

The Swift-Jet Range

Thanks to Swift-Cut, it's never been more affordable or achievable to own a water-jet cutting system. Waterjet technology produces excellent fine-feature cut quality with low edge taper, no heat-affected zone, a narrow kerf, and dross-free cutting.

It also offers the ability to process nearly any material and a thickness range capability unmatched by other cutting technologies.

The Swift-Jet machine with its easy to use software and powered by Hypertherm HyPrecision pumps provides high sector leading cutting on a wide range of materials at a low-cost investment. Easy to use with exceptional aftercare and support, the Swift-Jet is the answer to affordable, high precision, high quality in-house cutting.

Bellows & cover
Prevents ingress for component protection.

Hopper
Adjustable abrasive mini hopper at head for optimisation of abrasive flow.

Collision probe
Protects the cutting head in the event of a crash.

Enclosed drag chains
Fully enclosed cable drag chains protect cables reducing potential downtime.

Water tank
Epoxy coated heavy duty steel water tank is long lasting and delivers stability for precise cutting.

Dual Y Axis
Dual driven Y axis maintains gantry squareness for the most accurate parts.

AC servos
Omron AC servos with high resolution encoders drive precision ball screws on all axes for unmatched positioning accuracy.

Software
Omron industrial CNC control system provides a robust and dynamic controller with online diagnostic functionality.

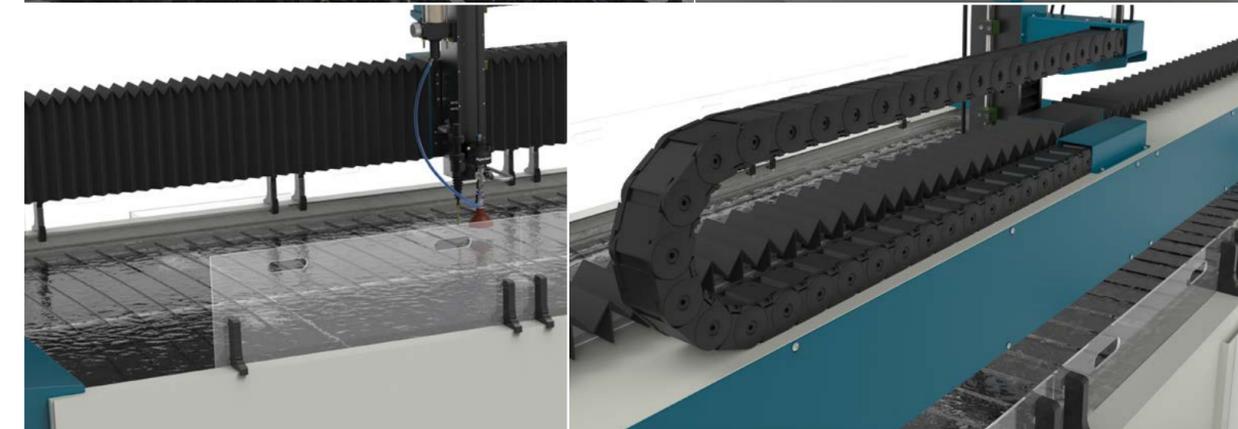
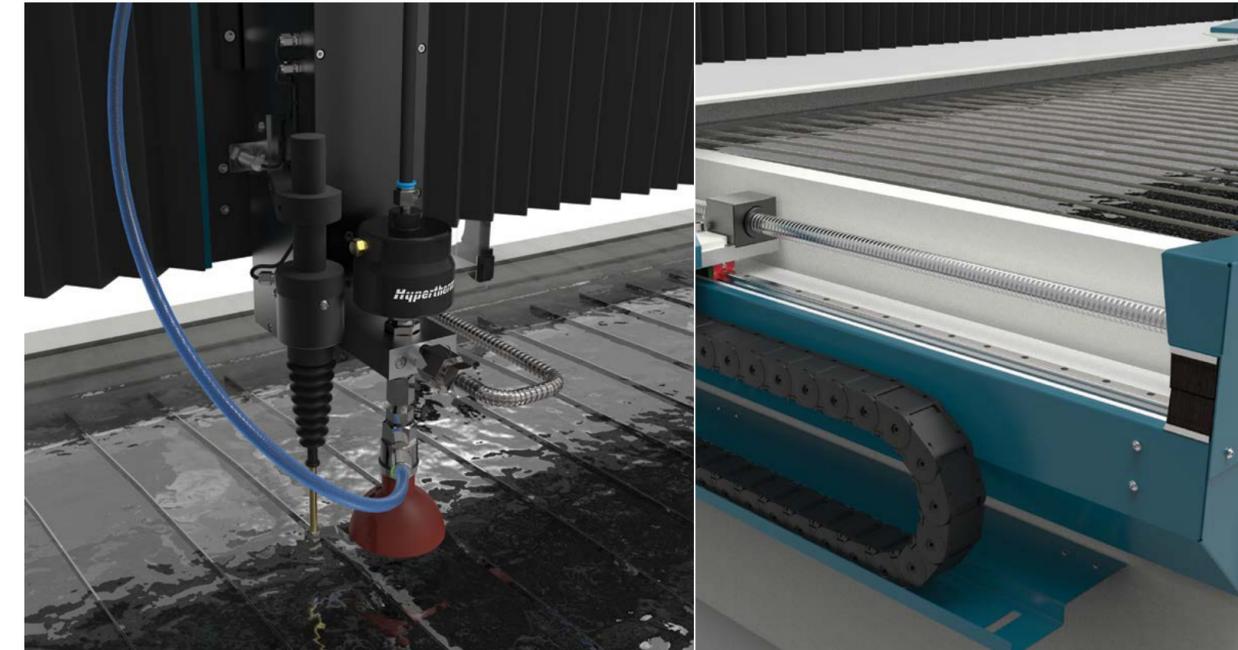
EtherCAT communication
EtherCAT communication throughout machine and HyPrecision pump ensures highspeed communication for motion and I/O control.

Linear rails
Precision linear rails on all axes provides repeatable positioning across the whole cutting bed.

Enclosed drag chains
Fully enclosed cable drag chains protect cables reducing potential downtime.

Splash guard

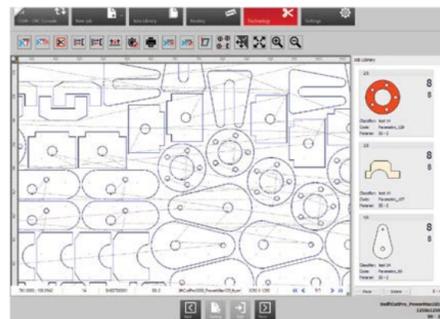
Operators console
Ergonomic standalone operators console with touch, keyboard and mouse inputs.



Swift-Jet is our new, affordable and easy-to-use waterjet profiling solution. Offering precision cutting and superior build quality, this smart machine can be used to cut textiles, rubber, foam, plastics, leather, composites, stone, tile, glass, metals, food, paper and much more. Our machines are calibrated using the very latest Renishaw ballbar testing equipment, ensuring outstanding dynamic positioning and repeatability.

SwiftCAM

Swift-Cut's easy to use software guarantees that anyone with a basic knowledge of computers will be capable of operating the Swift-Jet cutting system. Minimal training means the table will be operational almost immediately, maximising output from the start.



Automatic nesting

Automatically nests parts for economical sheet usage.

Automatic lead in/out

Software automatically applies lead ins/out for quicker programming.

Micro joints

Tabs to prevent parts moving whilst cutting.

Bridges

Continuous cutting between parts to reduce cycle times.

Common-line cut

Cut along shared edges of parts.

Sheet Alignment

Align the cutting path with misaligned sheets on the cutting bed.

Reference points

User configurable reference points for jig fixtures.

Cut Quality

5 cut quality modes from fine to rough.

Parametric shape library

Over 80 configurable shapes.

Part in part nesting

Nest parts in scrap areas to fully utilise the sheet.

Customisable cutting rules

Optimise cutting parameters for best cutting performance.

Toolsets

Pre-programmed toolsets for common materials.

Customisable toolsets

Modify or create toolsets for new materials.

Job reports

Export job reports displaying scrap percentage and cutting times.

3D Cut Simulation

Play a 3D machine simulation of the cutting operation.

3D part preview

Preview the part in 3D before cutting.

Available in 2 sizes



SJ1500
1600mm x 1600mm
cutting area (5' x 5')



SJ3000
1600mm x 3100mm
cutting area (5' x 10')

Optional Extras

Water Treatment System
Reverse Osmosis System
(Must Include Softener and Boost Pump)

Benefits of Water jet cutting

- No heat ingress into material
- Precise repeatable cuts
- Ideally suited to exotic materials
- Can cut a range of materials including metals, stone, plastics, wood and foam
- Weld ready parts

Machine Performance

| Maximum traverse speed | Maximum Z clearance | Positional accuracy | Tank Depth |
|------------------------|---------------------|-------------------------|-------------------|
| 15m/min (590 ipm) | 220mm (8.5 inches) | 0.0150mm (0.006 inches) | 840mm (33 inches) |

Power Options

Source: Hypertherm

| Model | Power | Pressure | Max. output flow | Max. orifice size |
|------------------|-----------|-----------|------------------|-------------------|
| HyPrecision 30hp | 30hp/22kw | 60,000psi | 2.3 l/min | 0.28mm |
| HyPrecision 50hp | 50hp/37kw | 60,000psi | 3.8l/min | 0.35mm |

