

QUENCH OIL

Metal Heat Treating Fluid



Description

Quench Oils are specialty products designed for conventional and hot oil quenching. Quench Oils are uniquely formulated with thermally stable base oils blended with oxidation inhibitors and speed enhancers to optimize quench speed and control degradation.

Quench Oils are formulated to effectively cool steel to the austenite-martensite transformation zone for proper finished hardness and provide superior service when uniform heat dissipation is needed for quality hardened metal.

Quench 100 is designed for conventional quenching. It can be used in open quenching systems where operating temperatures are as high as 93°C (199°F) and in closed systems where temperatures are as high as 150°C (302°F).

Quench 250 is designed for marquenching. It is recommended for protected-atmosphere systems where temperatures are as high as 190°C (374°F) and unprotected systems (exposed to atmosphere) with quench bath temperatures up to 135°C (275°F).

Features/Benefits

- **Superior Finished Product Aesthetics**
Bright quench
Non-staining
- **Environmentally Friendly**
Easily reclaimed for further use
Reduces waste
- **Exceptional Finished Product Quality**
Minimal distortion
Excellent hardness control
- **Longer Bath Life**
Improved uptime from reduced frequency of maintenance intervals
Extended life reduces cost
- **Minimal Scale Build Up**
Reduces mineral deposits in bath resulting in cleaner quenching operations

Typical Properties

Properties	Quench 100	Quench 250
Product Number	316	312
API Gravity @ 60°F	32	29.7
Viscosity @ 40°C (104°F), cSt	22	54
Viscosity @ 100°C (212°F), cSt	4.3	7.5
Viscosity Index	100	100
Type of Oil	Conventional	Marquench
Recommended bath temp, °F	90 – 200	150 – 350
Time for immersion @ 600°C (1112°F), seconds	7.6	10
Time for immersion @ 400°C (752°F), seconds	11.9	17.1
Time for immersion @ 200°C (392°F), seconds	46	55