

ABSTRACT**MOLTEN-SALT BATH FOR NITRIDING MECHANICAL STEEL PARTS, AND IMPLEMENTATION METHOD**

The invention relates to a molten-salt bath for nitriding mechanical steel parts, essentially consisting of the following (the contents being expressed in wt %): 25 to 60 wt % of alkali-metal chlorides; 10 to 40 wt % of alkali-metal carbonates; 20 to 50 wt % of alkali-metal cyanates; and a maximum of 3 wt % of cyanide ions (formed during the use of the bath), wherein the total of the contents is 100 wt %. Preferably, the bath contains: 25 to 30 wt % of sodium cyanate; 25 to 30 wt % of sodium carbonate and lithium carbonate; 40 to 50 wt % of potassium chlorides; and a maximum of 3 wt % of cyanide ions (formed during the use of the bath), the total of the contents being 100 wt %.

No Figure.