



Laser Cutting System

Powered by
Synova Laser MicroJet®

Announcement

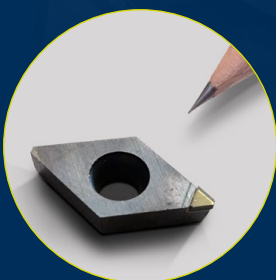
5-axis Laser MicroJet® machine for
the tool and metalworking industries

- Highly accurate and fast laser machining
- Wet laser process without heat damage
- Cutting, drilling, grooving and 3D shaping of superhard materials, ceramics and metals



LCS 250

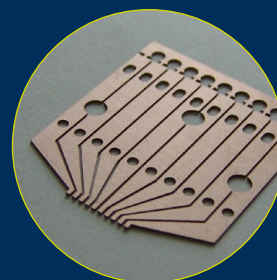
Main Industries and Applications



Tool Manufacturing



Tool Manufacturing



Micro-Machining




Automotive



General Specifications

LCS 250-5

Axes

Working volume	mm (H x Ø)	 260 x 130
Linear axis XYZ		Linear motor
Rotary axis A (+135° to -20°)		Torque motor
Rotary axis C (360°)		Torque motor
Maximum stroke	mm (X, Y, Z)	500 x 380 x 380
Accuracy	µm	+/- 3
Repeatability	µm	+/- 1
Maximum XY speed	mm/s	500
Maximum Z speed	mm/s	500
Maximum A speed	RPM	200
Maximum C speed	RPM	500
Acceleration	G	1
CNC control (Bosch-Rexroth)		5-axis

Laser

Laser type		Diode pumped solid state Nd: YAG, pulsed
Wavelength	nm	532
Average power	W	50-400
Beam transmission (optical fibre)	µm (core diameter)	150-300

Water Pump

Water flow/ Water consumption	l/ h (average)	1/ 10
Water pressure	bar (max.)	500
Nozzle diameter	µm	50-120

Utilities

Electrical power	VAC	3 x 400
3 phases	Hz	50/60
Power consumption (total)	kVA (max.)	30
Compressed air, oil free	bar	5-6

Dimensions/ Weight

Dimensions (machine)	mm (W x D x H)	1800 x 1950 x 2500
Dimensions (utilities cabinet)	mm (W x D x H)	700 x 2300 x 1600
Weight (machine)	kg	6000
Weight (utilities cabinet)	kg	700-750

Options

Automatic jet angle correction
Chiller
CAD CAM software
Touch probe
Motorized vision
Power meter
High-pressure water pump (800 bar)

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