

Compact unit NIKA-158



The Nika-158 magnetron sputtering unit is designed for silver sputtering on open-type metal-film resistors.

Basic platform NIKA-2012-500

Vertical chamber Φ500 mm

Pumping means

- BB pump: KYKY-FF-200 / 1300E
- FV pump: NVSp-35

Technological devices

- Ion source II-250 1 pc.
- Magnetron-270 3 pcs.
- Heater 1 pc.
- Resistance witness 1 pc.
- Temperature sensor 1 pc.

Compact unit NIKA-158

Layout and characteristics



IBS-250 – Ion beam source.



Heater

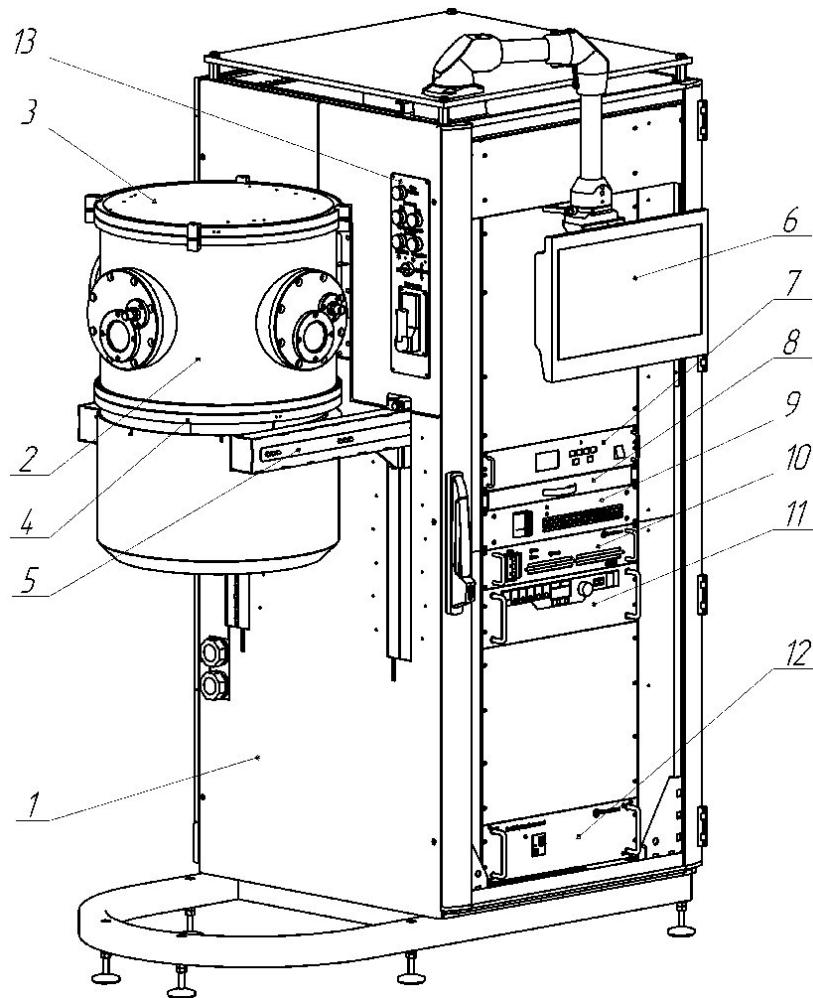


M-270 - Magnetron - 3 pcs.

Options

Power Supply voltage Mains	13.6 kW
connection	400 (+ 10-15)%
Time to reach working vacuum	TN-S no more than 30 minutes
Number of gas injection channels	2
Maximum current consumption per phase	14 A
Weight	(excluding foreline pump), kg, no more than 650
Coolant volume	not more than 15 l
Coolant	distilled water, 20% ethyl alcohol solution in distilled water
Ultimate vacuum	no more than 1×10^{-5} Pa
Working gases	Argon, oxygen
Working vacuum no more	4×10^{-3} Pa

Compact unit NIKA-158 Components



- 1 - frame;
- 2 - vacuum chamber;
- 3 - upper flange;
- 4 - bottom flange;
- 5 - lifting frame;
- 6 - monitor;
- 7 - controller TMH TCDP-II;
- 8 - shelf with keyboard and mouse;
- 9 - power supply unit 351 of the ion source
- 10 - power supply 344 of the heater;
- 11 - power supply unit for magnetrons;
- 12 - water distribution block;
- 13 - control panel.



Beams & Plasmas
Laboratory of vacuum technologies plus, LLC

Compact unit NIKA-158 Layout

