

A detailed close-up of a metal lathe in operation. A cutting tool is precisely shaping a cylindrical metal workpiece. The scene is filled with bright, golden-yellow sparks that are being ejected from the cutting point, creating a dynamic and industrial atmosphere. The background is softly blurred, focusing attention on the machining process.

**MASTER
CUTTING OIL**

MASTER CUTTING OIL

MASTER KUTSOL is soluble super-performance cutting oil, which forms a strong milky emulsion when mixed with water. It is manufactured using specially selected base oils having excellent solubility. The emulsion forms a stable and homogeneous lubricant which does not separate during use or shut down periods.

MASTER NEAT CUTTING OIL

Master Neat Cutting oil is a transparent cutting oil recommended for the machining of ferrous metals especially under severe operations on difficult materials and tough steels. These are blended from high viscosity index base oils and selected additives. It is not suitable for yellow metals.

APPLICATIONS (KUTSOL)

- It is recommended for a variety of metal working operations on ferrous and non-ferrous metals such as machining, milling, drilling, turning, grinding, tapping, broaching etc.
- The most common emulsion strength used for machining ranges from 5 - 10 % depending on the severity of the machining. More dilute emulsions are recommended.
- For a stable emulsion, oil should always be added to water and not vice-versa, with continuous stirring.

APPLICATIONS (NEAT CUTTING)

- This cutting oil to be used without water on ferrous surfaces for fine finishes.

BENEFITS (KUTSOL)

- Has superior cooling and lubricating properties.
- Protects work piece, machine parts, and tool material from rust and corrosion
- Excellent surface finish and minimum tool wear.
- Provides long lasting stable emulsion due to critically selected biocide
- No unpleasant smell during the process, shut down or overnight.

BENEFITS (NEAT CUTTING)

- Non-corrosion, excellent cutting characteristics, good oxidation stability and rust protection, improved sharp cleanliness.

TYPICAL DATA (KUTSOL)

PHYSICAL CHARACTERISTICS		
TEST	TEST METHOD	TYPICAL VALUE
Appearance	VISUAL	CLEAR
Color	ASTM D 1500	1.5-2.5
Density At 85°f	ASTM D 1298	0.85-0.87
Kin. Vis. At 40°c Cst.	ASTM D 445	17-22
Flash Point °c	ASTM D 92	70-78
Ph Value 5% In Distt. water	INSTRUMENTAL	9-11
Emulsion Stability	IP-263	PASS
Corrosion Of Cast Iron	IP-125	PASS
Rust Preventive Characteristics	IP-287	PASS

TYPICAL DATA (NEAT CUTTING)

PHYSICAL CHARACTERISTICS		
TEST	TEST METHOD	TYPICAL VALUE
Kinematic Viscosity @ 40 °C	ASTM D 445	12.5
Flash Point (COC) °C	ASTM D 92	90

Packings **205 Ltr.**