

Select – optimized by flexibility

# Grand

TECHNICAL DATA

Devoted to  
performance



WATER JET SWEDEN

## Robust, large scale cutting system with top of the line technology

Grand machines are built for large scale production facilities with specific production needs and for large and odd size materials. It has a very robust construction based on a heavy-duty frame system and top of the line technology.

### TECHNICAL DATA

Construction: ..... Gantry machine, (WJS worldwide patented guide system)  
 Frame: ..... Heavy-Duty  
 Cutting Table: ..... Stainless Steel  
 Covers: ..... Heavy-Duty Stainless Steel Protection Covers  
 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 compatible)

### PERFORMANCE

Maximum Z-movement: ..... 250 mm  
 Maximum Table load: ..... 1200-3000 kg/m<sup>2</sup>  
 Positioning accuracy: .....  $\pm 0.050$  mm/m  
 Repetition accuracy: .....  $\pm 0.025$  mm

### TABLE SIZE (MM)

MODEL	NCG 25	NCG 30	NCG 35	NCG 40
Width	2700	3200	3550	4200
Length L1	-	3080	3080	3080
Length L2	3600	3600	3600	3600
Length L3	4500	4500	4500	4500
Length L4	6700	6700	6700	6700
Length L5	9200	9200	9200	9200
Length L6	12400	12400	12400	12400
Number of Z	1-2	1-2	2-3	1-4

### BEVELJET® PERFORMANCE

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

### Extra Large Machines

Is there a need for even larger cutting tables, Water Jet Sweden design and build extra-large machines on request as part of our Special Machine offer. With the WJS worldwide patent all machines has the same tolerance independent of size.

### FEATURES

#### Heavy duty design features

All grand machines have a side mounted motion system to enable safe handling of large and heavy materials, and heavy duty stainless steel covers protect the machine from impact.

#### Efficient job handling

The heavy duty design allow access to the machine from three sides to give secure and easy loading/unloading. The Zone divided work table function make it possible to exchange jobs while processing.

## Select – optimized by flexibility

Like the WJS Premium models the Grand models are extremely versatile machine tools with almost endless possibilities. The machines are designed for both 2D and basic 3D cutting, 4000 and 6000 bar system technology. You can add capacity and capability with functions like automatic multi-head, bevel cutting and tube cutting.

Every Grand machine is tailored according to the customer production process, easily adopted for multi-job processing and unmanned operations.

### Heavy duty production features

To avoid backlash when cutting thick materials all Grand machines has the ability to quickly adjust the water level to under water cutting. There are a number of table grid options suitable for different cutting requirements. Except for the standard grids you can choose wave grids for thick materials and straight line cutting, or tube grids for heavy-duty material cutting.

### Great versatility

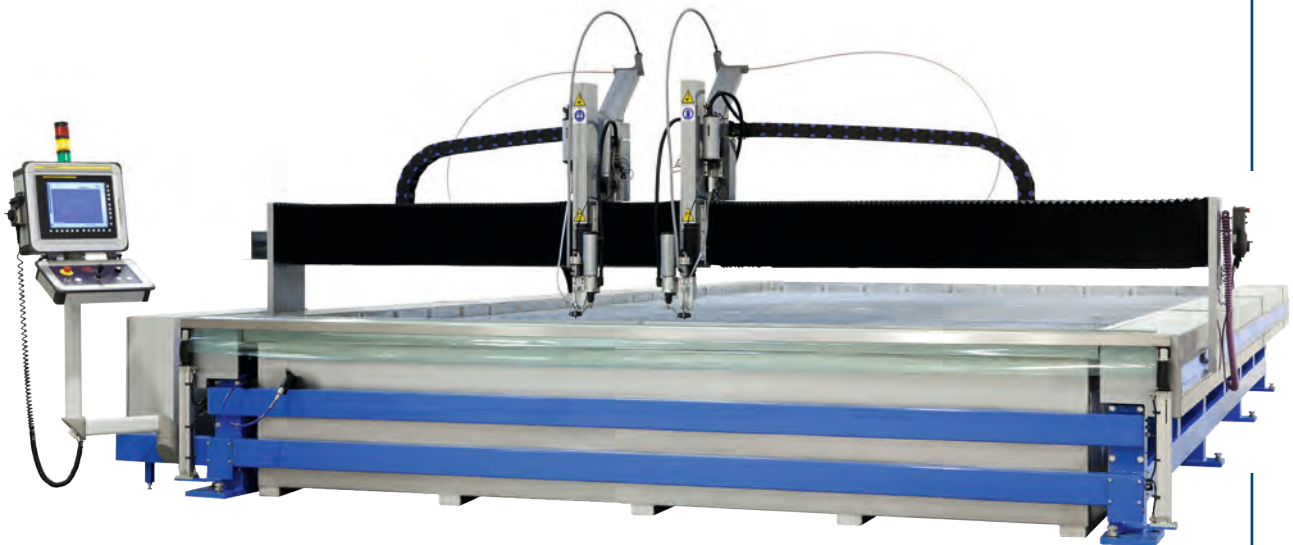
The Grand machines have the same armament options as Premium machines. With automatic multiple heads you can optimize nesting and get very efficient material usage. By cutting different parts simultaneously you also minimize production time. With Beveljet cutting head with real 5-axis interpolation you get a 3D cutting much more versatile than just bevel cutting. And the turning device for tube cutting can be combined with ordinary or Beveljet cutting head, and is fully integrated into the control system for smooth operations.

### 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
- De-sludge 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
- Zone divided work table



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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!



Europäisches Patentamt  
European Patent Office  
Office européen des brevets

### 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



Water Jet Sweden AB  
Teknikvägen 4  
SE-372 38 Ronneby  
Sweden

Phone: +46 457-45 54 40  
Fax: +46 457-192 01  
E-mail: [info@waterjet.se](mailto:info@waterjet.se)  
Web: [waterjetsweden.com](http://waterjetsweden.com)

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