TECHNICAL DATA SHEET PSQ - 140

Marquenching salt: PSQ - 140

Molten salts widely used for martempering, is composed nitrite and nitrate mixture. Temperature about 135C to 140°C and may be used for working range at 160°C to 400°C..

BASE: its combination of Sodium Nitrite and Potassium Nitrate.

Advantages of salt:

- 1) Salt viscosity changes only slightly over a wide temp.range. It transfers heat rapidly.
- 2) Salt retains chemicals stability so that the only need for replenishing is to replace drag out loss.
- 3) Salt is washed from the work with plain water.
- 4) Less time is required for work pieces to Heat transfer in salt.
- 5) Less distortion and less crack generation compare to oil.
- **6)** It virtually eliminates the problem of a vapor phase barrier during the initial stage of quenching.

A fringe benefit of water addition is that it lowers salt's freezing point, further increasing its working range. For example, a 1% water addition lowers the freezing point by 11°C (20°F), while 2% water lowers it by 19°C(35°F).

DESCRIPTION

PSQ 140 is a pink colour, natural crystalline Powder material with these typical physical properties:

Melting Point 1370°C Operating Range $150 - 550^{\circ}\text{C}$ Decomposition Point 635°C Unit Weight, solid 2114 kg/cumUnit Weight, liquid $1762 \text{ kg/cum at } 426^{\circ}\text{C}$

Specific Gravity @ 426°C 1.768