

PremiumCut

The waterjet cutting system with unlimited cutting capabilities.



Your lasting partner of choice

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 a 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

he 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 cutting software can be adapted to individual requirements using modular upgrades. Within the graphic user interface all parameters can be set intuitively and DWG, DXF, STEP, IGES files imported directly.

Top ease of use

STM waterjet cutting systems are accessible from 3 sides. Control is made via a classic Windows 10 desktop PC and additional features such as the manual control unit provide top ease of use.

Profitable – guaranteed

With the unique STM Care package, the warranty on STM systems can be extended from the standard 2 years to up to 8 years. In addition to ease of maintenance and wear resistance, with STM you are also opting for a high-performance overall package with low operational costs and sustainable options for economical water treatment and abrasive discharge.

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 conditioning. Durable and highquality design with stainless steel and aluminium are the focus of STM waterjet cutting systems. Characteristic features are the concealed linear guides without bellows and a high-pressure pipe fed through the axes. The all-digital drive consists of a brushless AC servo motor with multiple axes CNC control. The associated software runs on a standard

Windows PC. The tried and tested STM PremiumCut waterjet cutting systems combined with the innovative STM 3D cutting head form a universal waterjet cutting system. There are three different models available with cutting angles of 12° up to 68°. Furthermore the 5 axes kinematics allow cutting angle error correction and the integrated collision protection provides additional safety. The integrated lance flushing system enables up to 80 % of the abrasive sand to be efficiently flushed out of the cutting basin. STM offers individually compiled training modules to match the required system configuration.

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!



Standard work surfaces of the 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.



plastics		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 compensation 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





Travel speed Z-axis clearances A-axis feed bis zu 40 m/min 300/600/900 mm 360 °/sec. X/Y positioning precision X/Y repeatable precision C-axis feed ± 0,02 mm (per metre at 20 °C) ± 0,01 mm (per metre at 20 °C) 360 °/sec.

Included in the PremiumCut package:

- Welded and milled stainless steel machine frame made of aluminium and stainless steel
- Premium guide X- & Y-axis with Bosch RexrothTM with high-precision ball-bearing carriage and stainless steel balls
- Heavy-duty supports for workpieces up to 1,000 kg/m²
- STM SmartCut waterjet cutting software
- Marking of workpieces available as standard
- Supply tank for 450 kg abrasive
- CNC control and PC interface brushless servo motors
- Control unit

Options:

- Additional CNC Z-axes with 2D/3D cutting heads incl. abrasive equipment
- STM BasicClean or OneClean rinsing systems
- ► Water level regulation in the cutting basin
- Drilling spindle pneumatic or electric
- Automatic abrasive discharge
- Additional cutting heads on cantilever
- STM pipe cutting module
- Precision levelling wedges

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 Schlüßlberg (Austria). For more than 30 years, the long-established company has developed pioneering in tegrated 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 17E 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

97424 Schweinfurt, Germany F: +49 9721946 994-0 V: www.stm-waterjet.com E: info.de@stm-waterjet.com

STM WATERJET AG SWITZERLAND

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

STM WATERJET SOLUTIONS SARL FRANCE

3 Quai kleber 67000 Strasbourg, France T: +33 38 823 70 48 W: www.stm-waterjet.fr E: info.fr@stm-waterjet.com

RWS WATERJET SERVICE GMBH

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