High Purity,
Special Series Formulated with
Renewable Natural Base Oils!

CORNUS MQL Series



Naturally **Together**

CORNUS MQL Series is an environmentally friendly solution formulated with renewable natural oil-based ingredients, delivering maximum efficiency and minimum consumption in metalworking processes thanks to its superior lubrication performance.

What is CORNUS MQL Series?

CORNUS MQL SERIES are high-performance Minimum Quantity Lubrication (MQL) fluids designed for near-dry machining applications. Formulated with high-purity, renewable natural base oils, this special series reduces friction and heat in the cutting zone with its superior metal wetting and lubrication capability, thereby extending tool life. MQL lubricants are well-suited for light to medium-duty machining of ferrous and non-ferrous materials, providing an environmentally friendly and cost-effective alternative to conventional metalworking fluids.

Features & Advantages

Extended Tool Durability & Superior Finish:
Reduces wear and enhances precision by optimizing lubrication at the cutting interface.

Minimum Residue, Maximum Cleanliness:
Reduces the need for post-process cleaning, ensures a cleaner working environment in the production area, and lowers operational costs.

Optimized Lubricant Utilization:
Uses only the necessary amount of lubricant, contributing to cost savings and efficiency.

Safe & Environmentally Friendly:
Free from silicones, mineral oils, nitrite, and chlorine.

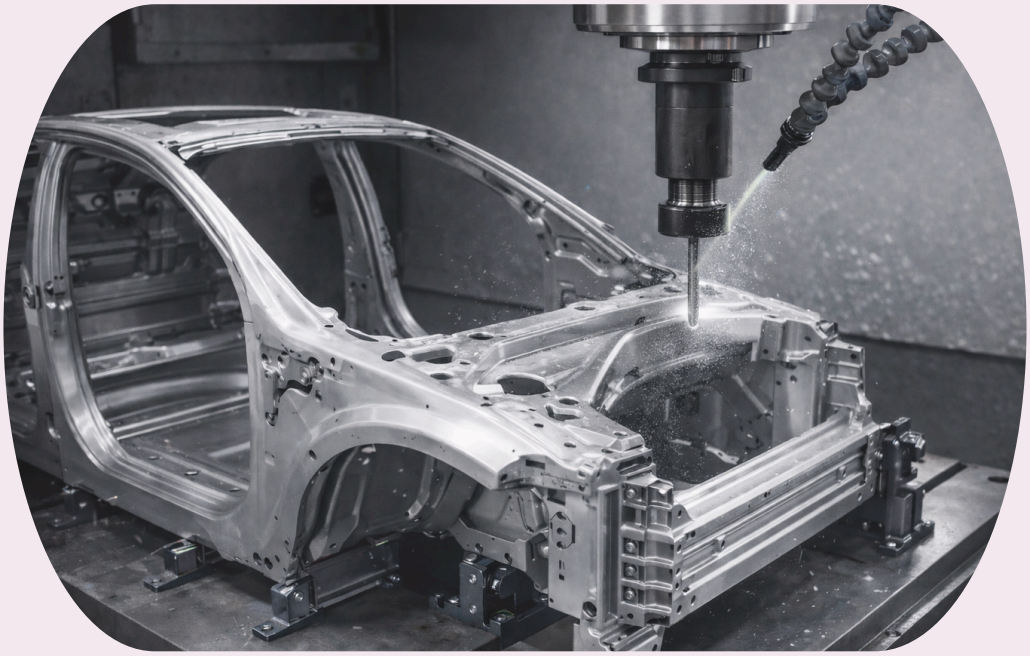
Versatile Material Compatibility:
Works effectively on ferrous and non-ferrous materials.

No Waste Disposal:
Consumed at the cutting interface, eliminating fluid disposal requirements.

Technical Specifications

Application / Material	MQL 8	MQL 12	MQL 20	MQL 35	MQL 46	MQL 68
Ferrous Metals (e.g., Steels)	●	●●	●●	●●●	●●●	●●●
Non-Ferrous Metals (e.g., Aluminium, Copper)	●●●	●●●	●●●	●●●	●●	●
Hard Alloys (e.g., Stainless, High-trength)	-	●	●●	●●●	●●●	●●●
Light-Duty Machining	●●●	●●●	●●	●	-	-
Medium-Duty Machining	-	●	●●●	●●●	●●	●
Heavy / Severe Machining	-	-	●	●●	●●●	●●●
Viscosity (@40°C) - mm^2/s	6,5-8,5	11-14	21-24	32-40	41-50	61-74

● Suitable ●● Very Suitable ●●● Highly Recommended



How to Select the Right MQL Grade?

Aluminum & Non-Ferrous Metals

Operation Severity / Condition	Recommended Product
High Speed, Light Cuts	MQL 8 / MQL 12
Medium-Duty Machining	MQL 20
Lower Speed, Higher Load	MQL 35

Steels (Carbon & Alloy)

Operation Severity / Condition	Recommended Product
Light Machining	MQL 12 / MQL 20
Medium-Duty Mmachining	MQL 20 / MQL 35
Heavy Machining	MQL 35 / MQL 46

Severe Cutting / Hard Alloys

Operation Severity / Condition	Recommended Product
High Load, Low Speed	MQL 46
Extreme Boundary Lubrication Required	MQL 68





Proil’s MQL Solutions

The MQL oils we develop are not designed merely to be used in minimal quantities—they are engineered to deliver maximum performance.

What sets us apart:

- EAL-compliant, environmentally friendly formulations
- Optimized viscosity and atomization characteristics specifically for MQL systems
- Non-resinizing, residue-free compositions
- Advanced tribological additive technology that extends tool life
- Full alignment with sustainable manufacturing goals

Companies that switch to MQL today:

- Consume less
- Produce cleaner
- Operate at lower costs
- Grow faster and more sustainably



Proil

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