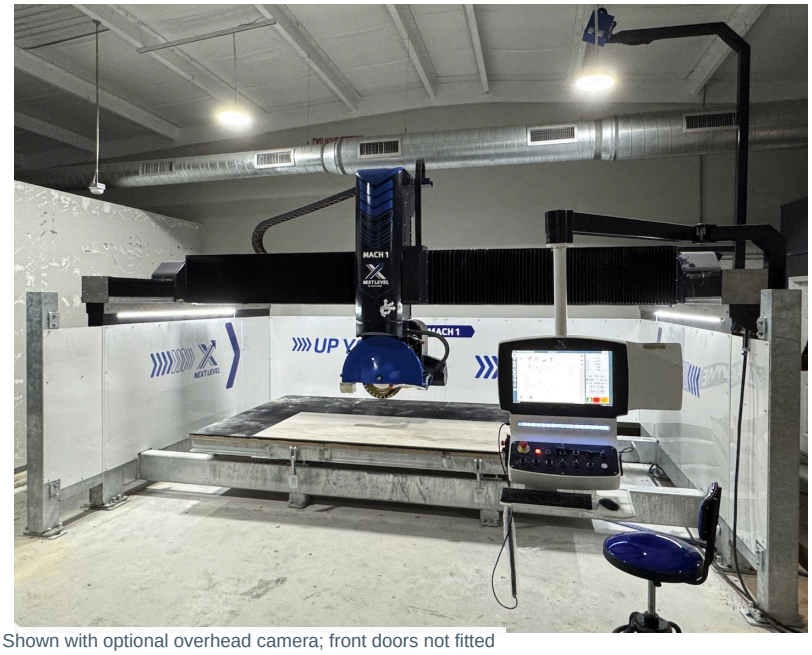


Shown with optional overhead camera; front doors not fitted

MACH 1

5-axis CNC bridge saw on a galvanized monoblock

PRODUCT OVERVIEW

MACH 1 brings 5-axis CNC cutting to the shop on the same galvanized monoblock as the rest of the MACH series. One 21.5 kW spindle saws and mills: straight, diagonal and miter cuts, sink cut-outs, drilling, contours and profiles on a 3,800 × 2,400 mm hydraulic tilting table, programmed on a 21-inch touchscreen with Zeus by Pegasus.



MACH 1 head



Installed and cutting

21.5 kW S6
Main spindle (≈29 HP)

5 axes
A 0–90° · C 0–370°

3,800 × 2,400 mm
Tilting work table

70 hours
Installation + training

KEY SPECIFICATIONS

Blade tilt	Automatic, 0–90°
Z stroke	450 mm (17 3/4 in)
Maximum blade	Ø 725 mm (28 9/16 in)
Spindle speed	Up to 6,000 rpm, built-in inverter
Milling	From the main spindle, ½-inch Gas interface
Table tilt	Hydraulic, up to 85°
Measuring	Slab thickness probe · blade/tool presetting
Control	21-inch industrial touchscreen · Zeus by Pegasus
Frame	Hot-dip galvanized steel monoblock

WHAT MACH 1 LEAVES OUT

No vacuum lifter, no side spindle and no automatic tool changer; the internal live camera and the overhead slab camera are options. Those come with MACH 5 and MACH 10.

IDEAL APPLICATIONS

- Countertops and custom stone: straight, diagonal and precision miter cuts.
- Sink cut-outs and drilling with the main spindle.
- Curved and contour cutting, custom shapes and profiles.
- Slab polishing programs and surface processing.

INCLUDED CONFIGURATION

- Industrial CNC control, 21-inch touchscreen and handwheel.
- Zeus by Pegasus: Profiles & Shapes, Photo Digitizer, Mini CAD and Cut from CAD.
- Blade laser, cross laser and cutting from a template.
- Slab thickness reader; blade and tool presetting device.
- Hydraulic tilting table with wooden + rubber surface.
- Safety doors, inside covers, cabinet A/C, transformer.
- 70 hours installation and operator training.

YOUR CONFIGURATION

Options: internal live camera and an overhead slab camera on a side post or the ceiling. Your written quotation lists the final configuration and licensed software.

FIVE AXES. ONE SPINDLE.

Saw, drill and mill with the main spindle on an interpolated 5-axis head.



Interpolated 5-axis head

Servo motors drive all five axes together, so the blade follows angled cuts, miters and curved contours in one movement. The blade sits in line with the head's rotation center, and the spindle carriage runs on two linear guides.

A-axis	0–90°
C-axis	0–370°
Axis drives	Servo motors, precision reducers





21.5 kW main spindle.

S6 rating, up to 6,000 rpm with a built-in inverter. Saw cutting and milling run on the same motor through a ½-inch Gas intercooled tool interface.

Presetting and probe.

A device in the table measures blade diameter and milling-tool length; a probe on the head reads slab thickness — automatically, before the cut.

Lasers and templates

Blade laser and cross laser, with cutting from a template placed on the table.

Precision linear guideways

All axes run on precision linear guideways that need no adjustment.

Easy routine maintenance

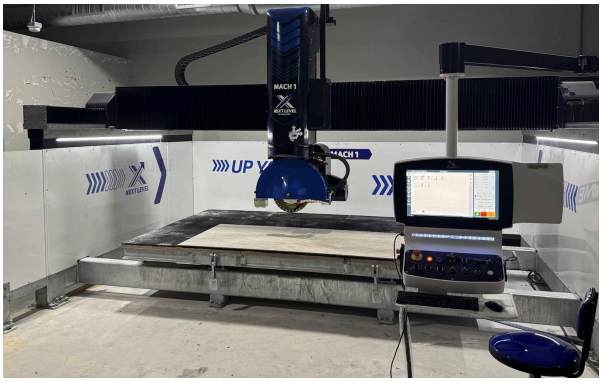
All lubrication points are grouped where they can be seen and reached without removing guards.

Built for wet shops

The hot-dip galvanized steel monoblock resists corrosion and needs no concrete foundation.

TABLE. CONSOLE. CAMERA.

Load the slab, program the job, see the slab on screen.



Hydraulic tilting table

The 3,800 × 2,400 mm wooden table with its rubber cutting surface tilts hydraulically up to 85° to load and unload slabs. Maximum working length is 3,780 mm (148 13/16 in).

Table	3,800 × 2,400 mm (149 5/8 × 94 1/2 in)
Surface	Wooden + rubber





21-inch touchscreen console.

A color touchscreen running Windows, with a pushbutton station that has a USB port and the handwheel for precise manual moves.

Overhead camera (option).

An IP67 industrial camera on a side post or the ceiling photographs the slab; Photo Digitizer flags cracks and defects and lays out the cuts.

IN ACTION (STILLS FROM A MACH 1 VIDEO)



Blade in the slab



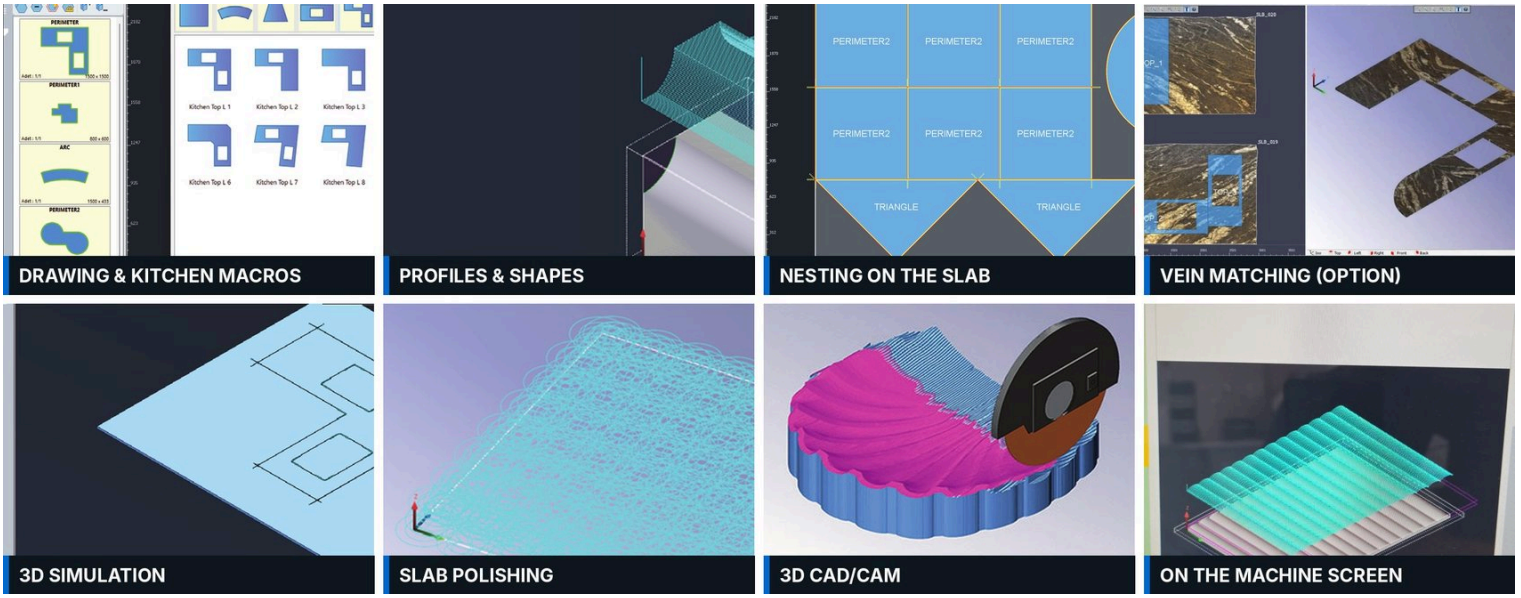
Head turned over the table



Water-cooled cut

ZEUS BY PEGASUS SOFTWARE

Touch-based CNC software with slab imaging and vision-based apps — no advanced technical skills needed.



Screens from the Zeus by Pegasus apps and the 3D CAD/CAM module; the last picture is the 21-inch screen of a MACH 1.

VEIN MATCHING AND NESTING

Vein matching is offered on MACH 5 and MACH 10 only. Automatic nesting in CAD Cuts is an optional module.

Machine panel

Axis positions, machine status, active origin and tool, spindle power absorption, feed and speed, NC and PLC alarms — with START, STOP and RESET on the screen.

CNC and Saw Bridge modes

JOG, MDI and Automatic pages with tool and origin tables. Manual cutting with the joystick, plus semi-automatic cycles: single, multiple, orthogonal, leveling, polygons, arcs and circles.

CAD Cuts

Pieces from a rectangle, a parametric library, an Excel/CSV list, the Drawing app or DXF. Overlapping cuts are removed, colliding cuts trimmed and the sequence optimized, with rest machining by drill and mill and a built-in simulation.

Photo, Laser Slab, Templates

The slab photo is rectified to the real table size. The head laser traces the slab perimeter, and templates or drawings laid on the table are digitized with the laser or the camera image.

Profiles & Shapes · Manual Cuts · Drawing

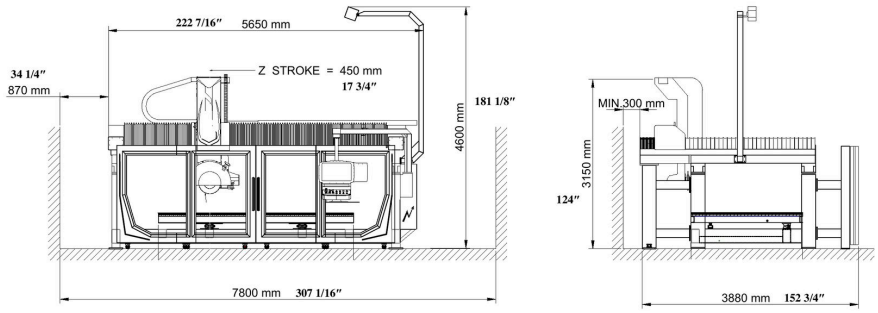
Disk shaping from parametric macros or imported CAD with vertical, oriented and horizontal disk roughing and finishing; quick manual cuts; 2D drawing with CAD import.

Slab Polishing · 3D CAD/CAM

Polishing programs with saved presets. The 3D CAD/CAM module reads DXF, DWG, IGES, STEP, 3DS, OBJ, STL and Rhino3D for 2D/3D roughing and finishing, 3+2 and 4–5-axis interpolated.

TECHNICAL DATA AND LAYOUT

MACH 1 · factory layout drawing (front and side elevations)



MACHINE

Axes	5-axis interpolated
Max. working length	3,780 mm (148 13/16 in)
Overhead camera	Option: on a side post or ceiling-mounted
Internal camera	Option
Weight	~7,000 kg (approx. 15,430 lb)

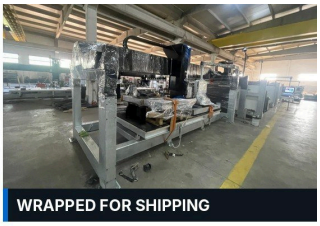
SITE

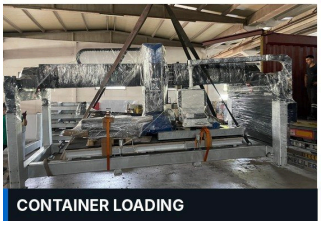
Buyer supplies	Water, compressed air, blades, milling tools, electrical supply and a surge protection device (warranty condition)
Wall clearance	Min. 300 mm (11 13/16 in) on every side
Foundation	None: the monoblock stands on the shop floor

LAYOUT AND UTILITIES

Layout (L × W)	7,800 × 3,880 mm (307 1/16 × 152 3/4 in)
Bridge length	5,650 mm (222 7/16 in)
Height	3,150 mm (124 in); 4,600 mm (181 1/8 in) with camera post
Electrical	400 V, 50–60 Hz, 3-phase + ground; 30 kW; transformer included
Compressed air	Min. 5 L/min, filtered and dried, 3/8-inch
Water	Min. 30 L/min, 3.5 bar, 1-inch, filtered to 100 µm
Network	Wi-Fi or RJ45 (Cat 5 or higher)


FACTORY RUN-IN


WRAPPED FOR SHIPPING


CONTAINER LOADING



INSTALLED AND CUTTING

From our factory to your floor

Real photos of MACH machines on their way: factory assembly and testing, wrapping, container loading, delivery and installation. At your shop a Next Level technician sets the machine up and trains your operators.

Specifications are subject to change without notice. Weights and dimensions are approximate; inch and pound values are converted and rounded. The layout drawing is a planning reference; the approved drawing for your machine governs the installation.

CHOOSE YOUR MACH

The whole MACH series side by side — then built, shipped and installed by Next Level.

ECO MACH, MACH 1, MACH 5 OR MACH 10?

	ECO MACH base	ECO MACH fully loaded	MACH 1	MACH 5	MACH 10
Main spindle (S6)	13 kW	13 kW	**21.5 kW**	21.5 kW	21.5 kW
Maximum blade	Ø 625 mm*	Ø 625 mm*	**Ø 725 mm**	Ø 725 mm*	Ø 725 mm*
Z stroke	325 mm	325 mm	**450 mm**	450 mm	450 mm
Work table (mm)	3,500 × 2,000	3,500 × 2,000	**3,800 × 2,400**	3,800 × 2,400	3,800 × 2,400
Hydraulic table tilt	80°	80°	**85°**	85°	85°
Milling from main spindle	Option	Option	✓	✓	✓
Side spindle	Option	ER32 · 7 kW	—	ER32 · 7 kW	ISO30 · 5.2 kW
Automatic tool changer	—	—	—	—	9 positions
Vacuum lifter (2 arms)	—	—	—	700 kg	700 kg
Thickness probe · presetting	Option	✓	✓	✓	✓
Overhead slab camera	Option	✓	**Option**	Option	Option
Internal live camera	—	—	**Option**	✓	✓
Software	Factory CAD	Factory CAD	**Zeus by Pegasus**	Zeus by Pegasus	Zeus by Pegasus
Vein matching module	—	—	—	Option	Option
Safety doors · cabinet A/C	—	—	✓	✓	✓
Outside side covers	—	—	—	✓	✓
Layout L × W (mm)	6,000 × 3,300	6,000 × 3,300	**7,800 × 3,880**	8,300 × 4,150	8,300 × 4,150
Machine weight	~5,000 kg	~5,000 kg	**~7,000 kg**	~7,000 kg	~7,000 kg
Installation + training	Included	Included	**70 hours**	90 hours	90 hours

✓ standard · — not offered / not included. All five share the 5-axis head (A 0–90°, C 0–370°, automatic blade tilt 0–90°), a 6,000 rpm main spindle and a hot-dip galvanized monoblock frame. *Factory data, largest blade with the thickness probe fitted: ECO MACH Ø 450 mm, MACH 5/10 Ø 625 mm (also with the vacuum lifter); with the side spindle: ECO MACH Ø 350 mm, MACH 5/10 Ø 450 mm.

INSTALLATION & TRAINING

- 70 working hours of installation and operator training at your shop, including the technician's travel, board, lodging and local transfers.
- Operator availability Monday through Saturday is needed to complete the training.

WARRANTY

- 12 months on mechanical and 12 months on electrical/electronic parts (one working shift), from installation but no later than 60 days after the invoice date.
- Software: 24 months, including teleservice / help-desk assistance and license updates (patches and releases).
- Not covered: damage from accidents, incorrect use or not following the training and manual; technician travel for warranty visits; loss of production.

Questions, or ready for a written quotation? **+1 941-900-3018** · **sales@nextlevel.plus** · **nextlevel.plus**

Budgetary equipment information. U.S. and metric values appear together; added conversions are approximate. This sales document does not replace the delivered manual, drawings or safety labels.