



## DaVinci Diamond Factory

Powered by  
Synova Laser MicroJet®

### First automated laser faceting solution for diamond manufacturers

- Virtually complete Rough-to-Polish process
- 57 facets, one single operation
- Reduced manufacturing pipeline
- Higher accuracy and stone yield
- Stone size: 0.25 to 10 cts



DaVinci software



Stone mounting station



From rough diamond to 57 facets

Shareholder partner:



DE BEERS GROUP

## General Specifications

## DaVinci Diamond Factory

### Axes

Axis system		3 linear + 2 rotary axes
Drive		Linear and torque motors
Accuracy	$\mu\text{m}$	+/- 3
Repeatability	$\mu\text{m}$	+/- 1
CNC control (Bosch-Rexroth)		5-axis

### Laser

Laser type		Diode pumped solid state Nd: YAG, pulsed
Wavelength	nm	532

### Water Jet

Nozzle diameter	$\mu\text{m}$	50
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### Special features

Breakthrough sensor		Optical detection of cut-through
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### Dimensions/Weight

Dimensions (machine)	mm (W x D x H)	800 x 1200 x 1650
Dimensions (utilities cabinet)	mm (W x D x H)	700 x 2300 x 1600
Weight (machine)	kg	750
Weight (utilities cabinet)	kg	700

### Mounting Station

Positioning accuracy	$\mu\text{m}$	+/- 30
Tilt angle deviation	degree	+/- 0.5

### Software

CAM software		3D Shaping
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The specifications are subject to change without notice due to technical changes. The LMJ machines incorporate the worldwide patented technology of water jet guided laser invented at the Swiss Federal Institute of Technology in Lausanne, Switzerland. These machines conform to CE regulations.



CORPORATE HEADQUARTERS

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