



## Product Application Presentation

**Product Identifier:**

# TCI 1205 H.D.

**Process Identifier:** Multi-metal non-foaming hot aqueous cabinet jet wash degreaser, rust, scale, paint stripper and corrosion inhibitor (powder)

### Product Presentation

TCI 1205 H.D. is a non-foaming fine granular cream coloured slightly moist and dust free powder of mild alkaline builders, food grade defoamer and biodegradable detergents incorporating special buffers, chelating agents and corrosion inhibitors.

TCI 1205 H.D. is charged to a volume of hot water 60–80°C at a rate of 30 g/L.

### Conversion

160°F at a rate of 4 oz/gal.

### Process Specificity

Hot aqueous (60-80°C) low pressure (50–80 psi) high volume (50-80 gpm) spray cleaning of soiled aluminum, ferrous and copper metals and their alloys pertaining to automotive and industrial engines and power transmission components. In the transportation industry the sight glasses of aluminum hubs get a build up of varnish that restrict the visibility of oil levels.

Soils effectively removed through turbulence include: dirt, oil, varnish, drawing compounds, grease, carbon, metallic particles, some paints, rust, phosphate coatings, heat treat scale and smut. The metals are cleaned by emulsification, dispersion, saponification and sludge settling or a combination of these mechanisms.

The cleaning solution comes in contact with the entire surface of the part when properly placed on the rotating turntable of the jet washer to prevent shadowing. After the alkaline cleaner has affected the soil on the part, the soil is removed from the metal surface by low pressure flushing, i.e. mechanical means of solution movement.

The cleaning cycle (1-15 minutes) depends on the type of dirt and the type of parts cleaned. For normal temperature and product concentration extremely dirty parts will be clean in 15 minutes. Due to the hot cleaning process, parts dry quickly with no residual white powder residue. Use a airblow gun to remove the residual cleaning solution from pooling areas, threaded bolt holes, cracks and crevices.

### Solution Maintenance

Cleaning solution concentration is maintained through simple addition of the TCI 1205 H.D. compound. Solution strength is determined by titrating with a dilute acid to the phenolphthalein end point with **Titration Kit 1205**.

If a foaming problem should arise, due to saponifiable contamination, check solution strength first, and only if the solution strength and temperature are normal, add the **TCI 015 H.D.** food grade defoamer.

**CAUTION:** you may shut the heat off overnight or on weekends to allow the oil skimmer to remove floating protective oils and waxes that separate during cooling. The solution must be back up to 60–80°C before cleaning resumes to prevent spillage by foaming.

### Solution Disposal

The clean chemical solution is biodegradable, but according to the Ontario Ministry of the Environment and Climate Change "Regulation 347", and local municipal by-laws the cleaning process may have generated a hazardous or liquid industrial waste in which case it must be: Discharged through a treatment system e.g. 3 stage interceptor; or manifested and removed by a licensed carrier and received by a licensed receiver accompanied by a Generator Registration Number; or removed by a licensed carrier and received by a licensed receiver under a service contract providing a garage license number. Contact Tetra-Chem Industries Ltd. for complete and complementary analytical tests in compliance with the regulations prior to sewer discharge.

Typical cabinet jet washer



### TCI 1205 H.D.

when used according to directions will prevent **rust** and **corrosion** of all wetted parts (steam, vapour or liquid) of the steel cabinet and solution holding reservoir.

### PACKAGING

25, 100, 200 kg

## Before



## After



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