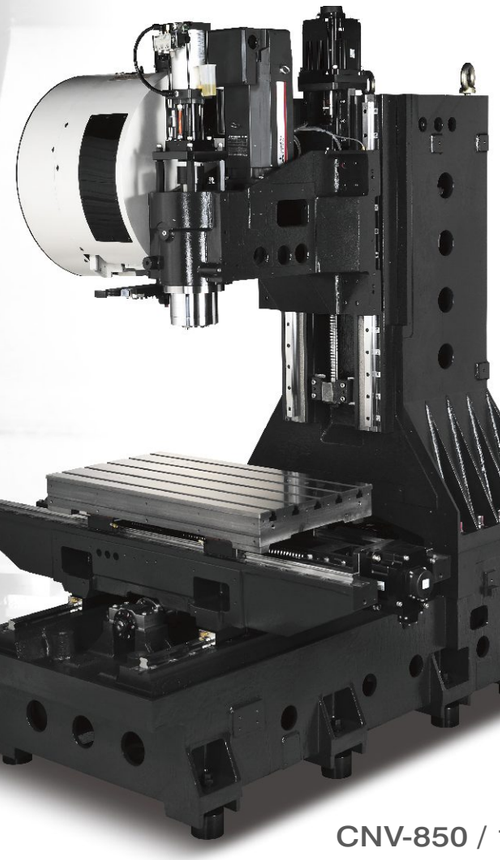
*CNV-550 / 750 / 850 / 1050 are Linear Guideways on 3 axes

CNV-550 / 750 / 850 / 1050 Features



CNV-550 / 750 structure

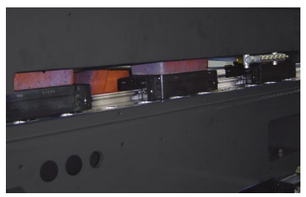
- Linear guideways on all three axes provide high speed yet rigid machining capabilities for a wide range of machining requirements from small lot size to mass production for the automotive industry.
- CNV-850/1050 are equipped with heavy duty roller type linear guideways on the Z-Axis
- All axes are equipped with direct drive servo motor with coupling.
- The Z-axis uses a servo motor brake instead of a counterbalance which provides superior surface finishes and accuracy.



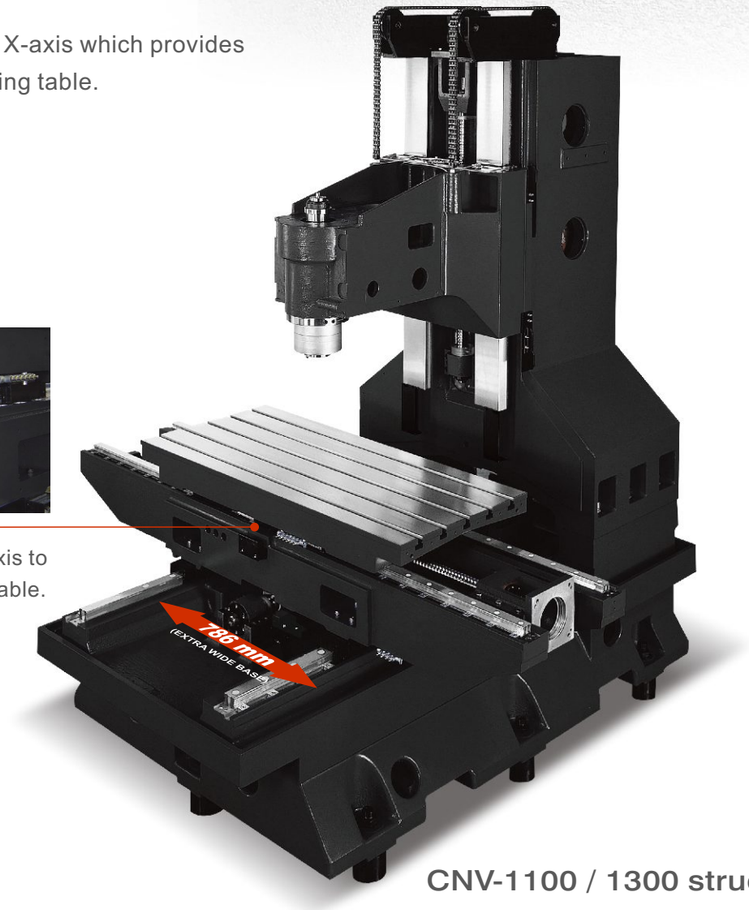
CNV-850 / 1050 structure

CNV-1100 / 1300 Features

- Box guideways on the Z-axis increases rigidity and minimizes vibration.
- The X & Y axes utilize precision heavy loading linear guideways for high accuracy and high metal removal rates.
- The counter-balance system is equipped with a guide rail to increase stability and avoid vibration during high feedrate or rapid traverse to ensure machining accuracy.
- The extra wide base and massive saddle provides complete support for high accuracy and high metal removal rate machining.
- Three blocks on the X-axis which provides full support for working table.



Three blocks on the X-axis to full support for working table.



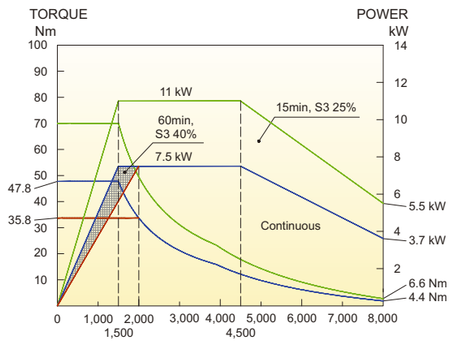
CNV-1100 / 1300 structure

Spindle Diagram

8,000 RPM Belt Type Spindle

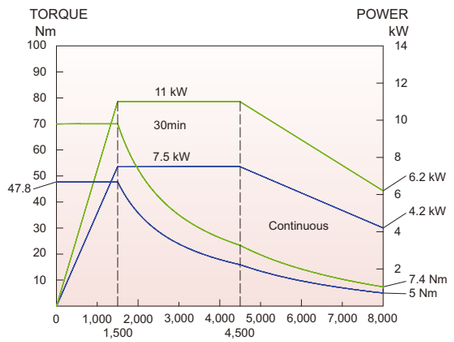
FANUC 15HP

Model : 550 / 750 / 850 / 1050 / 1100



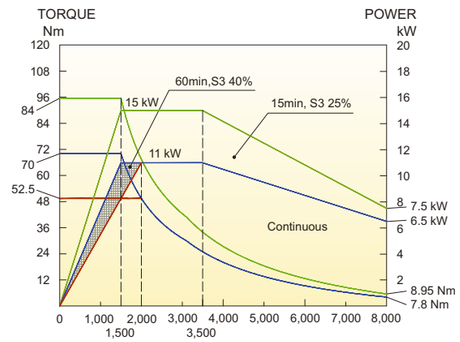
MITSUBISHI 15HP

Model : 550 / 750 / 850 / 1050 / 1100 / 1300



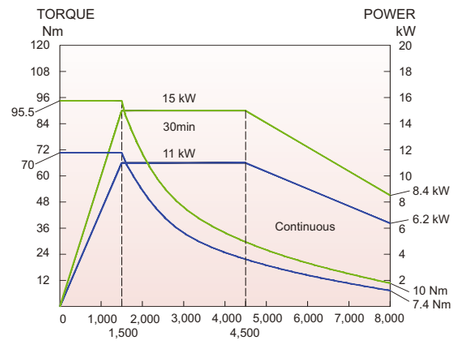
FANUC 20HP (Opt.)

Model : 850 / 1050 / 1100 / 1300



MITSUBISHI 20HP (Opt.)

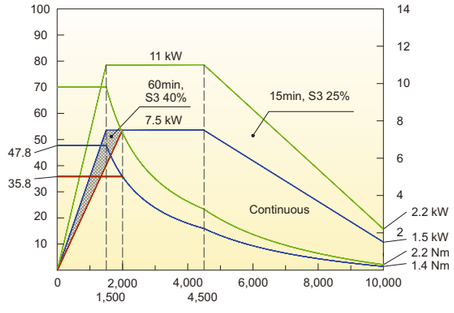
Model : 850 / 1050 / 1100 / 1300



10,000 RPM Belt Type Spindle (Opt.)

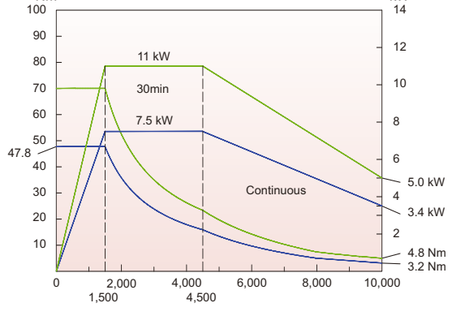
FANUC 15HP

Model : 550 / 750 / 850 / 1050 / 1100



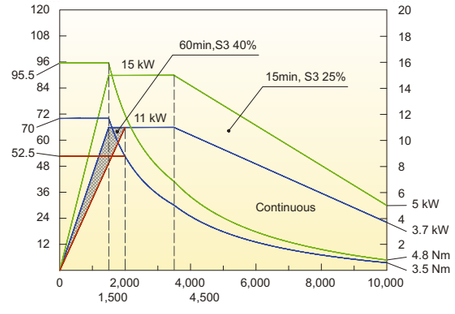
MITSUBISHI 15HP

Model : 550 / 750 / 850 / 1050 / 1100 / 1300



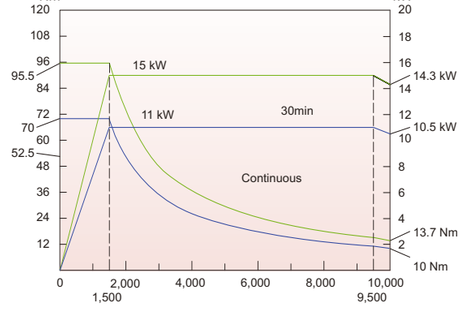
FANUC 20HP

Model : 850 / 1050 / 1100 / 1300



MITSUBISHI 20HP

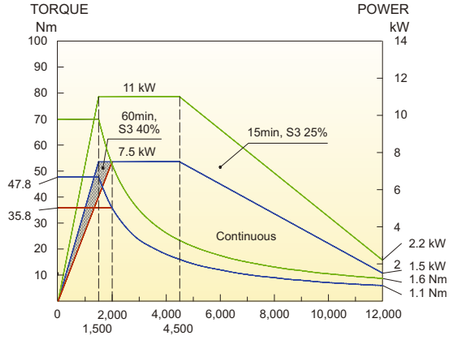
Model : 850 / 1050 / 1100 / 1300



12,000 RPM Belt Type Spindle (Opt.)

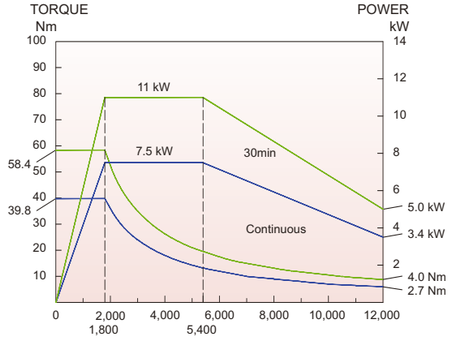
FANUC 15HP

Model : 550 / 750 / 850 / 1050 / 1100



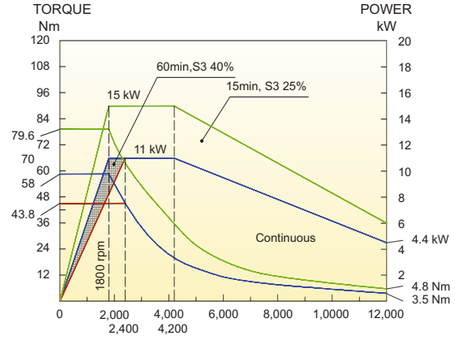
MITSUBISHI 15HP

Model : 550 / 750 / 850 / 1050 / 1100 / 1300



FANUC 20HP

Model : 850 / 1050 / 1100 / 1300



MITSUBISHI 20HP

Model : 850 / 1050 / 1100 / 1300

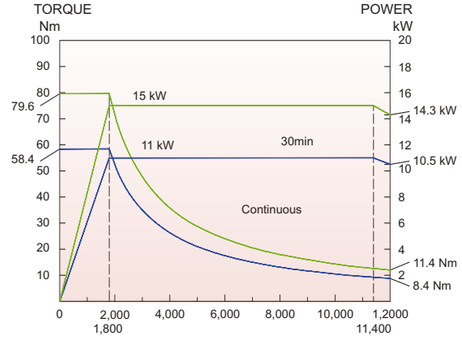
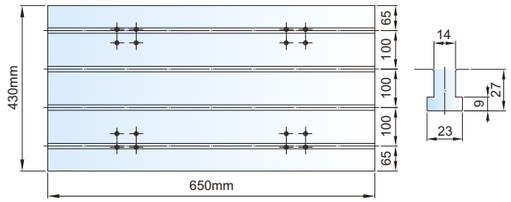


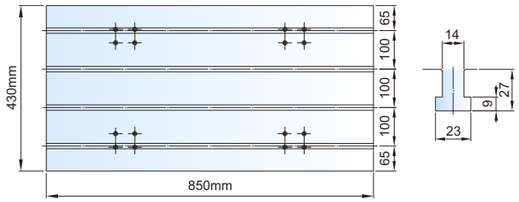
Table Dimension

Unit : mm

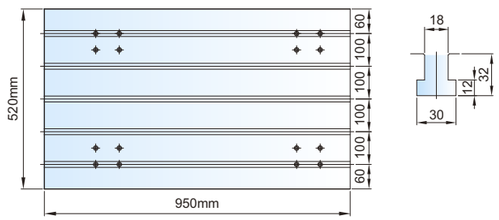
CNV-550



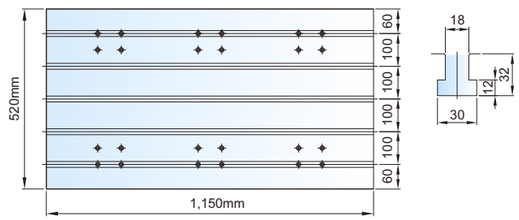
CNV-750



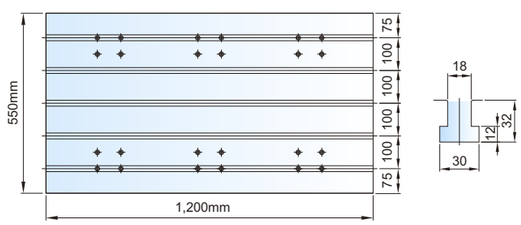
CNV-850



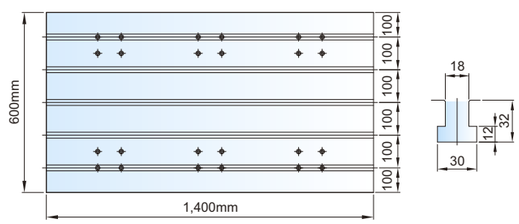
CNV-1050



CNV-1100



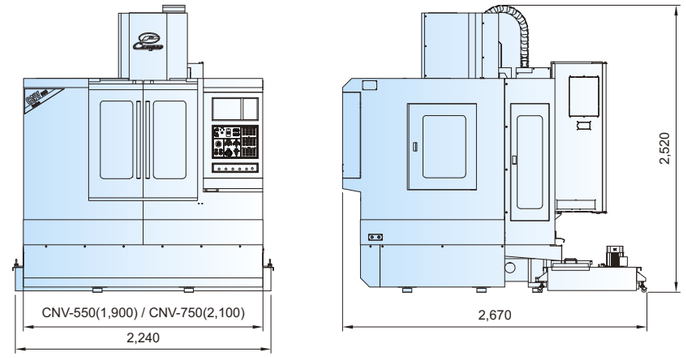
CNV-1300



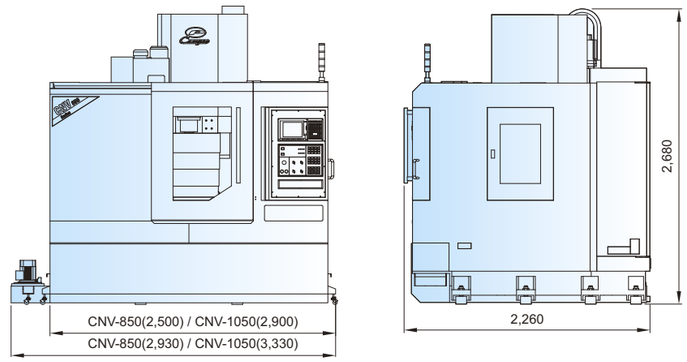
Machine Dimension

Unit : mm

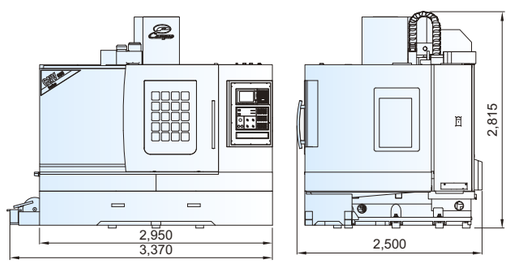
CNV-550 / 750



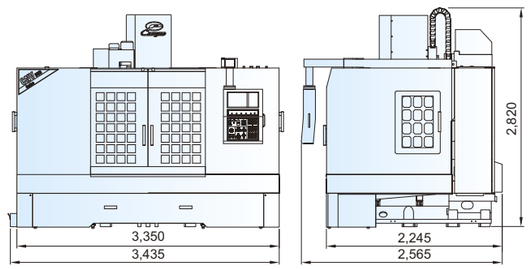
CNV-850 / 1050



CNV-1100



CNV-1300



Machine Specifications

MODEL	UNIT	CNV-550	CNV-750	CNV-850	CNV-1050	CNV-1100	CNV-1300
TRAVEL							
X-axis travel	mm (in)	550 (21.6")	750 (29.5")	850 (33.4")	1,050 (41.3")	1,100 (43.3")	1,300 (51.1")
Y-axis travel	mm (in)	430 (16.9")	430 (16.9")	520 (20.4")	540 (21.2")	580 (22.8")	600 (23.6")
Z-axis travel	mm (in)	480 (18.8")	480 (18.8")	520 (20.4")	520 (20.4")	560 (22")	610 (24")
Distance from spindle nose to table surface	mm (in)	100~580 (39"~22.8")		110~630 (43"~24.8")		90~650 (3.5"~25.5")	80~690 (3.1"~27.1")
Distance from spindle center to column	mm (in)	485 (19")		630 (24.8")			670 (26.3")
TABLE							
Table dimension	mm (in)	650 x 430 (25.5" x 16.9")	850 x 430 (33.4" x 16.9")	950 x 520 (37.4" x 20.4")	1,150 x 520 (45.2" x 20.4")	1,200 x 550 (47.2" x 21.6")	1,400 x 600 (55.1" x 23.6")
Max. loading weight	kg (lb)	300 (661)	300 (661)	500 (1,102)	600 (1,322)	700 (1,543)	900 (1,984)
T-slots (W x No. x P)	mm (in)	14 x 4 x 100 (0.5" x 4 x 3.9")		18 x 5 x 100 (0.7" x 5 x 3.9")			
SPINDLE							
Spindle speed (OPT)	rpm	8,000 (10,000 / 12,000 / 15,000)		8,000 (10,000 / 12,000 / 15,000)			
Spindle motor	kW (HP)	7.5 / 11 (15)	7.5 / 11 (15)	7.5 / 11 (15)	7.5 / 11 (15)	7.5 / 11 (15)	7.5 / 11 (15)
Spindle taper	type	7 / 24 taper No.40		7 / 24 taper No.40			
AUTO. TOOL CHANGE							
ATC type (OPT)	type	Arm Type (Carrousel)		Arm Type (Carrousel)			
Tool shank	type	BT-40		BT-40			
Pull stud	type	P-40T (45°)		P-40T (45°)			
Tool storage capacity (OPT)	pcs.	20 (16)		24 (20)			
Max. tool diameter	mm (in)	Ø80 (3.1")		Ø80 (3.1")			
Max. tool diameter (Adjacent empty)	mm (in)	Ø130 (5.1")		Ø150 (5.9")			
Max. tool length	mm (in)	250 (9.8")		250 (9.8")			
Max. tool weight	kg (lb)	7 (15)		7 (15)			
Tool change time (Tool to Tool)	sec.	2.5		2.5			
Tool change time (Chip to Chip)	sec.	7		7			
FEEDRATE							
Rapid traverse (X/Y/Z)	m (in) / min.	30 / 30 / 30 (1,181.1 / 1,181.1 / 1,181.1)		30 / 30 / 30 (1,181.1 / 1,181.1 / 1,181.1)		30 / 30 / 24 (1,181.1 / 1,181.1 / 944.8)	
Cutting feedrate	mm (in) / min.	10,000 (393.7)		10,000 (393.7)			
OTHER							
Floor plan (W x D)	mm (in)	2,240 x 2,670 (88" x 105")		2,930 x 2,260 (115" x 88")	3,330 x 2,260 (131" x 88")	3,370 x 2,500 (132" x 98")	3,435 x 2,565 (135" x 100")
Machine weight	kg (lb)	3,000 (6,613)	3,300 (7,245)	5,000 (11,023)	5,700 (12,566)	6,700 (14,770)	7,500 (16,534)
Max. machine height	mm (in)	2,520 (99")		2,680 (105")		2,815 (110")	2,820 (111")
Air source	kg/cm² (PSI)	6~8 (85~113)		6~8 (85~113)			
Power supply	KVA	15		15			20

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Standard accessories

- 8,000 rpm belt type spindle
- Rigid tapping
- Spindle air blast system
- Pre-tensioned ballscrews on 3 axes
- Telescopic covers on 3 axes
- Pneumatic system
- Automatic lubrication system
- Heat exchanger for electrical cabinet

Optional accessories

- 10,000 rpm / 12,000 rpm belt type spindle
- 10,000 rpm / 12,000 rpm / 15,000 rpm I.D.D. spindle
- Spindle oil cooler
- Chip screw conveyor
- Chain type chip conveyor
- Coolant through spindle
- Deep hole adaptor
- Coolant flushing device
- High pressure coolant pump
- Linear scales
- CNC rotary table
- Automatic tool length measurement
- Workpiece measurement
- ATC cover
- Fully rear cover
- Air condition
- CE modification
- Transformer