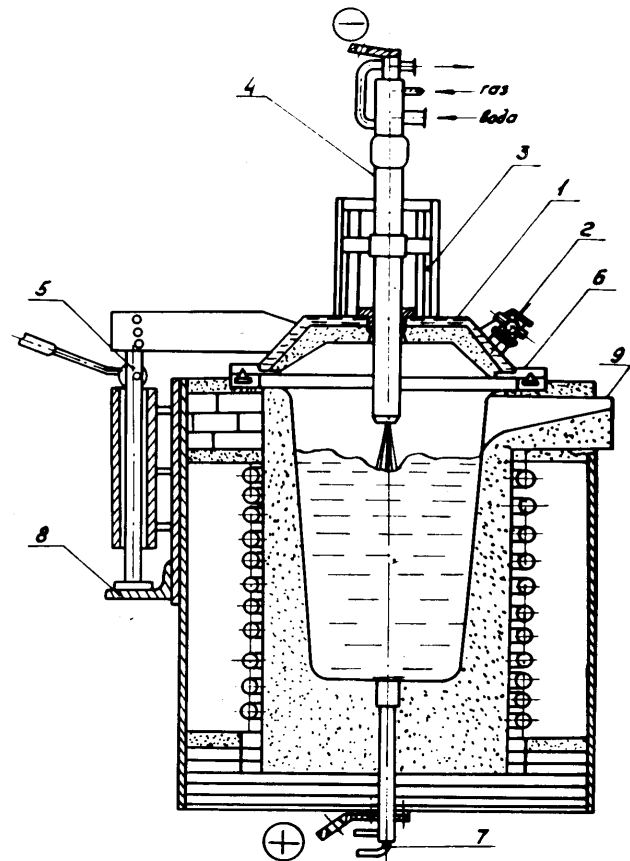


Plasma-induction installation ISTP-016

Plasma-induction

installation ISTP-016 (fig. 1) consists of melting furnace IST-016, plasma add-on device, system of gas purification and power source. Plasma add-on device represents water-cooling lid 1, established in top part of furnace upon the junk-ring 6. On the furnace there are assembled the plasmotrone moving device 4, plasmotrone 4, device of swinging and lifting of lid 5, dosage bunker



and watch window 2. The water-cooling copper anode is assembled into bottom of crucible. The pouring-out of metal is made when the furnace is oblique through the pouring nozzle 9, which is closed by lid in time of melting for the prevention of air inflow to the working space. The technical standard argon is the working gas.

The usage of combined plasma-induction heating has essential influence upon the energetic indexes of furnace. It is explained by that fact, that coming in of heat takes place by two ways in the same time: by thermal flux inside the setting (inductive heating) and external thermal flux (plasma heating).