# **HOUGHTO-QUENCH K**

High Performance, Highly Accelerated Cold Quenching Oil

#### DESCRIPTION

Houghto-Quench K is an accelerated quenching oil suitable for use at temperatures up to 180°F (82°C). It is based upon specialty solvent refined base oil to minimize oxidation and ensure consistent performance under the most arduous of operating conditions. A carefully formulated additive package is incorporated into Houghto-Quench K to reduce the duration of the vapor blanket cooling stage and provide accelerated quenching characteristics, together with excellent oxidation resistance and thermal stability.

#### APPLICATION

The highly accelerated speed provided by Houghto-Quench K enables the development of optimum strength and hardness with minimum distortion in lower hardenability and low alloy steels, heavy sectioned components or steels of borderline hardenability.

Houghto-Quench K is suitable for use in all types of quenching installations including open quench tanks, sealed quench furnaces and continuous furnaces of the shaker hearth, cast link and mesh belt type. It is recommended particularly for applications where staining of components during quenching should be minimized.

## DATA (TYPICAL VALUES)

Kinematic Viscosity @ 100°F (37.8°C)	77 SUS (15.0 cSt)	
Flash Point (minimum)	345°F (174°C)	
Specific Gravity @ 60°F (15.6°C)	0.88	
GMQS @ 80°F (26.7°C) (ASTM D-3520)	7 – 9 seconds	

#### **FEATURES/ BENEFITS**

- Fast cooling rate in initial stage of quenching: Maximum metallurgical and physical properties
- Minimal drag-out of quenching oil: Less smoke and makeup required
- Excellent oxidation resistance and thermal stability: elimination fo waste due to quench oil degradation

### **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.

Date I version Code



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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.

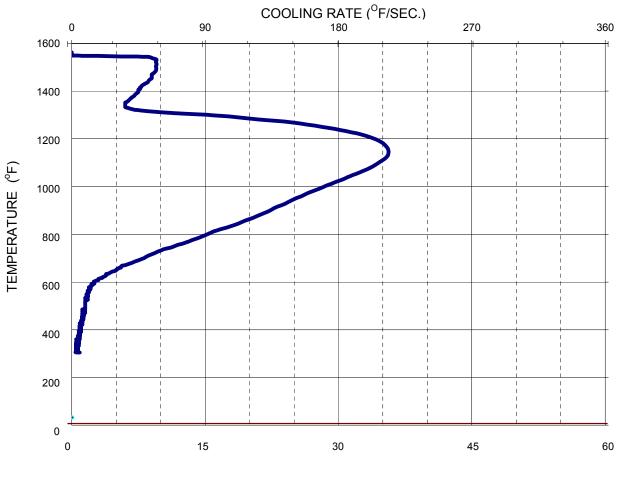
### **COOLING CURVE ANALYSIS**

By ivf quenchotest

#### Houghto-Quench K

			Date:	3/12/2010
Test Parameters:	Sample Size - 1 liter	Bath Temp	140° F	
	Probe -IFHT Std. Inconel 600	Agitation-	None	

Sample #1- Houghto-Quench K



COOLING TIME (SEC.)



Tested according to Houghton International laboratory procedure Q03.