

MasterCut

The all-round system for higher level requirements

Our solution:
Efficiency and precision meet adaptability



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STM MasterCut waterjet cutting systems are the perfect all-rounders for more-sophisticated cutting tasks. MasterCut systems provide the possibility of making three-axis 3D cuts or demanding 2D cuts. The systems operate resource-efficiently and are notable for their extremely low consumption of power, water and compressed air.

All components and screw fasteners of the design are made of wear-resistant stainless steel or aluminium. Characteristic are the flat underside, smooth side panels with concealed linear guides without bellows and high pressure pipe led through the axes. The fully digital drive consists of brushless AC servomotors with multiple-axis NUM or Eckelmann CNC control unit. The matching software runs on MS-Windows and requires only a standard PC.

- ▶ Lightweight design in aluminium and stainless steel
- ▶ Robust rack and pinion drive
- ▶ Working area accessible from 3 sides
- ▶ Marking of workpieces possible as standard
- ▶ Underwater cutting is possible
- ▶ Rectangular grating a workpiece support for max. workpiece weight of 600 kg/m²

Optimally advised

The service team supports you with technical service, training courses and high-quality spare parts. For this purpose an excellently qualified technical support team as well as an extensive customer service network is at your disposal. We continuously advise and comprehensively support you from the initial informatory stage through to the realization of value-creation potential.



Experience flexibility

STM waterjet cutting systems are able to cut almost all solid materials. The spectrum ranges from metals, stone, tiles, glass and wood to foam, rubber, plastic and food.

Depending on your requirements, STM waterjet cutting systems can be equipped with a pure-water package or an abrasive cutting head.



Plastic materials



Seals



Foam materials



Aluminium



Copper



Stainless steel



Wood



Glass



Stone



Carbon

PURE WATER

ABRASIVE

Your system adapts to you

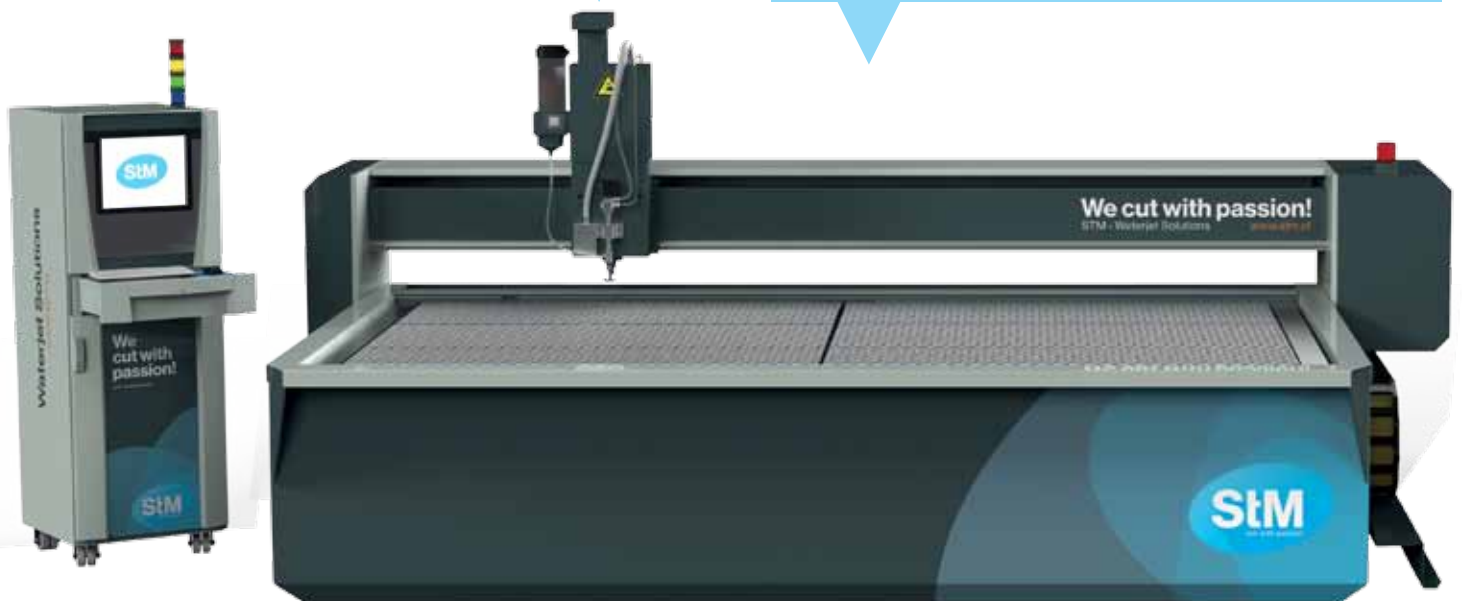
The modular construction system allows, by the use of standard components, to adapt and upgrade STM waterjet cutting systems individually to the requirements of the customers. The individual components of STM waterjet cutting systems i.e. control system, guidance system, bridge carrier, dosing system, Z-axis, abrasive desludging system, cutting heads as well as all other components are tried, tested and designed to be used modularly. STM waterjet cutting systems can even be upgraded at a later date.

Maximum process reliability

Automatic scanning of the workpiece as well as collision protection provide for safe working. STM waterjet cutting systems are by default able to mark. With the laser tracker setting up the workpiece can be done without difficulty.

Profitable and sustainable

STM systems are distinguished by their low operating costs. The waterjet cutting systems are designed to use as little compressed air, electricity and water as possible.

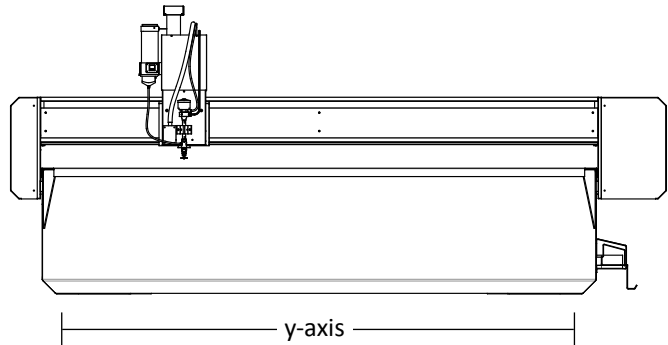
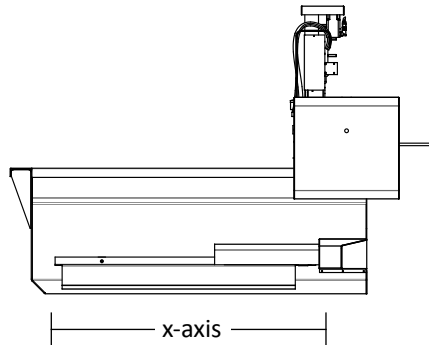


STM SmartCut waterjet software

The easy to understand cutting software can be adapted to one's own requirements through the addition of modular extensions. Within the graphic user interface all parameters are able to be intuitively set and dxf files can be directly imported.

Top user comfort

STM waterjet cutting machines are accessible from three sides. The machine is operated by using a classic Windows PC and additional features such as the manual control provide top user comfort.



Technical specifications

Workspace	min. 1 m x 1 m / Vertical format: max. 6,5 m x 2,5 m / Horizontal format: max. 2 m x 4 m
Travel speed	max. 15 m/min
Positioning accuracy	± 0.08 mm (per meter at 20 °C)
Repeat accuracy	± 0.05 mm (per meter at 20 °C)
Z-axis clearance	180 mm / 230 mm

Included in MasterCut package

- ▶ Welded rust-proof machine frame of aluminium and stainless steel
- ▶ Premium guides Y-axis, Premium gear
- ▶ Cutting tank with bearing surface grating
- ▶ CNC Z-axis
- ▶ CNC control unit and PC interface
- ▶ Control console
- ▶ Brushless servomotors
- ▶ STM SmartCut waterjet software
- ▶ High pressure pump with a pressure intensifier between 11/75 kW or 4.000/6.000 bar depending on requirement
- ▶ Waterjet cutting valve
- ▶ Abrasive cutting head
- ▶ Abrasive dosing device with sand quantity control up to 1.000 g/min and accurate to one gram
- ▶ Supply tank for 250 kg abrasive medium

Tuning options

- ▶ Heavy-duty load frames for workpieces of up to 1.000 kg/m²
- ▶ Additional cutting heads on separate Z-axis or on the same bridge
- ▶ Predrilling unit pneumatic
- ▶ Adjustable feet for cutting tank
- ▶ Automatic abrasive recovery
- ▶ Water level control
- ▶ Pressure bag filter
- ▶ STM Edge Tracker positioning laser
- ▶ Manual rotatable holder for cutting valve for chamfered cuts to 48°
- ▶ Supply tank for 1.600 kg abrasive medium
- ▶ OneClean, the modular all-round system for recycling and cleaning abrasive and water

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WATERJET SOLUTIONS

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