

# Neutral Salt A

Neutral Salt A is a chemically balanced mixture of chlorides designed for a specific range of operating temperature. Neutral Salt A has a low melting point (1000°F.) and can be operated at a low temperature of 1100°F. to a high temperature of 1750°F. and intermittently for short periods of time, up to 1850°F.

Neutral Salt A is used as a neutral molten salt bath for heat transfer medium in the heat treatment of medium in high carbon steels and low alloy steels. It can also be used for reheating carburized steels and annealing. Neutral Salt A is a neutral salt mixture and when the production salt bath is properly maintained by periodic chemically testing and, if necessary, rectifying, will neither carburize nor decarburize the metal surfaces being heat treated. Neutral A can be used as a pre-heat prior to high heat high speed salt baths and as a quench after coming out of the high heat high speed salt bath.

## Features & Benefits

Free flowing powder	Easy safe handling for additions to salt pot
High purity	Consistency Sharp melting point

## Physical Data

Operating range	1100°F – 1750°F
Melting point	1000°F
Weight	144 lb/ft <sup>3</sup>

## Operating Conditions

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

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 Neutral A salts, little, if any rectification of the salt bath is necessary. However, most operations have normal drag out and replenishment and, under these circumstances, the Neutral A salt bath needs to be controlled and rectified.



**Cleaning**  
the Hard to Clean



**Finishing**  
the Hard to Finish



**Treating**  
the Hard to Treat

This rectification is accomplished by additions of our Rectified “A” which react with the impurities which have formed in the Neutral A production salt bath and precipitates them to the bottom. This precipitate is then removed from the bottom of the salt bath pot. Rectification can also be accomplished by bubbling methyl chloride through the molten salt bath. More detailed information is available on rectification of salt baths upon request.

#### Cleaning Requirements

Hot or boiling water is recommended for the removal of any solidified Neutral A salts, especially after oil quenching. After salts have been removed in hot water, the remaining oil on the pieces can be removed in a hot alkaline cleaner.

#### Equipment Required

Equipment in the Neutral A salt bath should be externally heated 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.

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## **Our people. Your problem solvers.**

For more information on this process please call us at

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