



Vacuum Chamber Shielded Atmosphere Module

This module is designed for laser welding small production series of packages under vacuum or shielded atmosphere.

As an effective alternative to a full-sized glovebox, the vacuum chamber module fits inside the NOVA-6. The module consists of a vacuum chamber, vacuum pump, safety overpressure valve, baseplate and piping.

The vacuum pump evacuates the chamber to a vacuum of a few mBar. In this vacuum, the laser can weld through the cover glass.

Optionally the operator can choose to flush the chamber (and the package) with a controlled atmosphere. After 2 to 3 repeat pumping and flushing actions, the device will have an atmosphere suitable for closing the package.

The advantages of using this extra module on your laser welding system are:

- Low moisture and oxygen content
- “Glovebox results” without the glovebox inflexibility and costs
- Vacuum welding possible
- Ideal for specialty and low-volume series

SPECIFICATIONS CHAMBER

Inside dimensions	172 mm diameter x 100 mm height
Material	Stainless steel and optical glass
Specs pump	
Type	Dry pump
Voltage	110-230V +/- 10%
Frequency	50/60 Hz
Power	600W max.
Operating temperature	12 to 31 °C
Operating humidity	Max. 80%
Absolute pressure	38 mTorr (0,5 Mbar)
Options	Pressure sensor
Oxygen sensor	
Humidity sensor	
Automatic pump and purge cycle	
Electrical/ SW integration into the NOVA-6	

IMAGES



Vacuum chamber pump inside NOVA-6



Vacuum chamber in open position



Vacuum chamber in closed position