muratec

Automation for Large-Part Manufacturing

Vertical CNC Turning Center

MVH600

24 Inch Chuck

Spindle ×1

Turret ×1

12 Station turret

Live Tools



MURATA MACHINERY, LTD.

AUTOMATED PRODUCTION OF LARGE AND HEAVY PARTS REDUCING THE OPERATOR WORKLOAD

The MVH600 delivers stable machining of large, heavy workpieces and automated material handling through an INTEGRATED gantry loader, boosting manufacturing productivity and flexibility.



CHUCK SIZE	MAXIMUM WORKPIECE WEIGHT	SPINDLE MOTOR OUTPUT
24 inch	100 kg	30 kW



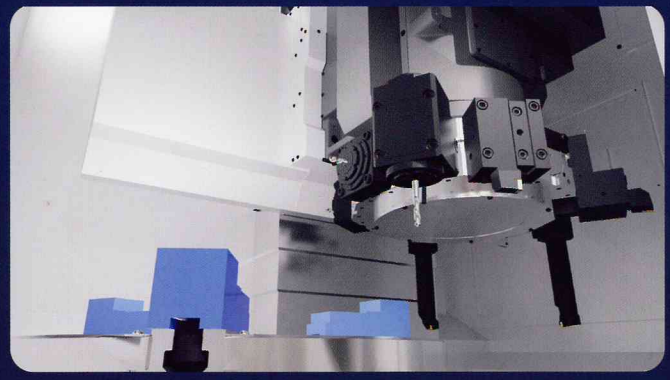
DESIGNED FOR LARGE WORKPIECES

With 490 mm of X-axis stroke and 790 mm of Z-axis stroke, the MVH600 provides a large machining envelope for a broad range of oversized and heavy-duty applications.



AUTOMATED TRANSFER OF HEAVY WORKPIECES

The INTEGRATED gantry loader enables fully automated loading and unloading of workpieces from multiple pallets, and can include the automatic sheet separator handling via an integrated vacuum system. (Max. handling size: Ø600 mm × 435 mm)



LIVE TOOL FUNCTION

Optional live tooling adds milling and drilling capabilities with tool capacities up to Ø26 mm. Combining turning, milling, and drilling in a single setup reduces secondary operations and improves productivity.

MVH600 EXAMPLE SYSTEM CONFIGURATION

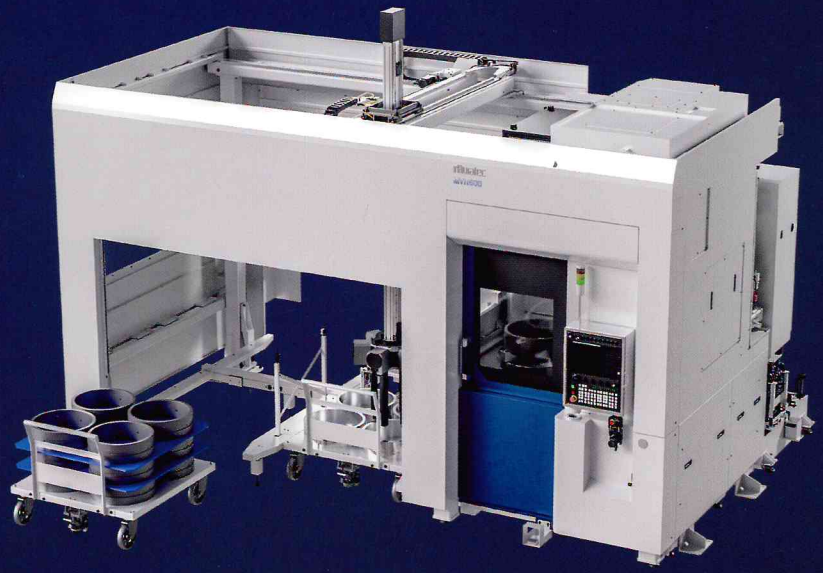
FLEXIBLE AUTOMATION FOR A WIDE RANGE OF APPLICATIONS

FRONT-ACCESS DESIGN SIMPLIFIES INTEGRATION INTO EXISTING PRODUCTION LINES



01 FORKLIFT OR AGV HANDLING

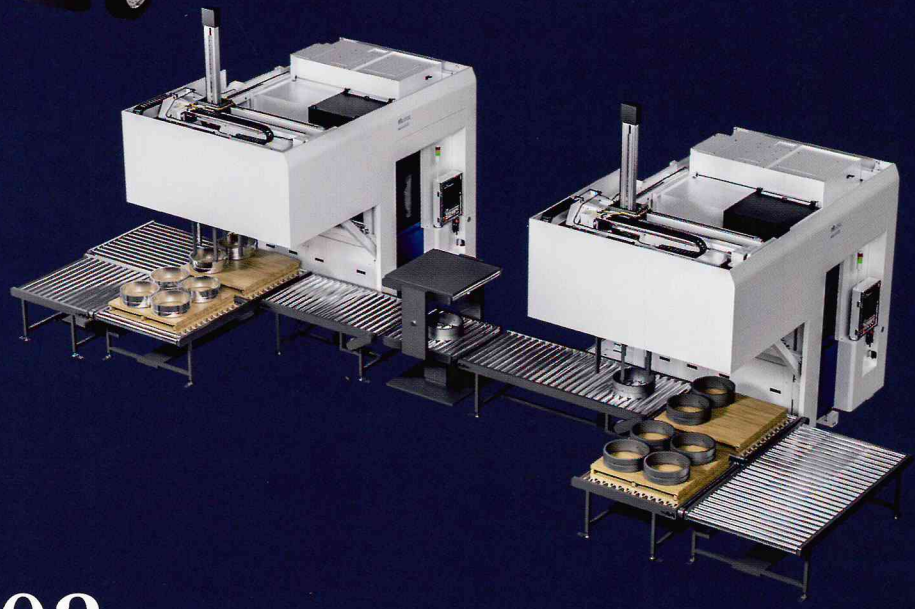
Pallets can be loaded and unloaded directly using a forklift or AGV.



How It Works

02 MATERIAL CART

Material carts can be used to keep aisles clear and improve workspace organization.



03 SYSTEM CONFIGURATION

Multiple MVH600 machines can be linked into an automated manufacturing cell, enabling sequential processing and automated workpiece transfer between operations.

MAIN MACHINE SPECIFICATIONS

MACHINE SPECIFICATIONS

CHUCK SIZE		ϕ610 mm/24 inch
TURRET CONFIGURATION		12 STA × 1
SPINDLE MOTOR OUTPUT		30 kW/30 min
MAXIMUM SPINDLE SPEED		2,000 min^{-1}
TOOL SIZE	TURNING TOOL SIZE	32 mm × 25 mm
	BORING BAR SIZE	ϕ50 mm/ϕ60 mm

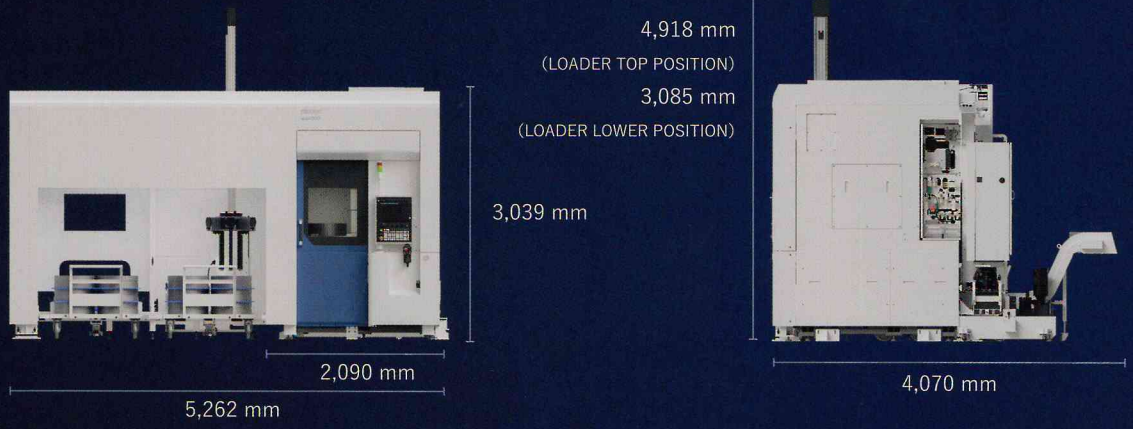
GANTRY LOADER SPECIFICATIONS

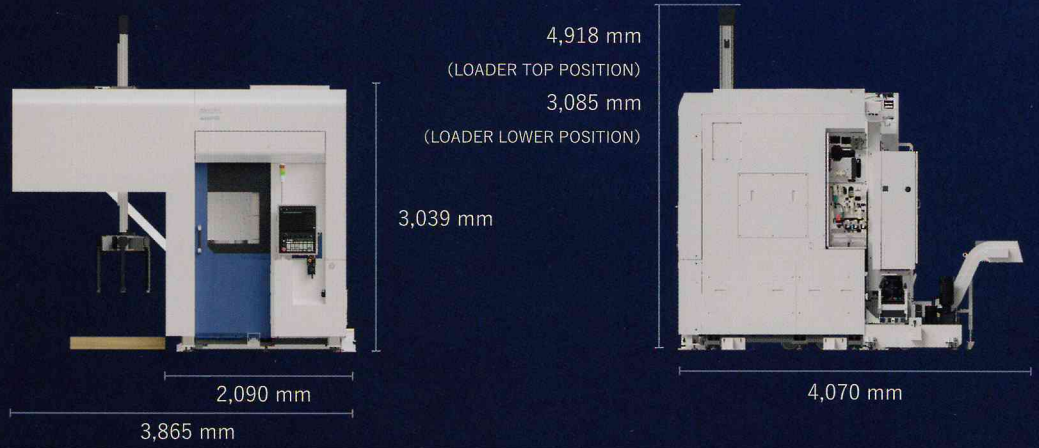
WORKPIECE SIZE	ϕ610 mm × L425 mm
WORKPIECE WEIGHT	100.0 kg/pc

LIVE TOOL SPECIFICATIONS

LIVE TOOL MOTOR OUTPUT	7.5 kW(RATED TORQUE 46.4 N・m)
MAXIMUM LIVE TOOL SPEED	4,000 min^{-1}
TOOL SIZE	ϕ26 mm

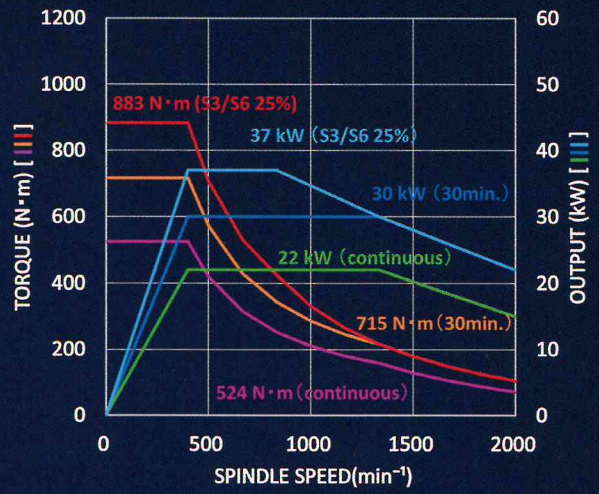
MACHINE FLOOR LAYOUT



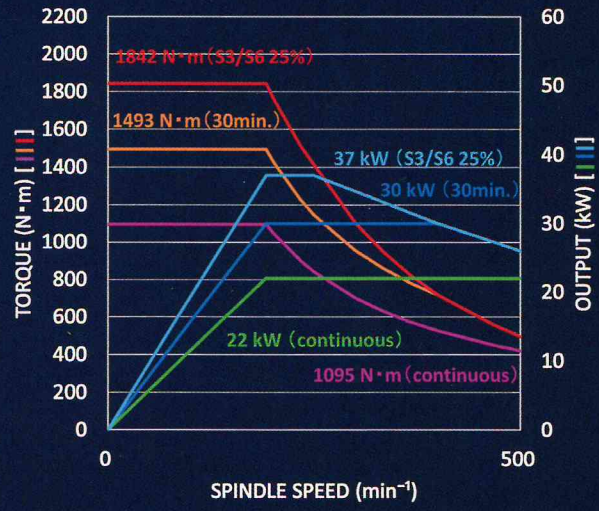


SPINDLE POWER CURVE

HIGH SPEED WINDING



LOW SPEED WINDING



For the latest information, visit the “Turning Universe” website!!

