



# ATP<sup>®</sup>-642

## protective coating to control oxide scale

### Description

A water-based, ceramic coating formulated to protect stainless, low alloy, & carbon grade steels against oxide scale, oxidation, and decarburization

### Performance Characteristics

- effective temp. range 1500-2300° F (816-1260° C)
- minimizes formation of oxide scale by 70%
- reduces surface defects such as forged or rolled-in scale
- reduces secondary finishing operations
- spalls on cooling to leave oxide scale-free surface
- demonstrates exceptional green strength upon proper drying to withstand cracking, chipping, peeling, etc.
- excellent paintability; formulated for brushing application (can be adjusted for dipping or spraying by diluting with water – do not thin coating too much)
- desirable heat retention properties for improved hot working operations

### Recommendations for Use

- **thoroughly suspend and mix before use**
- metal surfaces must be free of dirt, oil, grease, metal oxides, and other materials
- coating thickness depends on the time and temperature of exposure (generally, the higher the temperature and longer exposure, the thicker the coating should be applied)
- a wet film thickness of 6 ± 3 mils should be optimal
- ensure bottom coat is thoroughly dried when applying multiple coats
- water-based coatings need ample time to completely dry before entering furnace (can be applied over preheated substrate to accelerate drying time)

### Typical Properties

pH	6.0-9.0
% Solids	57.0-61.0
Vehicle	Water
Viscosity (@ 25°C) as Supplied (cP)	5,000-9,000
Weight/Gallon (lb/gal)	13.75 ± 0.25
Specific Gravity	1.62-1.68

