freeformer

HDG Premium

High Dynamic Generator
Digital Freeform



High Dynamic Generator - Digital Freeform Lenses



freeformer HDG Premium

Versions: XS

Technical data

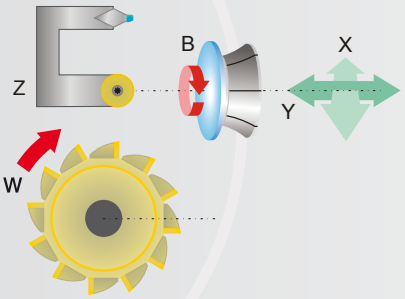
DIMENSIONS	mm. 965 x 1300 x 1450 (W x D x H)
WEIGHT	Kg. 800 ca.
NOISE	65/70 db.
ELECTRIC POWER	7.5 Kw. Installed
ELECTRIC CONSUMPTION	10/12 A (in cycle)
COMPRESSED AIR	6 bar
TOOLS	**Generating:**
	- PCD tool
	Fining:
	- PCD tool
	- Diamond tool / 2mm. Angle 120°

Axes

X:	Position +/- 0.001 mm. - max speed 500 mm./sec
Y:	Position +/- 0.001 mm. - max speed 500 mm./sec
Z:	Position +/- 0.001 mm. - ultra fast acceleration axis
B:	Position +/- 0.008° mm. - 6000 rpm.

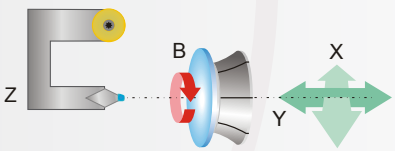


Generating axes



Wheel Optional on demand

Fining axes



for RX prescription laboratory

Integrated technologies

Features

- 4 working axes (X, Y, Z, B).
  Interpolated X and Y axes based on high speed linear motors
  Z oscillating bipolar axis (w1 and w2) - CNC controller with touch screen PC.
  Tangential cutting speed= 11.580mm/sec. when in combination with rotating centre.
- Interpolated direct driven spindle with high precision and stiffness bearings (B axis) - max 5000 rpm.
- FreeForm ophthalmic lenses, aspherical, spherical, cylindrical and toric.
- Diameter reduction and lens pre-shape: elliptic and programmable forms.
- Controlled programmable chamfering.
- High speed feedback on operative system kernel.
- Pneumatic and I/O controls based on Ethercat technology.
- Separated antivibration double structure.
- Fast and easy manual tool setup with proprietary COMES device.
- Internal washing system with rotating nebulizer.
- Electric protection system by transformer / RS, US motors.

Control panel - PC system

- Innovative graphic user interface.
- Dedicated software Zanzaform by COMES.
- Touch screen interactive user interface.
- Relational data base for lens parameters.
- LAN Network connection.
- Serial port RS 232.

Optionals

- Remote control service.
- Internal modem.
- Barcode scanner for lens data entry.
- Filtering Cooling system / 90 lt. tank (included).
- Multiform LDS software generation (freeform).
- Micro-Mechanical Engraver for technical marking (for progressive lenses - laser substitute).
- Faster elliptical reduction spindle.
- 12 plates generation wheel (optional on demand).



Materials

- CR 39 / Trivex.
- Polycarbonate.
- Plastic high index.

Production

Ready to polish

- All ophthalmic forms + FREEFORM.

Integrated technologies

freeformer

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