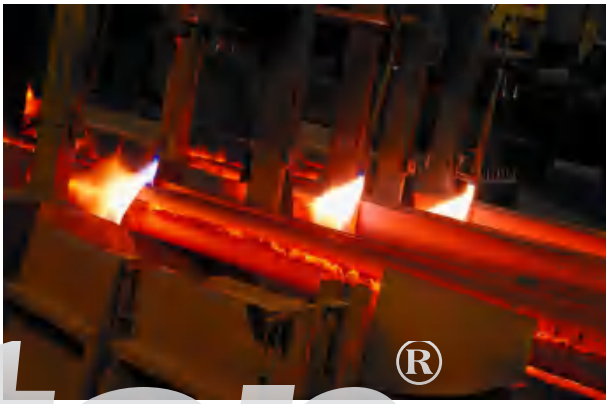
Tempering oil

Performance Overview

Maxtop MTTO is made of highly refined high flash point mineral oil as base oil, adding high temperature antioxidant and other high quality functional additives. Designed for metal heat treatment tempering process, providing excellent cooling performance and thermal stability. Inhibit sludge generation and prolong oil change cycle. High temperature stability, suitable for high-load precision parts, balance cooling efficiency and flow.



Features

01

It has good thermal stability and is not easy to coke. The appropriate cooling rate can effectively eliminate the internal stress of the workpiece.

02

It has the characteristics of high flash point and low volatility, and is not easy to evaporate and form smoke, creating a good use environment.

03

After tempering, the workpiece has uniform hardness and bright surface.

04

It has good thermal oxidation stability, is not easy to form sludge and oil residue, and has a long service life;

05

After tempering, the surface is bright without rust spots, and the hardness uniformity is increased by 20%.

06

The low volatile formula reduces oil mist diffusion and keeps the workshop air clean.

Application Scenario

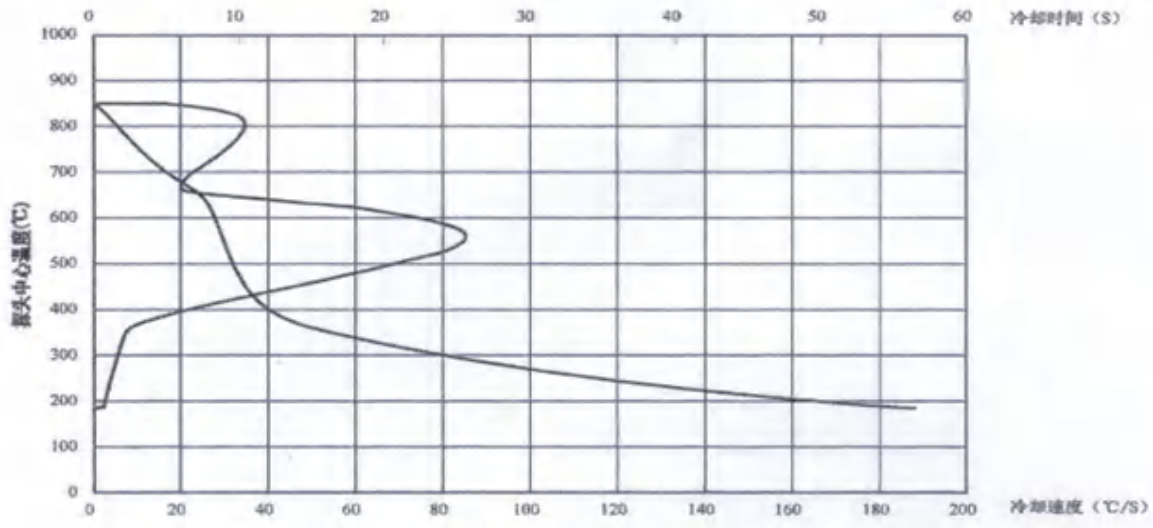
Tempering oil is suitable for tempering parts after quenching in closed tempering furnaces. It is widely used in the tempering process of bearings, watches, chains and other industries.

No. 138, Guanshan Road, Shuangliu District, Chengdu, China (Sichuan) Pilot Free Trade Zone
TEL: +8613541155698 EMAIL: maxtop@maxtop-oil.com
TEL: +864008330667 Website: www.maxtop-oil.com

Tempering oil performance indicators

Project				Quality indicators	
				No. 1	No. 2
Kinematic viscosity, mm2/s		40℃	not more than	-	-
		100℃	not more than	30	50
Flash point (open), ℃			not less than	230	280
Flash point, ℃			not less than	250	310
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	-	-
Saturated vapor pressure (20℃), kPa			not higher than	-	-
Thermal oxidation stability	Viscosity		not more than	1.4	1.4
	Residual carbon increase, %		not more than	1.5	1.5

Cooling characteristic curve of tempering oil



Cooling characteristic data of tempering oil

Medium temperature	Max Cooling rate	Maximum cooling rate Corresponding temperature	300 ℃ Cooling rate	850℃ to below temperature time			Peculiarity temperature	Peculiarity time
				600℃	400℃	200℃		
80	85.22	556.10	5.53	8.40	12.10	50.10	668.16	8.30

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

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