

## Cutting oil

### ● Performance Overview

Maxtop Cutting oil (MTCO) is formulated by hydrogenating and solvent refining base oil, and blending it with special additives such as extreme pressure anti-wear, antioxidant and anti-rust agents. Rapidly reduce the temperature in the cutting area to prevent workpiece deformation and tool wear. Form a stable lubricating film under extreme pressure to extend the tool life. Inhibit the oxidation reaction during the processing and protect the surface of the machine tool and the workpiece. Effectively suspend metal debris, keep the processing environment clean, and reduce downtime for maintenance. The low-volatility formula reduces the spread of oil mist, meeting environmental protection and occupational health requirements.

### ● Features

# 01

Good lubricity: reduces friction and wear during cutting and improves processing efficiency.

# 02

Excellent cooling performance: quickly absorbs and removes the heat generated by cutting to prevent overheating of the workpiece and tool.

# 03

Anti-rust performance: Form a protective film on the surface of workpieces and machine tools to prevent oxidation and corrosion.

# 04

Cleaning property: helps remove chips and impurities generated during the cutting process and keeps the processing area clean.

# 05

(Anti-foaming: It is not easy to form foam under agitation and high pressure, ensuring the stability of the cutting oil.

# 06

Oxidation stability: It is not easy to oxidize and deteriorate under high temperature and long-term use, which extends the service life of the oil.



### ● Application Scenario

It is suitable for deep hole processing such as gun drilling, BTA drilling or ejector drilling of medium carbon, high alloy, stainless steel, cast iron and other metal materials, as well as gear, thread, broaching, reaming, high extreme pressure forming and cutting processing.



# Cutting oil performance index

Project		Quality indicators
Kinematic viscosity (40 °C ), mm <sup>2</sup> /s	not more than	7~32
Pour point, °C	not higher than	-15
Flash point (open), °C	not less than	125
Acid value, mg(KOH)/g	not more than	3.5
Corrosion test (copper sheet, 100 °C , 3h), level	not more than	1b
Load-bearing capacity (four-ball method)		
Maximum no-seizure load (P B ), N	not less than	931
Sintering load (P B ), N	not less than	2842

# Maxtop<sup>®</sup>