Kimtech waterjet cutting machines



Kimtech's waterjet machines are developed and manufactured in Sweden. They are precision CNC-controlled machines using cutting edge technology to deliver an easy to operate, reliable cutting solution. The cut from abrasive waterjet cutting has a tolerance from 0.1 mm to 0.5 mm, depending on the thickness of the plate. The advanced software control of the machine delivers very high position accuracy, <0.10 mm. Kimtech works throughout Scandinavia and Europe. To ensure a high quality of expert support and service, Kimtech has several co-operation partners including LB-service, Indutech, NK-Service and Arvór System. Kimtech has delivered waterjet cutting machines from 0.5x1m up to 4x20m. All machines uses a range of techniques for linear movement including precision ball screws, linear motors and rack & pinion drive. The most suitable technique depends on the customer's request for acceleration, speed and accuracy.

Kimtech has three standard machines that cover most applications but we also regularly build fully customized special machines.

Standard machines			Special machines:		
XY-SMALL	3100x1600	Art.No: 24640	XY-MINI	1x0,5 meter	Art.No: 26645
XY-MEDIUM	2100x4200	Art.No: 24641	XY-X LARGE	4x14 meter	Art.No: 26646
XY-LARGE	3100x6300	Art.No: 24642	XY-WIDE	6x2 meter	Art.No: 26647

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Specifications XY-SMALL

- Suited for 2x1m plates
- · Optional automatic altitude control
- · Operating system specially adapted to water cutting
- · Machine Building in stainless steel and aluminum
- Ergonomic control panel
- · Ball screw on all axes
- · Water container in stainless steel

Specifications XY-MEDIUM

- Suited for 3x1,5 and 2x1m plates
- · Possibilty of 2 beams
- Optional automatic altitude control
- · Operating system specially adapted to water cutting
- · Machine Building in stainless steel and aluminum
- Ergonomic control panel
- · Ball screw on all axes
- · Water container in stainless steel





Specifications XY-LARGE

- Suited for 6x2 and 3x1,5m plates
- Possibilty of 2-4 beams
- · Optional automatic altitude control
- Operating system specially adapted to water cutting
- Machine Building in stainless steel and aluminum
- · Ergonomic control panel following crossbar
- · Linear motors on all axes
- · Water container in stainless steel

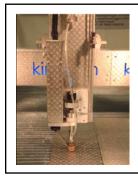
Control unit

- · Software developed specifically for waterjet cutting
- · Graphical color picture of the NC program
- · Ability to go backwards in the NC program
- Zero-coordinate can be placed over the entire operating range
- Ability to rotate the coordinate system in case of angled plate
- Zoom function
- Fast response time
- Very user-friendly
- · Online radius compensation
- · Optional GSM monitoring



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Best Quality



Automatic cutting distance

High-precision cutting head designed to automatically keep the same distance from the material. Highly accurate sensors ensure extreme accuracy. AC servo-driven Z-axis.





Bevel Cutting

High-precision cutting head designed for angled cutting of flat materials. Kimtech has developed its own system with extremely high precision, which is achieved through constant monitoring of the nozzle height and material.

Nesting

In order to use computers to quickly transfer various geometrical shapes on a surface with arbitrary geometric shape nesting is a necessity. Kimtech machines using IGEMS which have been shown to be among the most effective systems for handling algorithms. IGEMS is able to deal with virtually any object, varies from a simple line, to large complex geometries.

The system supports include DWG, DXF, WMF, CNC and IGS.

Auto-Nesting

The system automatically places the cuts on one or more plates. Nesting of multiple parties with different requirements at the same time, means that each process can have individual differences, why auto-nesting is a very effective tool. Auto nesting handles every single set, and automatically places them most effectively. This implies that the parties can be turned, turned upside down, or placing the minor parties in the larger parties cavity, all automatically to avoid waste.

Auto nesting handles parties and panels of any geometric shape.

Report

Nesting solution includes a report generator, for the presentation of the produced results. This includes information about the number of parties, the completion rate and total cutting length.

Pump

The main component of a water jet cutter is the high pressure pump that supplies water with a pressure of up to 4100 bar. Number of cutting heads are depending on the size of the HP pump. Kimtech water jet cutter is supplied with pumps in sizes from 22 kW to 75kW.

The pump is exposed to an enormous pressure when this handles pressures up to 4100 bar over a long time. In the Swedish and Northern European market, pumps manufacturer FLOW proved to be the only one who are able to handle this task. This is the reason that all the machines are provided with Kimtech FLOW pumps.

Spare parts

Kimtech have a full spare part stock for all machines and pumps, which means that downtime is reduced to an absolute minimum. This means delivery 1-2 days throughout Scandinavia.