

## Product Brochure For W08700

# X-MW 44 - CNC Waterjet Cutting System

1250 x 1250mm cutting capacity  
Cuts up to 100mm - (Material Dependant)



ORDER CODE:	W08700
MODEL:	X-MW 44
Cutting Table Capacity (mm):	1250 x 1250
Maximum Work Piece Weight (kg):	250 Per Square Metre
Maximum Cutting Thickness - (Material Dependent) (mm):	Water 100 / Abrasive 50
X Axis Travel (mm):	1250
Y Axis Travel (mm):	1250
Z Axis Travel (mm):	125
Z Gantry Clearance (mm):	~
Rapid Traverse ( X and Y axis ) (mm/mm):	15000
Absolute Positioning Accuracy (mm):	± 0.03
Repeatability (mm):	± 0.03
High Pressure Pump (Type):	Direct Drive Plunger
Max Pump Pressure (psi):	55,000
Max Water Usage (L/min):	4 @ 3800bar
Water Capacity (L):	~
CNC System (Type):	15" Touch screen
Nesting Software:	Included
Drawing File (Type):	DXF, G-Code
Garnet Delivery:	Automatic
Garnet Hopper Capacity (Kg):	80 / 180
Electrical Power (kW):	32
Max Current (Amps):	62
Input Air Pressure (Bar (PSI)):	~
Weight (Empty) (Kgs):	~
Operating Weight (Kgs):	~



## Description

The JEKRAN XM series Waterjet is rich with technology but at the same time extremely user friendly, The X-MW series machines are equipped with many standard features such as built-in material databases, variable soft piercing function for brittle materials, auto garnet delivery system and laser light sheet positioning assistance to name a few.

The powerhouse of the X-MW machine is the German built direct drive pump which outputs 3,800bar / 55,000psi at 100% duty cycle whilst maintaining unrivaled energy savings. These machines are manufactured in Europe and are unbelievably good value.

## Features

- CNC Control - The CNC controller is a 15" Industrial Touch panel which has been ergonomically designed for users in both standing and sitting positions. Using large icon based intuitive CNC software, most operators can be well conversant in using the machine with a single day of training. The CNC and accompanying offline software accept DXF, SVG, HPGL, Vector files as well as G-Code files. Nesting of parts can be achieved for material sheet utilisation.
- Material Database - The material database makes the machine suitable for any user. Cutting parameters are all stored in the CNC and loaded accordingly. This means that correct parameters and cutting configuration is always set and an optimum cut is guaranteed. Fine adjustment of feed rate or other parameters can still be done during the cutting sequence. This allows any novice user to attain satisfactory cutting results right from the start.
- High Pressure Pump - The heart of the system is the highly advanced German built variable speed direct drive pump, creating up to 3800bar / 55000psi pressure at 100% duty cycle using the standard 0.35mm orifice. The pump boasts a unique filtering system making it suitable for tap water quality saving you money on additional equipment and maintenance costs. Maintenance costs are also further reduced with the X-MW series pump having a 1000hr service interval compared to an intensifier pump which is 500hrs.
- Water pre-treatment - Suitable for tap water quality – No reverse osmosis filtration is required as long as water meets the correct specification. Sample testing is required.
- Energy Efficiency – Water jet cutting systems often use hydraulically driven intensifiers whereby only about 60% of the energy drawn to run the main motor is in effect used for the regulation and provision of the actual cutting Jet. This is an enormous energy loss. The variable speed directly driven pumps on the X-MW series distinguish themselves in comparison to intensifier pumps with a much higher degree of power efficiency of up to 30% more efficient than intensifier pumps.
- Bulk Garnet Delivery System - Equipped with a PLC controlled automatic bulk garnet feeding system the machine utilises unique technology which allows you to fill the bulk hopper without stopping the cutting process, combined with a garnet low-level sensor maximum production efficiency is achieved. The hopper capacity is 80L / 180kg
- Frame / Chassis – The chassis is fully welded to improve strength and rigidity, making the whole composition robust. This is especially important after prolonged cutting times when heat can distort the construction.
- Body Work / Covers - All steel covers are painted with epoxy type paint to give it ultimate coating quality. The aluminium sections are anodised for added protection. Side covers are made of industrial grade ABS to give the machine an aesthetically pleasing look whilst providing the necessary protection from ingress of contaminants and satisfying safety requirements.

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- Drives and Motors - The Y-axis benefits from a motor on either side of the gantry to achieve high speed and accurate motion during cutting and traverse rapid motion. These are coupled with a purposely designed gear box to maximise torque and accurate motion.
- Fully Sealed Z axis – Form and function are built into the X-MW Series Z-Axis, keeping a small form factor, yet housing a fully sealed cutting head post. The design ensures that the ingress of contaminants is minimised, thus eliminating the potential damage and shorter lifetime that these may induce.

### Specific Features



Side View



Close Up Head



Cutting Head



Sample Cut