

Neutral Salt BS

Neutral Salt BS is a chemically balanced mixture of chlorides designed for a specific range of operating temperatures. All chemicals incorporated into the formulation are technical grade to insure a high purity, high grade, trouble-free mixture. Neutral Salt BS solidified salts are easily removed from the heat-treated work and those which require oil quenching.

Neutral Salt BS is used as a neutral molten salt bath for a heat transfer medium in the heat treatment of medium or high carbon steels and low alloy steels. It can also be used for reheating carburized steels and annealing. For short periods of time, Neutral BS can be used at 1700°F. but not for continuous periods. After using at this temperature, it should be lowered to a maximum of 1600°F. Neutral BS is a self-rectifying neutral salt mixture and when the production salt bath is properly maintained by periodic chemically testing. If required additional rectifying, will neither carburize nor decarburize the metal surfaces being heat treated. Chemical testing kits and chemical testing procedures are available for maintaining the neutrality of the Neutral BS salt bath.

Features & Benefits

Free flowing powder	Easy safe handling for additions to salt pot
High purity	Consistency lot to lot, sharp melting point No smoke
Self-rectifying	Consistent non-decarburizing hardening

Operating Conditions

Melting point	1200°F
Weight	100 lb/ft ³
Operating range	1300°F – 1700°F

Chemical control Requirements

Chemical and chemical compounds should not be introduced into the Neutral BS salt bath such as nitrates, cyanides, cleaning compounds and oils. Contaminants not only will change the neutrality of the salt but, in many cases, result in ruining the salt bath, necessitating dumping the bath and starting up a new one.



Cleaning
the Hard to Clean



Finishing
the Hard to Finish



Treating
the Hard to Treat

If, during the heat-treating procedure, there is a large amount of drag out of the salt bath resulting in a large amount of additions of new Neutral BS salts, little, if any, rectification of the salt bath necessary. Most operations have normal drag out and replenishment. Under these circumstances, the Neutral BS salt bath needs to be controlled and rectified.

This rectification is accomplished by additions of our Neutral Salt Rectifier Pellets which react with the impurities which have formed in the Neutral BS production salt bath. Rectification can also be accomplished by bubbling methyl chloride through the molten salt bath. More detailed information is available on rectification of the salt baths upon request.

Equipment required

Equipment for the Neutral BS salt bath should be the externally heated or immersed or submerged electrode type.

The electrode type uses ceramic pots. The externally heated types use either mild steel or nickel alloy pots.

WARRANTY: THE QUALITY OF THIS PRODUCT IS GUARANTEED ON SHIPMENT FROM OUR PLANT. IF THE USE RECOMMENDATIONS ARE FOLLOWED, DESIRED RESULTS WILL BE OBTAINED. SINCE THE USE OF OUR PRODUCTS IS BEYOND OUR CONTROL, NO GUARANTEE EXPRESSED OR IMPLIED IS MADE AS TO THE EFFECTS OF SUCH USE, OR THE RESULTS TO BE OBTAINED.

Our people. Your problem solvers.

For more information on this process please call us at

1-800-648-3412

or techservice@hubbardhall.com

