

SYNOVA

Diamond Cutting System

Powered by Synova
Laser MicroJet®



DCS 30 *Ecoline*

Advantages of Water Jet Guided Laser Technology

- No heat damage
- Cylindrical beam (no V-shape)
- Clean cutting surfaces
- No focus adjustment or distance control



Minimal weight loss
(30 μm nozzle)



Low risk of breakage



Smooth surface quality



High cutting speed



Taper free



High-precision diamond cutting up to 2 carats

www.synova.ch



General Specifications

DCS 30 Ecoline

Axes

Working volume	mm (W x D x H)	150 x 100 x 50
Linear axis XYZ (Bosch-Rexroth)		High-precision ball screw axes
Maximum stroke	mm (X, Y, Z)	208 x 117 x 70
Accuracy	μm	+/- 5
Repeatability	μm	+/- 3
Maximum XY speed	mm/s	500
Acceleration	G	0.4
CNC control (Bosch-Rexroth)		2-axis

Laser

Laser type		Diode pumped solid state Nd: YAG, pulsed, air-cooled
Wavelength	nm	532
Average power	W	10-20
Beam transmission (optical fibre)	μm (core diameter)	100

Water Pump

Water flow (Water consumption)	l/ h (average)	1 (10)
Water pressure	bar	500-600
Nozzle diameter	μm	30

Utilities

Electrical power	VAC	1 x 230
3 phases	Hz	50/60
Power consumption (total)	kVA (max.)	8
Compressed air, oil free	bar	5-6

Dimensions/ Weight

Dimensions (with utilities)	mm (W x D x H)	2160 x 735 x 1600
Weight	kg (approx.)	500

Options

Sawing cassette
Rotary axis

The specifications are subject to change without notice due to technical changes. The DCS 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

SYNOVA SA

Route de Genolier 13
1266 Duillier
Switzerland

Phone: +41 21 55 22 600
sales@synova.ch
www.synova.ch

MICRO-MACHINING CENTERS, SUBSIDIARIES AND DISTRIBUTORS IN: CHINA, GERMANY, INDIA, ITALY, JAPAN, MALAYSIA, RUSSIA, SINGAPORE, SOUTH KOREA, TAIWAN, THAILAND, UNITED KINGDOM, USA

Contact information available at: www.synova.ch