

Rapid quenching oil

● Performance Overview

Maxtop Rapid quenching oil (MTRQO) is developed by highly refined low viscosity high flash point distillate oil, adding coolant, antioxidant, carbon inhibitor, preservative and other additives. Meet the relevant standards of the heat treatment industry, specially designed for the high demand metal material quenching process, providing excellent cooling performance and surface quality. Thermal oxidation stability: it is not easy to oxidize at high temperature, and the service life is extended by more than 50%. Better temperature resistance, suitable for extreme high temperature or low temperature environment.

● Features

01

The steam film stage is short, the high temperature cooling capacity is large, and it has strong hardening and hardening capabilities. The oil is less consumed, easy to clean, and the cost of use is low.

03

The viscosity remains stable and will not thicken after long-term use. With ultra-long cooling characteristic retention, the performance of Maxtop rapid quenching oil is significantly better than the comprehensive performance of other similar products on the market. Ultra-long service life.

02

Good thermal oxidation stability, stable oil performance and long service life. No sediment and sludge will be generated after long-term use.

04

The oil film is evenly distributed, the internal stress of the workpiece is reduced, and the deformation rate is reduced by 60%. Complex parts processing: mold, crankshaft, camshaft, etc.



● Application Scenario

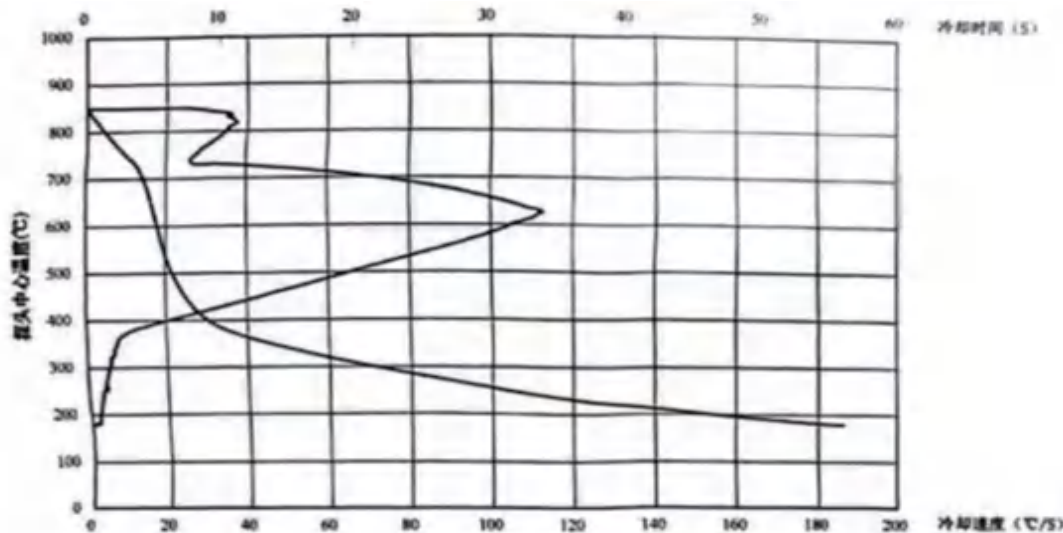
Rapid quenching oil is suitable for quenching parts such as tempering and carburizing that require high cooling speed, large forgings, large gears and quenching presses in salt bath furnaces, box furnaces, medium furnaces and continuous quenching furnaces.



Rapid quenching oil performance indicators

Project			Quality indicators
Kinematic viscosity, mm ² /s	40°C	not more than	26
	100°C	not more than	-
Flash point (open), °C		not less than	170
Flash point, °C		not less than	190
Moisture, %		not more than	trace
Pour point, °C		not higher than	-9
Corrosion (copper sheet, 100°C, 3h) level is		not greater than	1
Brightness, level		not greater than	2
Saturated vapor pressure (20°C), kPa		not higher than	-
Thermal oxidation stability	Viscosity	not more than	1.5
	Residual carbon increase, %	not more than	1.5
cold but sex able	Characteristic temperature (at 80°C), °C	not less than	600
	800 to 400°C time (at 80°C), s	not more than	4.0
	800 to 300°C time (at 80°C), s	not more than	-
	Characteristic temperature (at 120°C), °C	not less than	500

Cooling characteristic curve of rapid quenching medium



Cooling characteristics data of rapid quenching medium

Medium temperature	Max Cooling rate	Maximum cooling rate Corresponding temperature	300 °C Cooling rate	850°C to below temperature time			Peculiarity temperature	Peculiarity time
				600°C	400°C	200°C		
40	113	649.5	7.2	5.30	10.00	39.5	744.88	4.70

Note: The unit of time is S, the unit of speed is C /S, and the unit of temperature is C