

PremiumCut

The waterjet cutting system with unlimited cutting capabilities.



Your partner close to you

With four locations in Austria, Germany, Switzerland and France, STM Waterjet Group is the partner near you. With more than 30 years of experience in separation technology, STM pays particular attention to innovative modular system technology in combination with **connectivity, intuitive operation and high availability** of STM waterjet cutting systems.

Service has priority

We are there for you – even after the purchase of your waterjet cutting system. This high value of the service concept has prompted us to found RWS – Real Waterjet Service GmbH. As an STM Premium Partner of STM Waterjet, RWS puts service for you first. RWS will be your long term partner and companion from the time of delivery of the machine.



Maximum process safety

The automatic scanning of the workpiece as well as the collision protection provides safe operation. StM waterjet cutting systems can mark as standard and with use of the positioning laser the workpiece can be easily set up.

StM SmartCut cutting software

The easily understood StM SmartCut cutting software can be adapted to individual requirements using modular upgrades. Within the graphic user interface all parameters are able to be intuitively set and .dwg., .dxf, .step, .iges files directly imported.

Top ease of use

StM waterjet cutting systems are accessible from 3 sides. Control is made via a classic Windows PC and additional features such as the manual control unit provide top ease of use.

Low operating costs

StM machines are characterised by low operating costs. The StM waterjet cutting systems are designed to require as little compressed air, power and water as possible.

PremiumCut

The waterjet cutting system with unlimited cutting capabilities.

StM PremiumCut waterjet cutting systems are fully equipped high-performance systems which leave nothing to be desired. They are ideally suited for cutting tasks with high accuracy requirements and high speeds as well as for tube end cutting. The systems work resource efficiently and excel with extremely low power, water and air consumptions as well as maximum upgrade and adaption capacities.

All construction components, and screwed fasteners are of wear-resistant stainless steel or aluminium. Characteristic are the flat underside as well as the smooth side walls with concealed linear

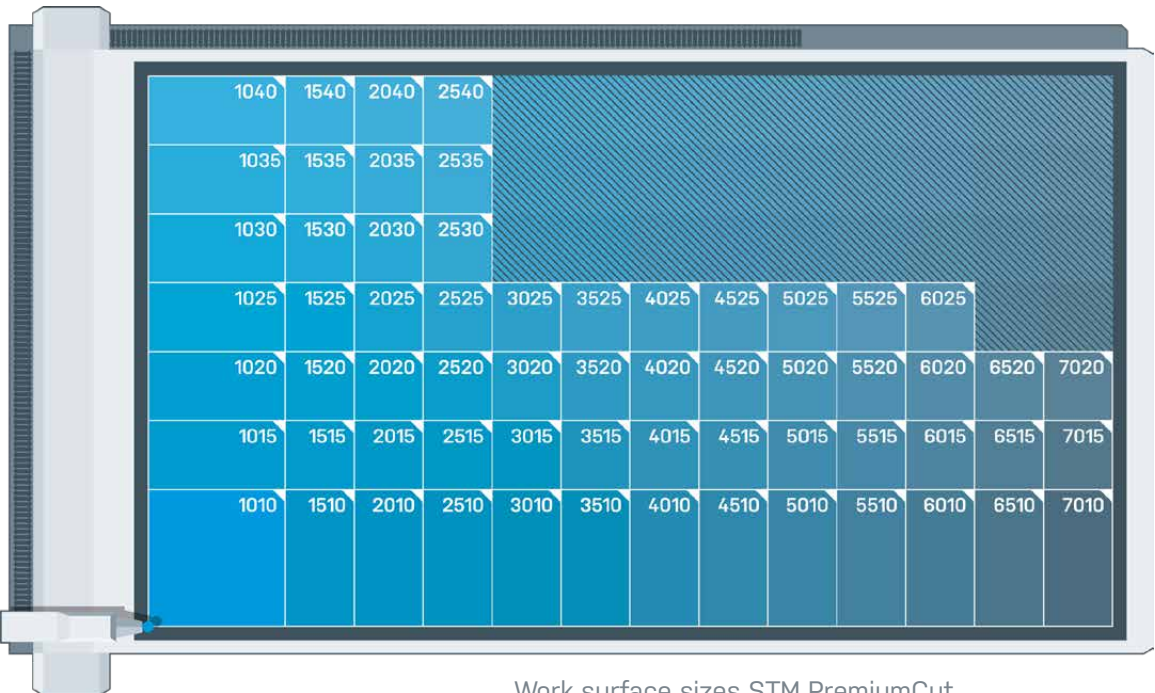
guides, no bellows and a high-pressure tube carried in the axes. The all-digital drive consists of brushless AC servo motors with multiple axes CNC controlled. The corresponding software runs on MS Windows and requires only a standard computer. The tried and tested StM PremiumCut waterjet cutting systems combined with the innovative StM 3D cutting head form a universal waterjet cutting system. There is a choice of three different cutting head models with cutting angles of up to 12°, 48° or 68°. Furthermore the 5 axes kinematics allow cutting angle error correction and the integrated collision protection provides additional safety.

Work surface sizes

The PremiumCut model is available as standard in the work surface sizes shown below.

However, the unique STM modular system for waterjet cutting systems stands for maximum flexibility and allows each customer to find a customised solution with the desired machine size.

Other sizes beyond those listed here are available on request!



Work surface sizes STM PremiumCut

Experience flexibility.

StM waterjet cutting systems can cut almost all solid materials. The spectrum ranges from metals, stone, tiles, glass and wood all the way to foams, rubber, plastics and foodstuffs. StM waterjet cutting systems can be equipped with either a pure water or an abrasive cutting head, depending on the requirements.



— plastic	— copper
— foam	— aluminium
— stone	— steel
— glass	— wood
— carbon	— brass



Cut accurately the way you want to.

The proven PremiumCut systems can be equipped for the most diverse cutting tasks. From the classic 2D cut via heads with cutting angle compensation or complex multiple cutting head systems through to 3D cutting head with 5-axes kinematics with up to 68° swivel range.

Our solution:
The flexible and modular
unit assembly system



StM 2D cutting head

- Maximum precision and cutting speed.
- Multiple cutting heads in parallel on up to 4 Z-axes
- Manually rotating holder for bevelled cuts



StM 12° angle error compensating cutting head

- Maximum precision and cutting speed.
- Workspace A-axis and B-axis up to 12°
- The angle error compensating cutting head compensates the angle error automatically to +/- 0.05 mm
- Integrated height scanning and collision protection



StM 3D68 five-axes cutting head

- Workspace A-axis up to 68°
- Workspace C-axis +/- 720°
- 5-axes cuts, cutting angle compensation and bevelled cut
- The cutting head swivels by means of the robot kinematics through the tool centre point. Cutting angle changes are possible without X/Y movement
- Upgradeable with continuously active height scanning which protects the focussing tube and the complete cutting head from colliding
- No raised construction of the cutting bridge required = low weight; thus drive system requires less power



Waterjet solutions



Travel speed	up to 60 m/min	Positioning accuracy	± 0,02 mm (per meter at 20°)
Z-axis clearance	300/600/900 mm	Repeat accuracy	± 0,01 mm (per meter at 20°)
A-axis feed	360 degree/sec.	Z-axis feed	360 degree/sec.

Included in the PremiumCut package

- ▶ Welded rust-proof machine frame of aluminium and stainless steel
- ▶ Brushless servomotors
- ▶ Premium guide X & Y-axis with Bosch Rexroth™ with high-precision ball bearing carriage and stainless steel balls
- ▶ Heavy-duty load supports for workpieces up to 1.000 kg/m²
- ▶ CNC control unit and PC user interface
- ▶ StM SmartCut waterjet software
- ▶ Control console
- ▶ Marking of workpieces standard

Tuning options

- ▶ Additional cutting heads 2D/3D
- ▶ Additional CNC Z-axes 2D/3D with cutting head incl. abrasive equipment
- ▶ STM pipe cutting module
- ▶ Predrilling unit pneumatic or electric
- ▶ Water level control for cutting tank
- ▶ Adjustable feet for cutting tank
- ▶ Automatic abrasive recovery
- ▶ STM OneClean

STM Waterjet Group

STM is a leading provider of waterjet cutting systems. The company has four locations in Eben im Pongau (Austria), Schweinfurt (Germany), Reiden (Switzerland) and Frans (France) with a total of 70 employees.

The company has four locations in Eben im Pongau (Austria), Schweinfurt (Germany), Reiden (Switzerland) and Frans (France) as well as the service office "RWS – Real Waterjet Service" based in Schlüßberg (Austria). For more than 30 years, the long-established company has developed pioneering integrated manufacturing solutions – particularly for the steel, aluminium, metal, plastic, stone and glass industry. These are characterized above all by efficiency, ease of operation and wear resistance. In development, STM pays particular attention to innovative modular system techno-

logy in combination with connectivity, intuitive operation and high availability of STM waterjet cutting systems. STM also stands for standard CNC controlled modular portal systems in all dimensions and for all applications. STM systems cover all currently possible cutting tasks in the 2D and 3D range and are characterised above all by their cost-effectiveness and standard of quality. The brand manufacturer thus ensures that its individual manufacturing processes are continually matched to the latest requirements of its customers. Since 2018, the company has also held the sole production rights to BYSTRONIC waterjet cutting systems. STM emphasised the importance of after-sales service by founding RWS – Real Waterjet Service GmbH. As an STM Premium Partner of the STM Waterjet Group, service for STM customers comes first. RWS is the partner and companion from the delivery of the machine.

Our solution: Partnership, precision and performance

STM WATERJET GMBH AUSTRIA

Gewerbegebiet Gasthof Süd 178
5531 Eben im Pongau, Austria
T: +43 6458 200 14-0
W: www.stm-waterjet.com
E: info@stm-waterjet.com

STM WATERJET GMBH GERMANY

Alois-Türk-Straße 12
97424 Schweinfurt, Germany
T: +49 9721 946 994-0
W: www.stm-waterjet.com
E: info.de@stm-waterjet.com

STM WATERJET AG SWITZERLAND

Kreuzmatte 1e
6260 Reiden, Switzerland
T: +41 62 772 44 44
W: www.stm-waterjet.ch
E: info.ch@stm-waterjet.com

STM WATERJET SOLUTIONS SARL FRANCE

ZA Pardy
01480 Frans, France
T: +33 63 310 93 59
W: www.stm-waterjet.fr
E: info.fr@stm-waterjet.com

RWS WATERJET SERVICE GMBH

Hauptstraße 11
4707 Schlüßberg, Austria
T: +43 7248 660 24
W: www.waterjet-service.com
E: office.rws@waterjet-service.com