

# HMT-208 Neutral Bright Cleaner

HMT-208 Neutral Bright Cleaner is a neutral, water-based cleaning product used for surface cleaning, degreasing, and brightening treatment of copper and copper alloys. The product adopts a unique dissolution–stripping cleaning technology, which can effectively remove processing oil, particles, and oxide films from the surface of copper materials. After treatment, the workpiece surface is clean, uniform, and bright. This product is a neutral system with a mild odor, and is suitable for copper material cleaning processes that require cleanliness, surface brightness, and subsequent anti-oxidation stability.

## Physicochemical Indicators

Appearance	Colorless transparent aqueous solution
Odor	Mild and non-irritating odor
Specific Gravity	1.02–1.10
pH Value	7.0

## Application Scope

- Suitable for surface cleaning of red copper, brass, and common copper alloy materials.
- Used to remove processing oil, heavy oil contamination, particles, and general contaminants.
- Used for bright cleaning treatment of copper materials and pretreatment before anti-oxidation.
- After cleaning, the surface is clean, uniform, and bright.

## Product Features

1. Provides strong degreasing at room temperature and within a short period of time, quickly and thoroughly cleaning various oil stains from the workpiece surface and effectively preventing oil contamination from redeposition.
2. Cleaning and brightening are completed simultaneously, which can improve the surface brightness of copper materials.
3. The neutral system has a pH value of approximately 7.0, with a mild and non-irritating odor, and offers a user-friendly operating environment.
4. The cleaning result is stable and can meet the requirements for bright cleaning of copper materials and subsequent anti-oxidation treatment.
5. It is easy to rinse and leaves low residue; after ordinary water rinsing, the workpiece can enter the subsequent anti-oxidation process.

## Bath Composition and Operating Conditions

Use Concentration	5%–10%
Temperature	25–40°C
Cleaning Time	1–20 minutes
Types of Contamination	Processing oil, heavy oil contamination, particles, oxide films, yellow stains, black stains, etc.
Cleaning Method	Immersion cleaning or spray cleaning; adjustable according to on-site equipment conditions

## Common Process Flow

HMT-208 cleaning → Water rinse 1 → Water rinse 2 → Anti-oxidation → Air knife → Drying

Note: According to the process requirements for this time, no pure-water rinsing step is included in the process flow. In actual production, the concentration, temperature, and time may be appropriately adjusted according to the amount of oil contamination on the workpiece surface, oxidation degree, material condition, equipment structure, and line speed requirements.

## Packaging and Storage

Packaging	25 kg/drum, or customized packaging according to customer requirements.
Storage	Keep the package tightly sealed and store in a cool, ventilated place; avoid direct sunlight.
Safety	Prevent leakage and keep away from children. It is recommended to wear conventional labor protection equipment during handling and use.

## **Precautions for Use**

HMT-208 should be maintained regularly according to the on-site cleaning effect and the contamination level of the bath solution. During production, it is recommended to keep the bath solution clean, promptly remove floating oil and deposited contaminants, and replenish the original solution or replace the bath according to the cleaning effect. If the workpiece has requirements for anti-oxidation performance, it should enter the anti-oxidation process promptly after cleaning and water rinsing to avoid secondary oxidation caused by prolonged exposure.