

# CEE-BEE® J-89



## POWDER SCALE CONDITIONER

CEE-BEE® J-89 is an alkaline powder used for conditioning heat scales on steel and titanium alloys, prior to pickling.

### BENEFITS

- Conditions heat scale on steel, magnesium and titanium alloy surfaces, prior to acid pickling
- Serves as an effective lower temperature substitute for molten salt baths
- Safe on steel, magnesium, and titanium alloys, cast iron, noble metals, and super alloys

### PHYSICAL PROPERTIES

Appearance	Powder	Solubility	Water soluble	Flammability	Non-flammable
Colour	White	pH	14 (5 % solution).	Density	N/A
Odor	Odourless	Flash Point	N/A		

### AVAILABLE FORMATS



19L

20CB900P

208L

20CB900D

1000L

20CB900T

### APPROBATIONS

- ROLLS ROYCE OMAT NO. 1/170B

## USE PROCEDURES

1. To prepare immersion bath, fill tank about half full with water, then cautiously mix and dissolve CEE-BEE® J-89 into the bath, while agitating bath solution. During mixing, heat will be generated; avoid boiling and splattering by adding powder cautiously and slowly. After powder is completely dissolved and free of lumps, add water to final bath volume, while continuously mixing.
2. Immerse parts in a 600 g/litre (5 lb/gal) bath, operating at 88–99 °C (190–210 °F), for 15 to 30 minutes.
3. Remove and suspend parts above bath solution while allowing dragged out solution to drain back into tank.
4. Rinse with a light mist of water over the tank to reduce dragout losses.
5. Dip in an air agitated, overflowing, clear water rinse tank.
6. Remove conditioned scale in a suitable acid pickling bath.

## SOLUTION CONTROL

Use 316 stainless steel tanks and heaters to contain and operate CEE-BEE® J-89. For optimal bath performance, mechanical agitation is recommended.

To compensate for bath's volume loss from evaporation, add water daily. In hard water (scale) areas, soft water addition is recommended.

Routine additions of CEE-BEE® J-89 are required to compensate for bath's volume loss from dragging out parts, and decreases in active chemical concentrations. To determine alkaline concentration in bath, use the following procedure.

### PROCEDURE

1. Pipette 2 mL of a bath sample into a 250 mL Erlenmeyer flask.
2. Into the flask, add approximately 100 mL of Deionized (DI) water, and 2 to 3 drops phenolphthalein indicator solution. For very dark tank solutions additional phenolphthalein indicator solution may be required to indicate titration end point.
3. Titrate flask's solution with 1 N acid until pink colour uniformly disappears.

Calculations: mL acid X 0.172 = lbs./gal. CEE-BEE® J-89

After frequent daily use, sludge will accumulate on tank's bottom. To extend bath's life, routine sludge removal is recommended.

## LEGISLATION

- WHMIS Regulated

## SAFETY & HANDLING

- Refer to Safety Data Sheet (SDS) for additional information
- Dispose of container and its contents in compliance with all applicable regulations.
- Contains caustic soda and chromate. Avoid eye and skin contact; may cause severe burns. Wear face shield, apron, gloves and boots, while handling. Handle and operate where ventilation is adequate. Do not breathe spray mist. Do not ingest. In case of accidental contact with eyes or skin, flush affected areas with water. If irritation persists, seek medical attention. • Bath will etch zinc, lead and aluminum. Metal ion contamination will impact bath's performance and may cause unintended deposits and smutting onto steel part surfaces. If excessive sludge builds up, recharge tank with fresh solution.

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