

EcoCut

The economic entry to
waterjet cutting

Our solution:

Reliable, low maintenance
waterjet cutting systems



EcoCut

The economic entry to waterjet cutting

STM EcoCut waterjet cutting systems are reliable, low-maintenance complete systems with an extremely attractive price-performance ratio. They provide economical entry to the world of waterjet cutting. The systems operate resource-efficiently and are notable for their extremely low consumption of power, water and compressed air.

- ▶ 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.



Robust and reliable construction

All components and screw fasteners are made of wear-resistant stainless steel and aluminium. Characteristic for the extremely low-vibration design are the flat underside and smooth side panels.



Minimal tooling and maintenance costs

STM systems are manufactured without bellows. The standard water-protected linear guide is easy to clean, has a superior protective effect and lasts for many years of use.



Remote maintenance

The STM service team is delighted to provide support for production questions via remote maintenance.



Preserving resources and the environment

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.



Online shop

Wear and spare parts as well as operating materials can be ordered cost-efficiently via the online shop at any time.

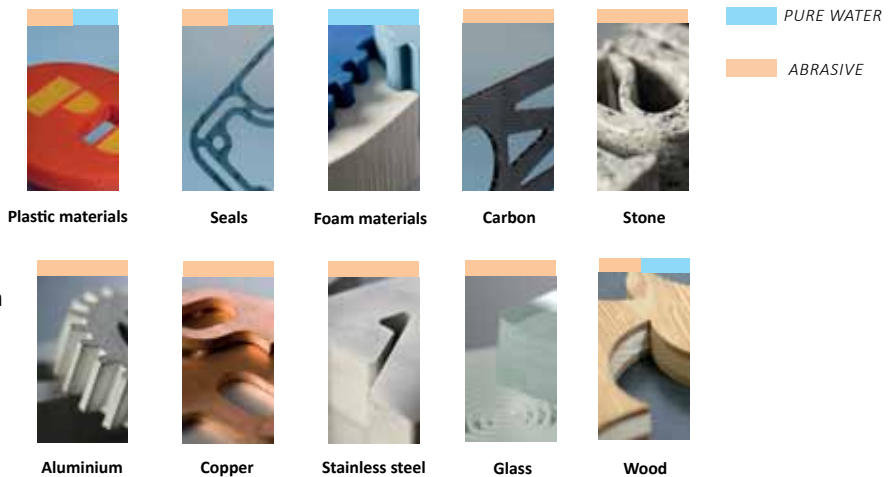
Cutting technology

STM EcoCut waterjet cutting systems are designed to be operated with pure water as well as for abrasive cutting. For the cutting process, water is pressed through a nozzle with a pressure of up to 6.000 bar, resulting in enormous speeds. The water exits with mach 2 to 3 (two to three times the velocity of sound). In order to increase the kinetic energy for cutting harder materials, abrasive (granite sand) can be added after the water nozzle.

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 or abrasive cutting head.



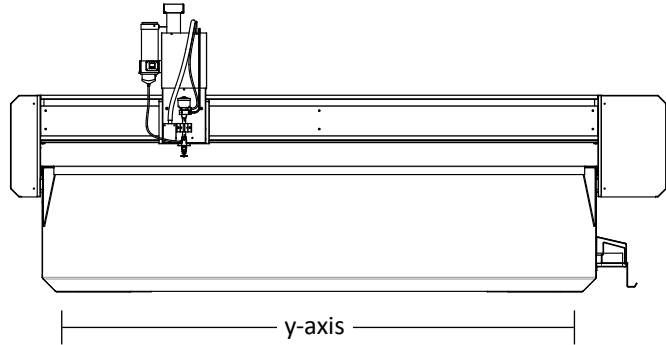
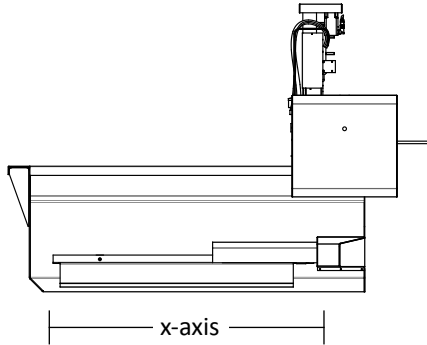
STM SmartCut waterjet software

The easy to understand cutting software can be adapted to the respective 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 imported directly.

Modular construction

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.





Technical specifications

Workspace	min. 1 m x 1 m / max. 2 m x 3m
Travel speed	max. 10 m/min
Positioning accuracy	± 0.1 mm (per meter at 20 °C)
Repeat accuracy	± 0.08 mm (per meter at 20 °C)
Z-axis clearance	180 mm / 230 mm

Included in the EcoCut package

- ▶ Welded rust-proof machine frame of aluminium and stainless steel
- ▶ Covered and encapsulated linear guides
- ▶ 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
- ▶ Water level control
- ▶ Pressure bag filter
- ▶ STM Edge Tracker positioning laser
- ▶ Manual rotatable holder for cutting valve for chamfered cuts to 48°
- ▶ Automatic abrasive recovery
- ▶ Supply tank for 1.600 kg abrasive medium
- ▶ STM OneClean, the modular all-round system for recycling and cleaning abrasive and water