Integrated technologies

medium IMPACT freeformer



IMPACT 2 freeformer



COMES S.r.l.

Via Veneto, 6 - 20025 Legnano (MI) Italy
tel. + 39 0331 400.036 - fax +39 0331 401.288
www.comes.it - E-mail info@comes.it

IMPACT 2 freeformer

high technology multiform generator





IMPACT 2 freeformer

Automatic load

Technical data	
DIMENSIONS	mm. 2000x1900x1550 - WxDxH
WEIGHT	Kg. 2100 ca.
NOISE	65/70 db.
ELECTRIC POWER	9.5 Kw. Installed + 3.5 chiller
ELECTRIC CONSUMP.	15/18 A (in cycle)
COMPRESSED AIR	6 bar
TOOLS	**Generating:**
	- Polycrystalline diamond wheel
	- Sintered diamond wheel
	- Galvanic, Carbide and for Aluminium (*)
	(*)available on requirement
	Fining:
	- PCD tool
	- Diamond tool

Axes	
X:	Position +/- 0.001 mm. - max speed 500 mm./sec
Y:	Position +/- 0.001 mm. - max speed 500 mm./sec
Z1:	Position +/- 0.001 mm. - ultra fast acceleration axis
Z2:	Position +/- 0.001 mm. - ultra fast acceleration axis
B:	Position +/- 0.008° mm. - 6000 rpm.
W:	Rotation 0 to 18.000 or 30.000 rpm.



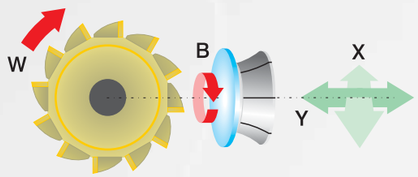
medium IMPACT freeformer

Manual load

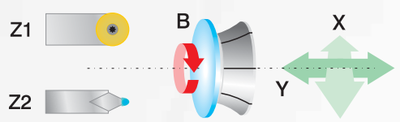
Technical data	
DIMENSIONS	mm. 1700x1700x1550 - WxDxH
WEIGHT	Kg. 2000 ca.
NOISE	65/70 db.
ELECTRIC POWER	8.5 Kw. Installed + 3.5 chiller
ELECTRIC CONSUMP.	15/18 A (in cycle)
COMPRESSED AIR	6 bar
TOOLS	**Generating:**
	- Polycrystalline diamond wheel
	- Sintered diamond wheel
	- Galvanic, Carbide and for Aluminium (*)
	(*)available on requirement
	Fining:
	- PCD tool
	- Diamond tool

Axes	
X:	Position +/- 0.001 mm. - max speed 500 mm./sec
Y:	Position +/- 0.001 mm. - max speed 500 mm./sec
Z1:	Not available
Z2:	Position +/- 0.001 mm. - ultra fast acceleration axis
B:	Position +/- 0.008° mm. - 6000 rpm.
W:	Rotation 0 to 18.000 or 30.000 rpm.

Generating axes



Fining axes



Features

- 5 working axes (X, Y, Z1, B, W) /optional 6th axis Z2.
  Interpolated X and Y axes based on high speed linear motors.
  Z1 / Z2 axes: special-patented ultra speed motors.
- Interpolated B axis (lens) - 6000 rpm.
- Direct drive motor spindle W axis (generation wheel) at 18000 or 30.000rpm.
- Automatic millesimal device for semi-finished and finished lens control.
- Automatic millesimal device for lens diameter control.
- 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 ModBus technology.
- Separated antivibration double structure.

Control panel - PC system

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

Optionals

- Remote control service.
- Internal modem.
- Integrated automatic loader for prescription box.
- Automatic or Manual barcode scanner for lens data entry.
- Cooling system.
- Multiform sofware generation (freeform).

Materials

- CR 39 / Trivex®
- Polycarbonate.
- Plastic high index.
- Aluminium and plastic tools.

Production

Ready to polish

- All ophthalmic forms + FREEFORM.

for RX prescription laboratory