

The invention relates to metallurgy, in particular to methods for vacuum separation of spongy titanium, obtained by magnesium-thermal reduction of four-chloride titanium. A method comprises the mounting of separation device with reduction retort with spongy titanium placed in furnace, connected through cooling retort-condenser with vacuum-line with vacuum pumps, heating of reduction retort with controlled degassing, hermetic separation of vacuum-line from vacuum pumps and terminations of heating of reduction retort at time attributes of vacuum of separation end, filling of retort with inert gas. The method is characterized by that hermetic separation of vacuum-line is carried out to time attainment attributes of vacuum of separation end. The invention provides improvement of quality of condensate and spongy titanium, and also improvement of economic parameters of vacuum pumps use.