

Select – optimized by flexibility

# Premium

TECHNICAL DATA

Devoted to  
performance



WATER JET SWEDEN

# Versatile cutting system with endless possibilities

The Premium machines are extremely versatile cutting systems with almost endless possibilities. The systems are designed for both 2D and basic 3D cutting, 4000 and 6000 bar system technology.

## TECHNICAL DATA

Construction: ..... Gantry machine (WJS world-wide patented guide system)  
Frame: ..... Welded  
Cutting Table: ..... Stainless Steel  
Covers: ..... Stainless Steel  
Motion System: ..... Linear Motor / Ballscrew  
Control Unit:..... PanelOne Operator HMI  
CNC-system: ..... FANUC 31i or 31i -5 for Beveljet  
Automatic Variable Multihead: .. 2-4 heads, (nesting optimization)  
3D Cutting:..... Beveljet system  
Process:..... PWJ and AWJ (FAWJ compatibele)

## PERFORMANCE

Maximum Z-movement: ..... 250 mm  
Maximum Table load:..... 1200-3000 kg/m²  
Positioning accuracy:..... ± 0.050 mm/m  
Repetition accuracy: ..... ± 0.025 mm

## BEVELJET® PERFORMANCE

Maximum Z-movement: ..... 170 mm  
Cutting Performance: ..... 60°  
B-axis movement:..... ± 91°  
C-axis movement:..... ± 400°  
Transmission accuracy B & C axis: . < 1 arcmin  
Repetition accuracy B & C axis: ..... < ± 0.1 arcmin

## TABLE SIZE (MM)

MODEL	NCP 30	NCP 40
Width	3200	4200
Length L1	1705	-
Length L2	2275	2275
Number of Z	1-2	1-4

## FEATURES

### Multithead CNC controlled

With multiple heads you can optimize nesting and get very efficient material usage. By cutting different parts simultaneously you also minimize production time in your operations. Automatic multiple cutting heads increase flexibility and are applicable for the NCP20-NCP40 models.

### Beveljet®

With real 5-axis interpolation you get a 3D cutting much more versatile than just bevel cutting. A fully vector based calculation in Fanuc CNC for TCP gives improved cutting quality. The Beveljet function is applicable for the NCP30 and NCP40 models.

### Turning Device (Tube Cutting)

The turning device for tube cutting is normally adapted to customer specific requirements. The function is fully integrated into the control system for smooth operations. The Turning Device can be combined with Beveljet, and also be retrofit into old WJS cutting machines.  
Maximum cutting feed B-axis: ... 6000° /min  
Transmission accuracy:..... ± 20 arcsec  
Tube diameter: ..... 10-500 mm

## Select – optimized by flexibility

You can add capacity and capability with functions like multi-head, bevel cutting and tube cutting. Water Jet Sweden Premium machines are especially designed for tough conditions, where high up-time and non-stop production is required, emphasising durability and long life performance.

A wide range of armament possibilities make these machines efficient in almost any job shop or industry.

### Table grids

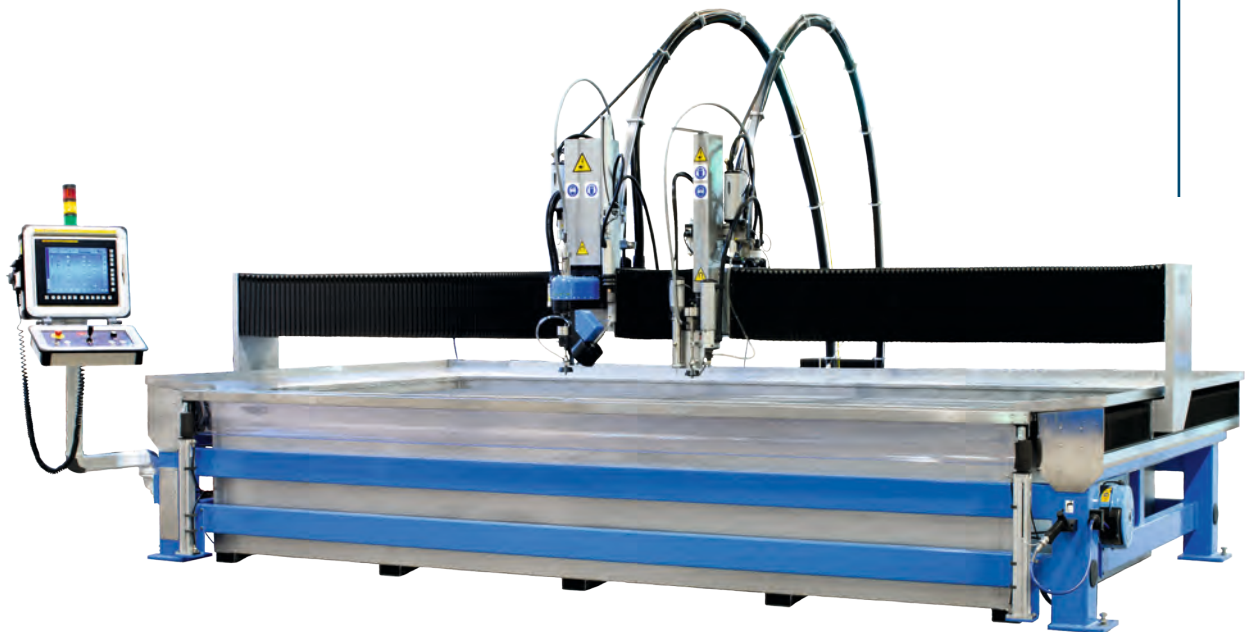
To emphasise the versatility of the Premium machine there are a number of table grid options, depending on cutting requirements. Except for the standard grids there are wave grids for cutting thick materials and straight lines, and tube grids for heavy-duty material cutting.

### INCLUDED

- Height sensor
- Abrasive Supply System with Pressure Vessel and Abrasive Tower
- Abrasive level control and blockage control
- Remote control of HP Pump in HMI
- Abrasive removal system with tip container and sediment tank

### OPTIONS

- Collision sensor
- Zero point indicator
- Drilling unit
- Workpiece Indicator System (probe function)
- Unmanned operations functions
- Jet Pen Marker system
- Online abrasive feeding system
- Electronic abrasive feeder, flow controlled from PanelOne
- Pressure monitoring of HP pump in HMI
- Proportional valve pressure control of HP pump in HMI
- Quick water level adjustment



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## General Water Jet Sweden benefits

### Designed to meet your specific needs

We offer machine system solutions based on an extensive range of product categories and families, but all machines are actually designed to meet specific customer needs. Each machine will consequently be considered a unique project.

### World class CNC systems



To secure high performance, all Water Jet Sweden machines have Fanuc CNC systems. Best reliability and availability in the world.

Fast and reliable CNC systems with worldwide support.

### Five Years Performance Warranty



We guarantee a brand new machine performance after 5 years of duty - a warranty extension made possible by a unique design. Thanks to the robust mechanical design and the patented guiding system, we can

ensure reliable machine performance over an extensive life span. Due to this fact, we can also offer a performance warranty spanning over 5 years or 10 000 hours of operation!



### Turn-key Delivery and Performance Testing

All machines are thoroughly tested before delivery, with advanced testing equipment from Renishaw. We use both AS XL-80 Laser for static laser measurements and Q-10 Ballbar dynamic performance for accuracy and repetition. Our turn-key delivery always includes installation, training and performance verification to secure customer operation.

### PanelOne® HMI

All Select and Special machines have a specific operator panel designed according to industry standards. PanelOne is an easy-to-learn, simple-to-use machine control unit, developed specifically for water jet cutting. To increase efficiency, the panel has a touch screen with a number of time-saving functions and a uncomplicated operator desk with a joystick and the key functions.

### Lifetime Support by Waterjet Specialists



The WJS service team is highly specialized within the field of water jet cutting. They are rightfully appreciated for fast, efficient support, online trouble-shooting and a high degree of personal commitment. Via our hotline support, our technical expertise is available on a 24/7 basis - and we always ship your spare parts on the very same day you order them!

### CERTIFICATE



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