

PUREJET

Pure water jet cutting

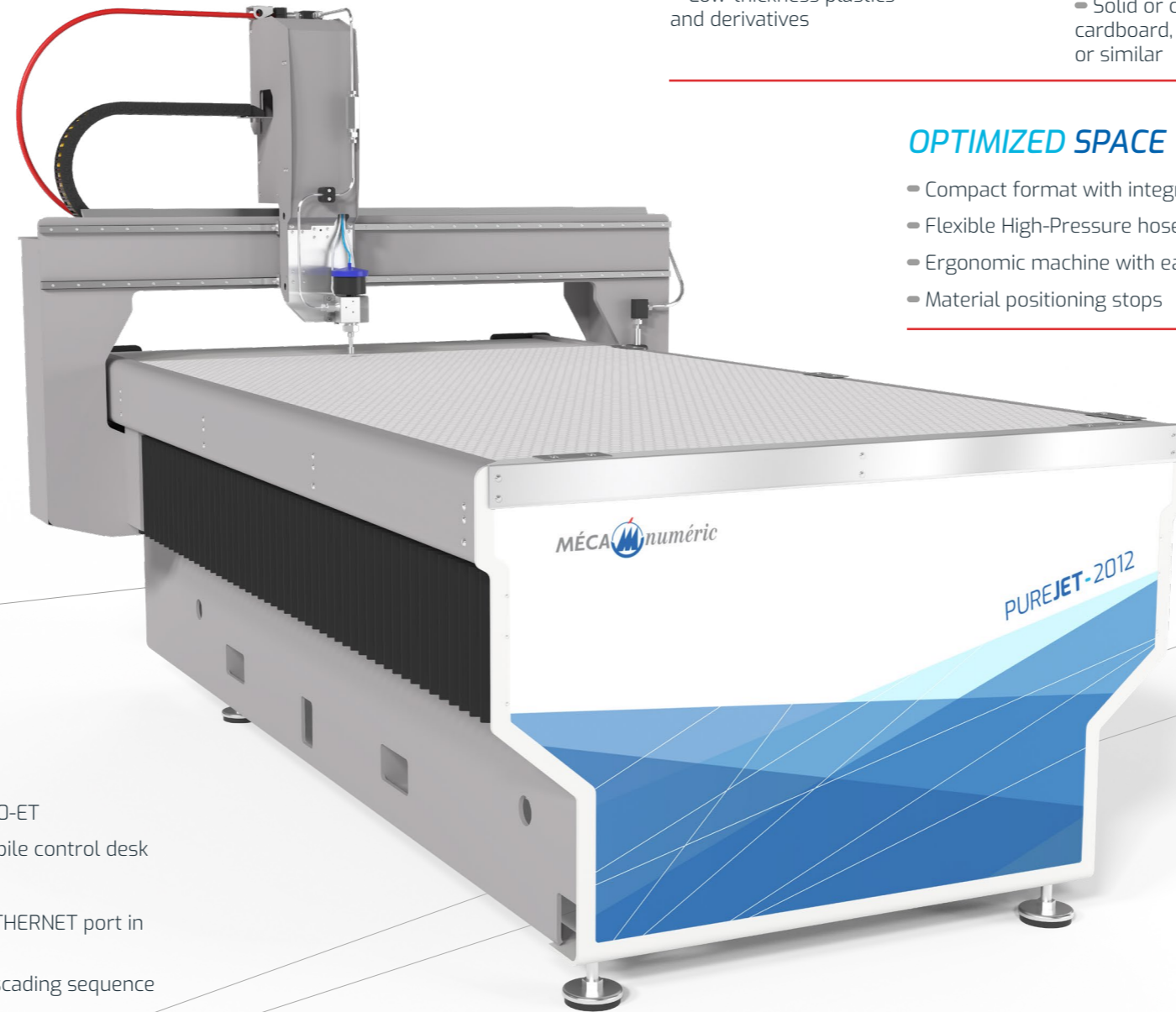
Water jet machine
designed to simplify cutting
of smooth or light material

PUREJET

Designed for intensive industrial use

CUSTOMIZABLE EQUIPMENT FOR BETTER ADAPTABILITY

- 3 useful formats available from 1220 x 1050 to 2050 x 4050 mm
- Mono or multi heads for several similar cutting simultaneously (up to 3 heads on the gantry)
- Visible laser for perfect material positioning
- Operator's safety:
 - Immaterial barriers
 - Bellows on the X axes
- Respect for the environment:
 - Spray suction system and filtration option (up to 99,97% of particles)
 - Setting and filtration of wastewater (belt filter option)



LATEST GENERATION DIGITAL CONTROL

- New generation MECANUMERIC CN2140-ET
- 21 inches vertical touch screen on mobile control desk
- Modern and user-friendly HMI
- Connectivity via USB serial port and ETHERNET port in RJ45
- Programming up to 4 programs in cascading sequence
- Predisposition for Industry 4.0 connectivity



SPEED AND ACCURACY

- Monobloc structure in machine-welded steel and moving gantry in machine-welded aluminium, CNC machined to 1/100 of mm for better accuracy and stability
- Transmissions by coated helical rack and pinion on X and Y axes and by ball screw on Z axis, for fluid, fast and precise movements
- Double drive on each side of the mobile gantry for optimum precision
- Brushless AC servomotors with high resolution absolute encoders (24 bits)

MAXIMUM VERSATILITY

Pure water cutting suitable for a wide range of materials:

- Rubber and derivatives
- Foams of all densities
- Leather and similar
- Low-thickness plastics and derivatives
- Rock wool, glass wool, plasterboard, etc.
- Cork and thin natural wood (marquetry, etc.)
- Solid or corrugated paper and cardboard, composites NOMEX® type or similar
- Woven or non-woven canvas, tarpaulins, etc.
- Pre-impregnated fabrics and mats of glass or carbon for the production of composite parts

OPTIMIZED SPACE

- Compact format with integrated electrical cabinet for minimum footprint
- Flexible High-Pressure hoses to limit the required ceiling height
- Ergonomic machine with easy access to the cutting area
- Material positioning stops



HIGH PRESSURE PUMP 4136 BARS

- Perfectly suited for cutting soft materials with pure water
- Oil/water intensifier for 4000 bar continuous pressure with low maintenance cost
- The 10 HP model is available with a 230 V single-phase power supply to equip non-industrial premises

	MHP 1040	MHP 2040	MHP 3040
Power HP/ kW	10 HP / 7,5 kW	20 HP / 15 kW	30 HP / 22 kW
Maximum pressure	4136 bars	4136 bars	4136 bars
Advised working pressure	3800 bars	3800 bars	3800 bars
Maximum flow litres/minutes at pressure 3800 bars	0,86 l/min	1,62 l/min	2,45 l/min
Pump capacity at 3800 bars: max. number of heads/max. nozzle diameter	2 / 0,10 mm or 1 / 0,15 mm	2 / 0,15 mm	3 / 0,15 mm
Pump capacity at 3000 bars: max. number of heads/max. nozzle diameter	1 / 0,18 mm or 2 / 0,12 mm	1 / 0,25 mm or 2 / 0,18 mm	1 / 0,33 mm or 2 / 0,22 mm or 3 / 0,18 mm
230V single phase power supply and required Amperes per phase (pump only)	38 A		
400V three-phase power supply and required Amperes per phase (machine + pump)	3 x 16 A	3 x 29 A	3 x 45 A
Pump module overall dimensions (L x W x H) in mm	1600 x 800 x 1300	1600 x 800 x 1300	1600 x 800 x 1300

TECHNICAL FEATURES	PUREJET 1012	PUREJET 2012	PUREJET 4020
X axis travel in mm	1 050	2 050	4 050
Y axis travel in mm	1 220	1 220	2 050
Z axis travel in mm	150	150	220
Maximum material width on table	1 240	1 240	2 070
Gantry/table distance	155	155	225
Maximum speed in m/min	40	40	40
Acceleration in m/s ²	2	2	2
Resolution* of the measuring system in mm	0,000010	0,000010	0,000010
Repeatability in mm at 20°C +/- 2° better than	+/-0,025	+/-0,025	+/-0,025
STANDARD EQUIPMENT			
KMT AQUALINE pure water jet cutting head	✓	✓	✓
Positioning stops	✓	✓	✓
NUMERICAL CONTROL			
MECANUMERIC CN2130-ET numerical control			
Base IPC Fanless - SSD - Windows 10 IoT Enterprise - 1 Ethernet RJ45 port - 1 serial USB port	✓	✓	✓
21 inches vertical, colour touch screen on mobile control desk with HMI system	✓	✓	✓
Movable electronic handwheel	Option	Option	Option
OPTIONS AND ACCESSORIES			
Multi-cutting heads with variable centre distance (maximum number of heads / minimum distance)	2 / 200 mm	2 / 200 mm	3 / 200 mm
Visible laser in cross aligned with water jet			
Bellows for the X axis			
Water softener			
Spray suction system under the cutting table			
Spray suction and filtering system under the cutting table			
Immaterial safety barriers			
Wastewater filtering by belt filters			
OVERALL DIMENSIONS			
Length in mm (pumps not included)	1 800	2 850	5 220
Width in mm	1 995	1 995	2 950
Height in mm	1 900	1 900	2 120
Minimum width for transport and logistics	1 740	1 740	2 495
Average weight in kg	1 000	1 400	3 750
ÉNERGIE			
Air supply	Pressure 6 bars - Flow 10 m ³ /h		
Power supply depending on the type of the chosen pump	230V mono or 400 V three-phases 50Hz + ground		

Structure

Monobloc structure in machine-welded steel and moving gantry in machine-welded aluminium.

Guidance

Grinded rails and preloaded ball bearings with NRII corrosion protection.

Transmission

Transmissions by coated helical rack and pinion on X and Y axes and by ball screw on Z axis.

Motorisation

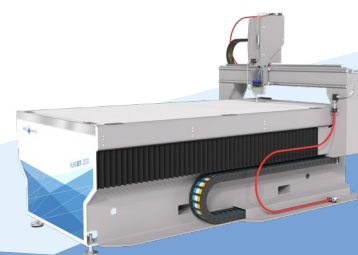
BRUSHLESS motors with absolute encoders on all axes.

**the smallest distance that the position coding system can read*



Leader in the manufacturing of multi-technology cutting machines

for the Industry, Education and Dental sectors



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