

MCV-860

MCV-1060

PORTAL TYPE MACHINING CENTER

MCV-1200

PT-128A

MCV-1250

MCV-1450

MCV-1680

MCV-1700

MCV-2100

MCV-2600

DCM-2213

MCH-630



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The Latest and Best Quality Machinery.
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Accuracy Results from Our Care to Every Detail

PT-128A

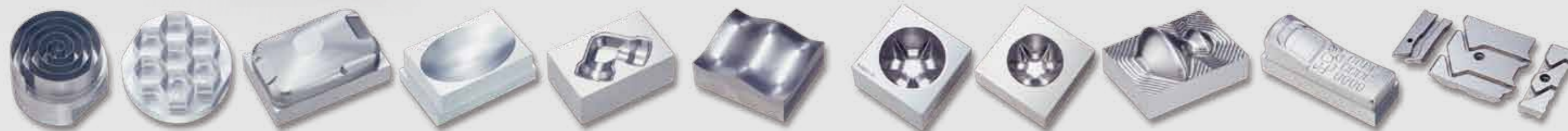
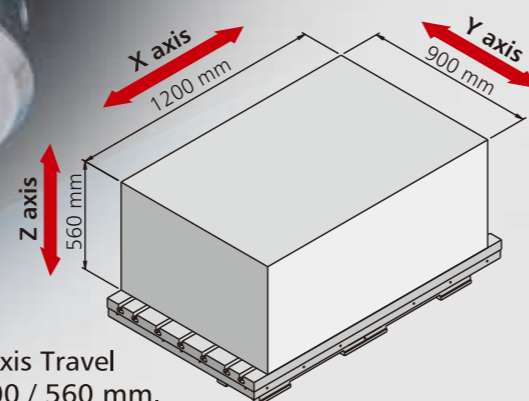
PORTAL TYPE MACHINING CENTER

Outstanding Features:

- » Double column construction exhibits exceptional stability in high speed machining.
- » Choice of 12,000 or 15,000 rpm direct-drive spindle.
- » X, Y, Z axes are all mounted with roller type linear motion guides featuring outstanding heavy load capacity.
- » Rapid traverse rate on X, Y, Z-axes reach 30 m/min.
- » Innovative thermal compensation function for spindle.

Applicable industries:

- » Aerospace parts machining.
- » Complex dies and mold machining.
- » Precision parts machining.



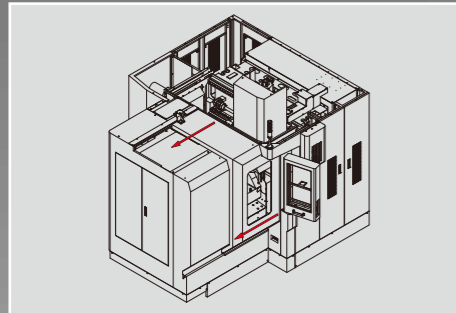
Double Column Construction with Optional Thermal Suppression

- » The symmetrical design of double column construction loads to an optimal thermal suppression features.
- » Major structural parts are scientifically reinforced by cross-shaped ribs for stable accuracy and good rigidity while lightening structural weight.
- » X,Y-axes are separately located on base and columns to eliminate overlapped load.
- » The table is fully supported to eliminate overhang and displacement problems, while ensuring the highest machining accuracy.
- » Linear motion guides on three axes features extra stable smooth motions and meet the requirement of high speed machining.



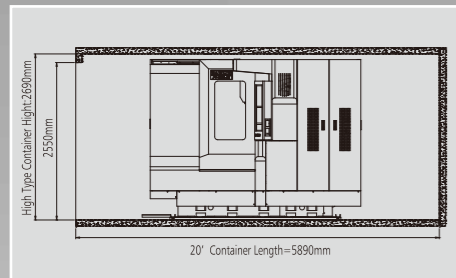
Ram Type Spindle Head

- » The spindle head is a ram type design in order to minimize temperature rise and deflection problem.



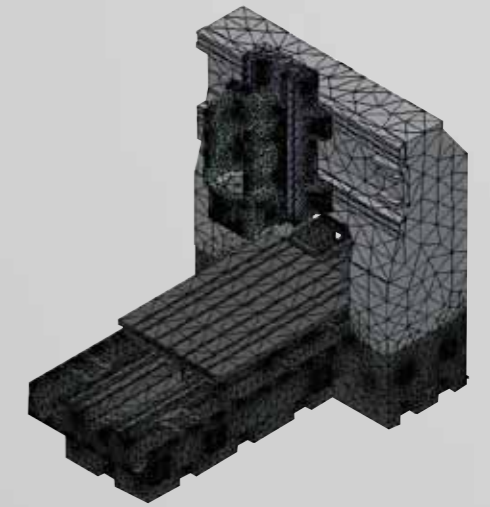
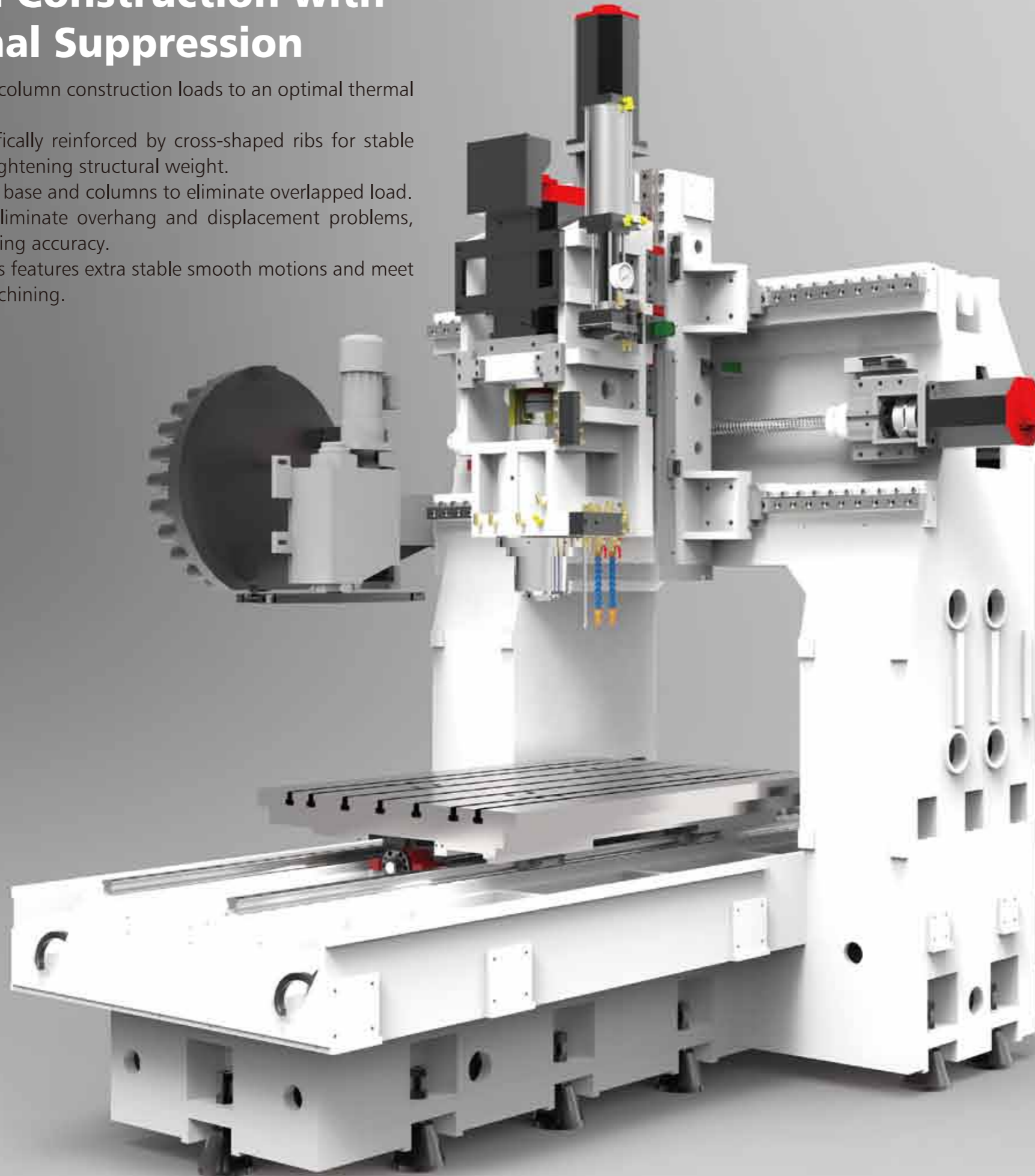
Open-Top Guard

- » The machine top and front have fully opened doors, allowing the operator to load and unload workpiece with ease by hand or crane.



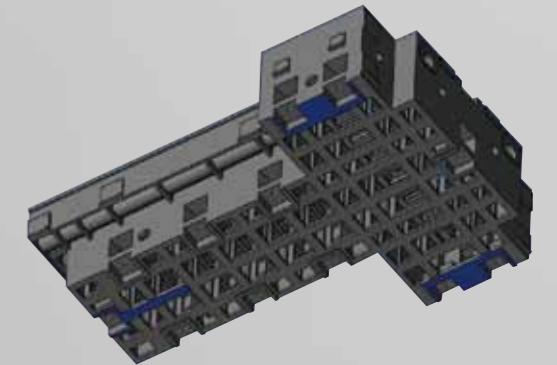
Container Loading able to Save Freight Costs

- » The PT-128A can be directly fitted into a container for saving freight and reassembling time.



Finite Element Analysis

- » To ensure the best structural rigidity and machine life, the major casting parts are analyzed by advanced "Finite Element Analysis" software to achieve an optimum design of structure.



Three-Point Support Construction

- » The base is three-point supported, providing a solid support for high speed, high precision machining.



Coolant through Ball Screw (Optional)

- » Coolant through ball screws on the three axes effectively prevent thermal deformation, upgrade stability of feed system, while also ensuring highly accurate machining.

12,000/15,000 rpm Direct-Drive Spindle

With Lower Cost than that of a Built-in Type Spindle



Low Cost

» The high speed direct drive spindle is lower cost than that of a built-in type spindle.

Low Vibration & Low Noise

» The direct spindle is not affected by a side force that usually occurs on a belt drive spindle, therefore it helps to reduce vibration, noise and tool wear.

Convenient to Install and Maintain

» The direct drive spindle is easy to install. As the spindle and the motor is separated, its maintenance cost is lower than that of a built-in type spindle.

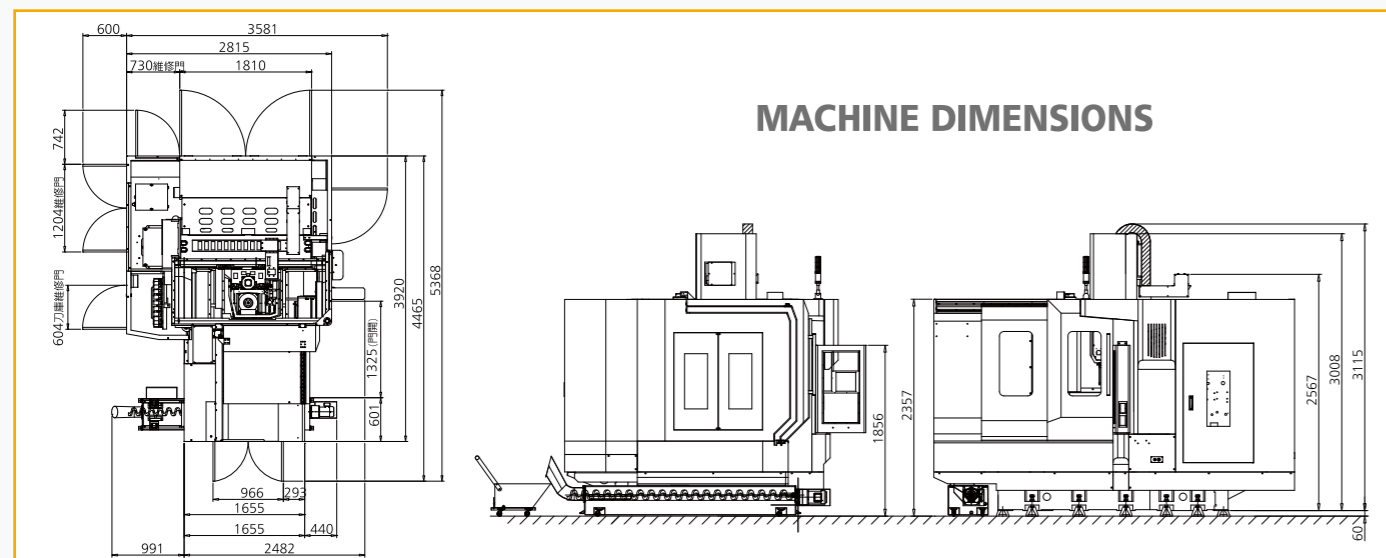
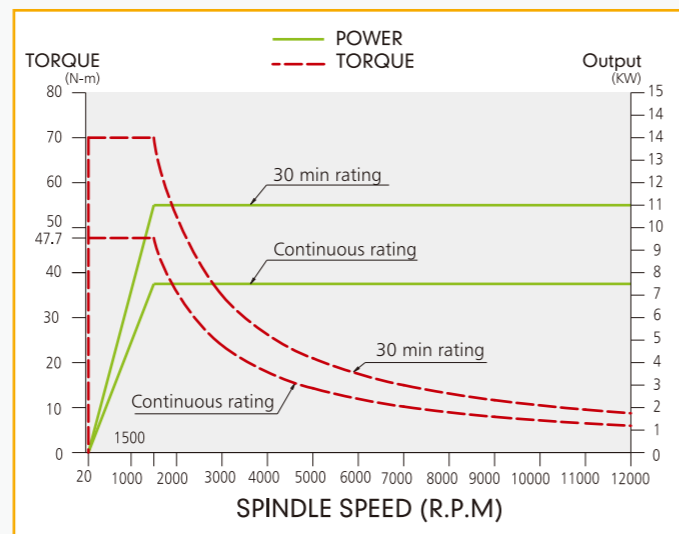
High Rigidity

» The inside diameter of spindle bearing is $\varnothing 70\text{mm}$, featuring high rigidity to resist heavy cutting.

High Precision

» The temperature growth and motor heat of the direct-drive spindle have less affection in spindle head displacement than a belt-drive spindle, as such it can provide more stable machining accuracy.

12,000 rpm Direct-Drive Spindle



SPECIFICATIONS, ACCESSORIES AND DIMENSIONS

SPECIFICATIONS

MODEL	PT-128A
TABLE	
Table work surface area (X axis × Y axis)	1350 x 900 mm
T-slot (W x no. x pitch)	18 x 5 x 125 mm
Max. table load	1600 kgw
Distance from table to floor	820 mm
TRAVEL	
X-axis travel	1200 mm
Y-axis travel	900 mm
Z-axis travel	560 mm
Dist. from spindle nose to table surface	150~710 mm
Distance between columns	1040 mm
Slideway type (X / Y / Z-axis)	Roller type linear way
X, Y, Z-axis transmission	Flexible type
FEED	
Rapid traverse rate (X / Y / Z-axis)	30 m/min, 30 m/min, 30 m/min
Cutting feed rate	1~20000 mm/min
Min. feed unit	0.001 mm
SPINDLE	
Spindle type	Direct-drive
Spindle motor (continuous rating/30 min.rating)	$\alpha 8/12000i$, 11kW(14.7HP)
Spindle nose taper	N.T.40
Spindle speed	12000 rpm
Spindle bearing bore diameter	$\varnothing 70$ mm
Cooling / Lubrication	Oil cooling / grease lub.
ATC (Automac Tool Changer)	
Tool magazine capacity	24 tools
Tool shank type	BBT40
Pull stud	Jaw type 45° pulling head
Max. tool weight	7 kgw
Max. tool length	300 mm
Max. tool dia. (without adjacent tool)	$\varnothing 75$ mm ($\varnothing 150$ mm)
Tool selection	Random
CNC CONTROLLER	
FANUC OiMF	
OTHERS	
Power required	36KVA
Air pressure required (Air supply)	6 kg / cm ²
Coolant tank capacity (Full / actual capacity)	300ℓ
Machine weight	13000 kgw
Space occupied	3900 x 4860 mm

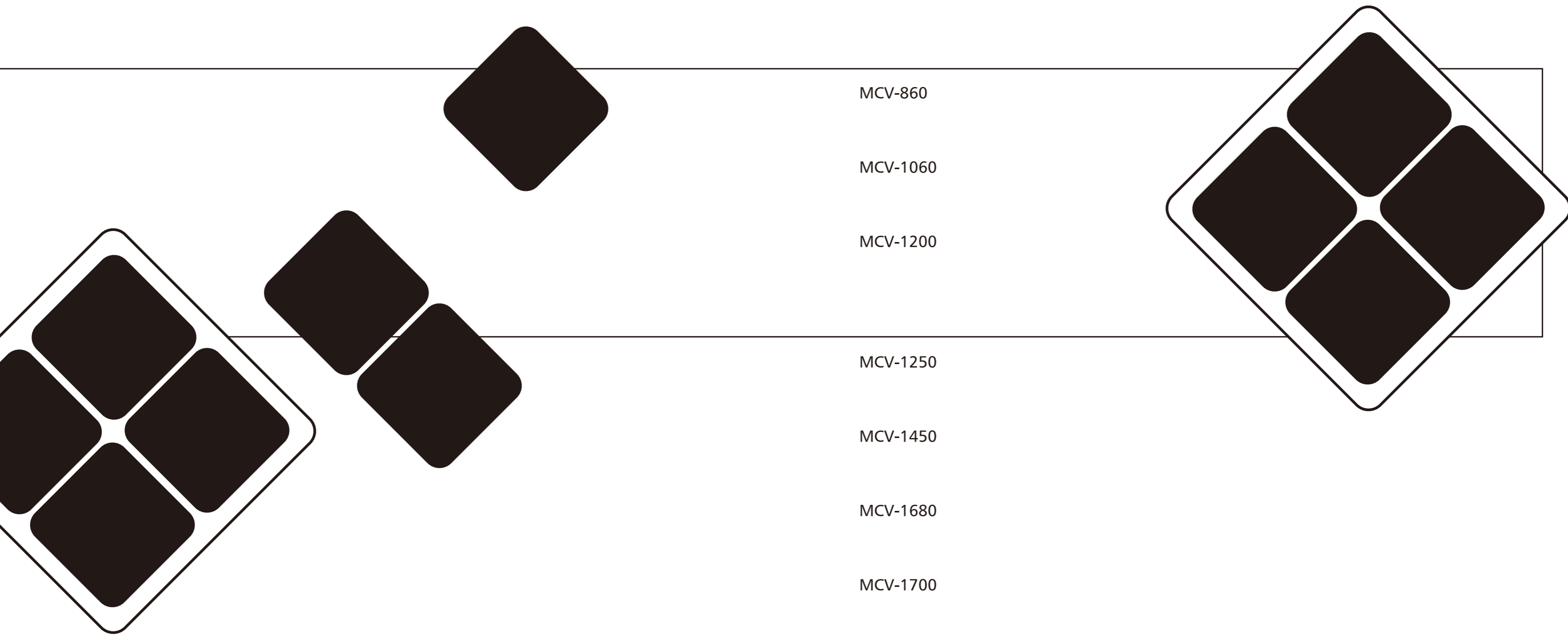
» STANDARD

- Spindle cooling device
- Heat exchange
- Removable manual pulse generator
- X,Y,Z-axis roller type linear guide ways
- Screw type chip conveyor + chip wagon
- Call light (three layers)
- Work light
- Coolant and air gun
- Enclosed splash guard
- Tool kits

» OPTIONS

- 15,000 rpm direct-drive spindle
- 15,000 rpm built-in type spindle
- 20,000 rpm built-in type spindle
- Coolant through spindle device (15,30,50,70 bar)
- Coolant through ball screw on 3 axes
- Linear scales on 3 axes
- Oil mist device
- Oil mist collector
- Flat type chip conveyor + chip wagon
- Oil skimmer
- Automatic centering device
- Tool breakage detecting device
- Tool length measuring device
- Air conditioner for electrical cabinet

Specifications are subject to change without prior notice.



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