

Method for reinforcing pipe-pressing tools made of die steels using ion nitriding involves preheating, quenching, and multiple tempering cycles, with quenching performed at a temperature of 1070-1080 °C and the final tempering combined with nitriding. The first tempering is performed at a temperature not exceeding 240-250 °C with a holding time of at least 1 hour, followed by heating to the temperature of the second tempering not exceeding 350-380 °C with a holding time of at least 1 hour and heating to the nitriding temperature. Combined with the third tempering at a temperature not exceeding 580 °C with a holding time of 2 hours or more, and cooling is carried out in ammonia atmosphere with the furnace down to 200 °C and then in air.