

AQUA-QUENCH 140

Advanced Polymer Quenchant for Induction Hardening Applications

DESCRIPTION

Aqua-Quench 140 is specifically designed for induction hardening applications to minimize residual sticky deposits on equipment and quenched parts.

APPLICATION

Aqua-Quench 140 is diluted with water in use and provides extremely uniform quenching characteristics. It eliminates steam pockets and high residual stress associated with water quenching and avoids the formation of soft spots and inconsistent mechanical properties. Aqua-Quench 140 can be used for a very wide range of induction and flame hardening applications including the quenching of crankshafts, camshafts, transmission components, starter ring gears, and bearings.

The quenching speed of Aqua-Quench 140 solutions can be selected to suit the steel hardenability and components requirements by varying the concentration of the solution. 1% to 5% solutions of Aqua-Quench 140 improve the wettability on the components surface thereby imparting a more uniform quench and preventing soft spotting. These low concentrations are generally used for steels of low hardenability. 5% to 20% solutions of Aqua-Quench 140 provide a range of cooling rates similar to those of soluble oil emulsions and quenching oils and are used for steels of higher hardenability.

DATA (TYPICAL VALUES)

Appearance	Hazy Light Amber Fluid
Kinematic Viscosity @ 100°F (37.8°C)	80 cSt
Specific Gravity @ 60°F (15.6°C)	1.05
pH	8.7

Date | version
Code

FEATURES/ BENEFITS

- Designed for induction hardening applications: Minimizes residual sticky deposits on equipment and quenched parts provide cleaner operations and prevents blockage of spray nozzles and filters
- Uniform quenching eliminates steam pockets and formation of soft spot associated with water quenching
- Water based quenchant to eliminate fire hazard and smoke associated with quenching oils along with cleaner parts and safer working environment

HEALTH AND SAFETY

Refer to MSDS for proper handling and disposal. Please note that the MSDS includes handling, health and disposal information which should be passed on to your employees, and to anyone else who comes in contact with our product. Additional advice can also be obtained from your local Houghton representative.

NOTE: Read and understand all precautions on container labels before using this product.



Houghton International Inc.
Madison and Van Buren Aves.
P. O. Box 930
Valley Forge, PA 19482-0930

Phone: 610-666-4000
Fax: 610-666-0174
info@houghtonintl.com
www.houghtonintl.com

This document contains information based on data that is believed to be correct. However, the product may not be applicable to all uses and operating environments. No warranty or guarantee is expressed or implied.

COOLING CURVE ANALYSIS

By ivf quenchttest

Aqua-Quench 140

Date: 3/12/2010

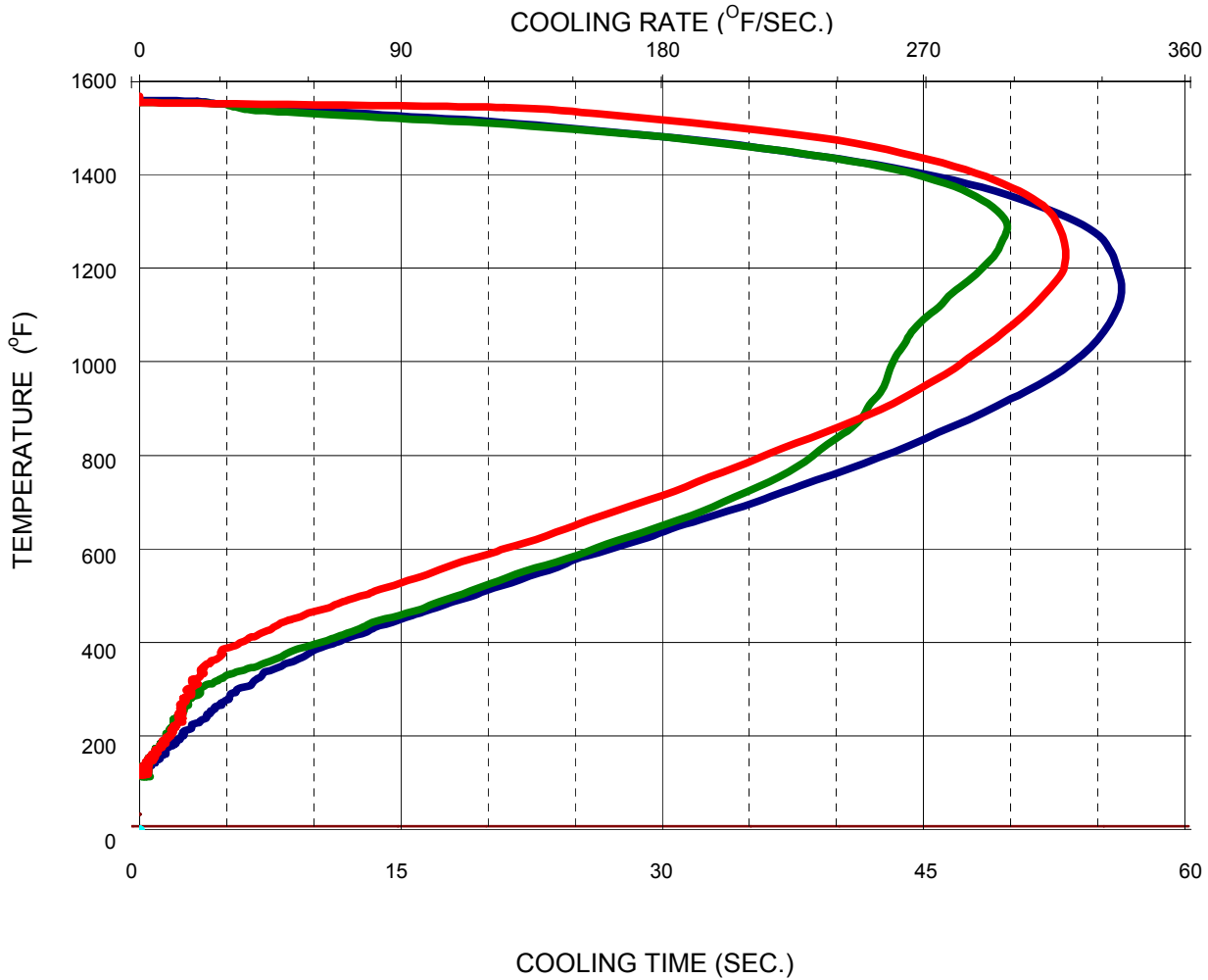
Test Parameters:

Sample Size - 1 liter
Probe -IFHT Std. Inconel 600

Bath Temp.-
Agitation-

100° F
Moderate

Sample #1- Aqua-Quench 140 5%
Sample #2- Aqua-Quench 140 10%
Sample #3- Aqua-Quench 140 15%



COMMENTS:

Tested according to Houghton International laboratory procedure Q03.