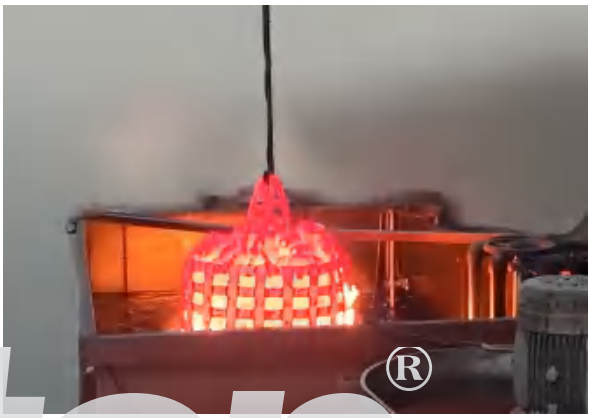
Isothermal graded quenching oil

Performance Overview

Maxtop isothermal grading quenching oil is made of highly refined mineral oil as base oil, adding a variety of high quality and efficient additives such as antioxidant and coolant, through a unique formula. It is a kind of high performance cooling medium specially designed for metal heat treatment process, mainly used for steel, alloy and other workpiece quenching processing. By precisely controlling the cooling speed, it can achieve the classification effect of "fast cooling - slow cooling" during the quenching process, which not only avoids deformation and cracking of the workpiece, but also ensures the best balance of material hardness and toughness.



Features

01

High flash point and high ignition point can realize isothermal graded quenching of martensite, which can effectively reduce the quenching deformation of parts and thus improve product precision.

02

Excellent thermal oxidation stability, can maintain long-term stable cooling characteristics, and has a long service life under high temperature conditions.

03

It has strong cooling capacity, moderate high-temperature cooling rate, and slow low-temperature cooling rate. It is especially used in the quenching process of controlled atmosphere furnace, which has a more obvious brightening effect on the workpiece surface.

04

The hardness of the workpiece is uniform after quenching, which can obtain both high and uniform surface hardness and sufficient hardened layer depth.

Application Scenario

It is suitable for quenching materials such as alloy steel, carburizing steel, as well as bearing inner and outer rings made of bearing steel and carburizing steel, precision parts, automobile gears, half shafts and other workpieces as well as easily deformed parts.

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Isothermal graded quenching oil performance indicators

Project				Quality indicators	
				No. 1	No. 2
Kinematic viscosity, mm2/s		40℃	not more than	-	-
		100℃	not more than	20	35
Flash point (open), ℃			not less than	200	250
Flash point, ℃			not less than	220	280
Moisture, %			not more than	trace	trace
Pour point, ℃			not higher than	-5	-5
Corrosion (copper sheet, 100℃, 3h) level is			not greater than	1	1
Brightness, level			not greater than	2	2
Saturated vapor pressure (20℃), kPa			not higher than	-	-
Thermal oxidation stability	Viscosity		not more than	1.5	1.5
	Residual carbon increase, %		not more than	1.5	1.5
cold but sex able	Characteristic temperature (at 80℃), ℃		not less than	600	600
	800 to 400℃ time (at 80℃), s		not more than	5.0	5.5
	800 to 300℃ time (at 80℃), s		not more than	-	600
	Characteristic temperature (at 120℃), ℃		not less than	-	6.0

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