JAEGER

METAL WORKING COOLANTS

JAEGER OIL & CHEMICAL CO LTD

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Jaeger metal working coolants include general-purpose water-soluble cutting fluids, as well as specialty products designed for specialized applications. The product consists of SW series emulsions, semi-synthetic cutting fluids, synthetic fluids, grinding fluids, and ME series micro-emulsions.

Advantages of Jaeger metal working coolants

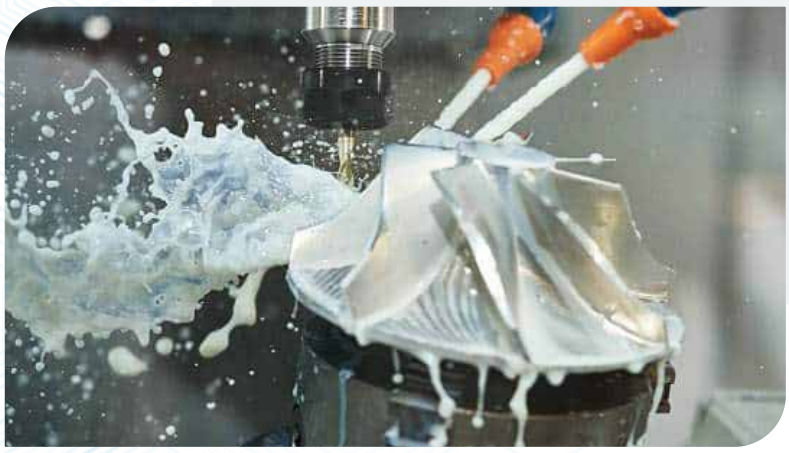
The series contains extreme pressure additives to enhance cutting performance, lubricating additives and special inhibitors for anti-corrosion of non-ferrous metals.

- High emulsion stability, effective even in areas with hard water supply.
- It low foaming properties with the same characteristics in soft water. It has high biological stability.
- It has excellent cooling capacity and can meet the requirements of lubrication, cooling and chip removal.
- It does not contain phenol ingredients. It does not irritate the skin and prevents operators from causing cancer due to long-term exposure.

Product	Features and Applications	Machining Process	Materials	Recommended Concentration %	pH Value @ 5% Diluent
Emulsified Coolants					
SW-113	A high-performance emulsion specially designed for aluminium and aluminium alloy processing, which can effectively solve the problems of diluent odor, sticky chips, poor smoothness and spot corrosion during aluminium alloy processing.	Turning, milling, drilling, boring, aluminium alloy tapping and other processing techniques are especially suitable for use in modern CNC machining centres.	Recommended for the aviation manufacturing industry and the processing of aluminium alloy automobile engine blocks and covers, and transmission cases.	6.0-12.0%	9.0-10.0
SW-129L	Good corrosion resistance, meeting aluminium processing requirements. Specially designed for aluminium wheel hub processing.	Turning, milling, drilling and other processing techniques	It can handle most ferrous and non-ferrous metals.	5.0-8.0%	9.0-10.0
Micro-Emulsified Coolants					
ME-730	Excellent lubrication performance and super extreme pressure performance to meet demanding machining processes.	Turning, milling, drilling, tapping, etc.	Medium to heavy-duty processing of ferrous and non-ferrous metals, including cast iron, carbon steel, alloy tool steel, stainless steel, copper alloy, aluminium alloy, etc.	6.0-10.0%	9.0-10.0
ME-833	High-performance micro-emulsion specially designed for aluminium and aluminium alloy processing, which can effectively solve the problems of diluent odor, sticky chips, poor finish and spot corrosion during aluminium alloy processing.	Turning, milling, drilling, boring, aluminium alloy tapping and other processing techniques, especially suitable for modern CNC machining centres.	It can process most ferrous and non-ferrous metals.	6.0-12.0%	9.0-10.0
ME-933	It has excellent lubrication performance, providing maximum protection for cutting tools, and can effectively improve the surface finish of workpieces.	Recommended for processing aluminium alloy automobile engine blocks, cylinder heads, gear-box casings.	It can process most ferrous and non-ferrous metals.	6.0-12.0%	9.0-10.0

Product	Features and Applications	Machining Process	Materials	Recommended Concentration %	pH Value @ 5% Diluent
Semi-Synthetic Coolants					
SW-119	Semi-synthetic cutting fluid with good biological stability. It does not contain phosphorus, and is conducive to subsequent treatment and discharge.	Various machining processes such as turning, milling, drilling, boring, reaming and tapping of aluminium alloys.	Carbon steel, alloy steel, stainless steel, copper, aluminium and aluminium alloys, especially suitable for processing sensitive aluminium materials and use in modern CNC machining centres.	5.0-10.0%	9.0-10.0
SW-130	It has very excellent anti-rust properties and lubrication properties, excellent aluminium protection and anti-tramp oil capabilities, and can widely replace emulsified working fluids.	Used for various light to medium load processing such as turning and milling, especially suitable for CNC machining centres.	Ferrous metals, medium tensile strength steels, high carbon steels, copper alloys and most aluminium alloys.	2.0-10.0%	9.0-10.0
SW-135N	It has very excellent lubrication extreme pressure characteristics and high alkali reserve, which can effectively resist the decomposition of diluent by bacteria during processing.	Light to medium load processing such as turning, milling and grinding, widely used in various types of lathes and CNC machine tools.	Stainless steel, mold steel, copper alloy and other metals.	5.0-7.0%	9.0-10.0
SW-136	Excellent sedimentation and clean dispersion properties, more suitable for grinding processing in non-ferrous metal processing technology.	Cutting, milling.	Stainless steel, carbon steel, aluminium and other ferrous and non-ferrous metals.	8.0 - 12.0%	9.0-10.0
SW-137	It has good lubrication properties and low foaming characteristics. It will not produce too much foam during high-pressure spraying and affect the usage.	Light and medium-load processing such as turning, milling, grinding, etc., especially suitable for use in modern CNC machining centres.	Most ferrous and non-ferrous metals.	5.0-10.0%	9.0-10.0
SW-139	It has excellent anti-rust properties and good settling properties.	Light and medium-load processing such as turning, milling, grinding, etc., especially suitable for use in modern CNC machining centres.	Most ferrous and non-ferrous metals	5.0-10.0%	9.0-10.0
SW-213	A medium-oil semi-synthetic cutting fluid specially designed for the processing of various sensitive aluminium and aluminium alloys. It contains a special anti-bacterial and anti-mildew system, which makes it have good ability to inhibit bacterial growth.	It is suitable for medium-load processing such as turning, milling, drilling, and boring. It is also suitable for aluminium alloy tapping and reaming processing. It is especially suitable for use in modern CNC machining centres.	It is suitable for processing ferrous and non-ferrous metals such as carbon steel, copper and aluminium, and is especially suitable for processing sensitive aluminium materials such as aviation aluminium and die-cast aluminium.	5.0-12.0%	9.0-10.0

Product	Features and Applications	Machining Process	Materials	Recommended Concentration %	pH Value @ 5% Diluent
SW-230 SW-230ND	It has very excellent anti-rust properties and lubrication properties, excellent aluminium protection and anti-tramp oil capabilities.	Turning, milling and other light to medium load processing, especially suitable for CNC machining centres.	Ferrous metals, medium tensile strength steels, high carbon steels, copper alloys and most aluminium alloys.	5.0-7.0%	9.0-10.0
SW-232	Excellent rust resistance and debris settling properties, suitable for metals prone to rust and debris.	Suitable for general processing, high-speed fine processing and various grinding processes such as cylindrical grinding, surface grinding and thread forming.	Ferrous metals, medium tensile strength steel and high carbon steel, copper alloys and cast iron, etc., especially recommended for cast iron and alloys that are prone to metal chips.	3.0-8.0%	9.0-10.0
SW-239	Multi-purpose general-purpose semi-synthetic coolant, excellent sedimentation, clean dispersion, lubricity and rust prevention. Low odor.	Light to medium load machining, cutting / milling.	Suitable for grinding non-ferrous metals, and also suitable for light and medium load processing of stainless steel, carbon steel, aluminium and other ferrous metals and non-ferrous metals.	8.0 - 12.0%	9.0-10.0



Product	Features and Applications	Machining Process	Materials	Recommended Concentration %	pH Value @ 5% Diluent
Fully-Synthetic Coolants					
SW-250M	It has excellent anti-rust and chip settlement properties, preventing the adhesion of processing chips and the generation of black stains on the machined surface of the workpiece.	Grinding, turning, cutting, etc.	Ferrous metal.	3.0-10.0%	9.0-10.0
SW-285	Excellent debris settling and anti-rust antibacterial system, non-allergenic and non-odorous.	Grinding, turning and milling operations.	Most ferrous and non-ferrous metals such as aviation aluminium, carbon steel, alloy steel and stainless steel.	3.0-10.0%	9.0-10.0
SW-288	It has excellent chip settlement and defoaming properties, as well as excellent wettability and anti-corrosion and anti-rust properties.	Suitable for various grinding processes such as cylindrical grinding, surface grinding, centreless grinding and thread forming, CNC machining centre, cutting, tapping and tapping processing.	Ferrous metal, especially suitable for materials such as low carbon steel, medium carbon steel and cast iron.	3.0-8.0%	9.0-10.0
SW-289C	It has good interface lubrication and extreme pressure properties. Its excellent cooling properties can shorten the cooling time of heat generated during high-speed machining and prevent workpiece burns and tool wear.	Various operations including cutting,turning and milling.	Aluminium alloy, stainless steel, alloy steel and other most ferrous and non-ferrous metals.	5.0-20.0%	8.0-9.0
SW-289E	Excellent anti-rust and chip settlement properties, preventing the adhesion of processing chips and the generation of black stains on the machined surface of the workpiece.	Grinding, turning and milling operations.	Most ferrous and non-ferrous metals such as aviation aluminium, carbon steel, alloy steel and stainless steel.	5.0-15.0%	8.0-9.0
SW-292	Provides excellent part visibility, exceptional corrosion protection, and extended diluent life.	Various grinding processes such as cylindrical grinding, surface grinding, centreless grinding and thread forming.	Ferrous metals, especially suitable for low carbon steel, medium carbon steel and cast iron, etc.	3.0-8.0%	9.0-10.0
SW-293	Excellent anti-rust and chip settlement properties, preventing the adhesion of processing chips and the generation of black stains on the machined surface of the workpiece.	Cutting, grinding, turning, etc.	Ferrous metals	3.0-10.0%	9.0-10.0

Product	Features and Applications	Machining Process	Materials	Recommended Concentration %	pH Value @ 5% Diluent
Fully-Synthetic Grinding Fluids					
SW-280L	It has excellent wetting and debris settling properties, as well as excellent anti-corrosion and anti-rust properties.	It can meet various grinding processes such as cylindrical grinding, surface grinding, centreless grinding and thread forming.	It can be used for all kinds of ferrous metals, especially for low carbon steel, medium carbon steel and cast iron.	3.0-5.0%	9.0-10.0
SW-290	Effectively inhibits the precipitation of copper soap, has excellent lubrication properties, and greatly improves the processing accuracy and surface finish of the workpiece.	Turning, milling, grinding and other processing techniques.	Copper and copper alloys.	3.0-5.0%	9.0-10.0

Types and application environments of water-based metalworking fluids

Category	Characteristics	Materials	Machining Process	Scenes
Emulsion (Soluble oil)	The resulting diluted liquid is a relatively thick emulsion, generally with a total oil content of 60% and above.	Cast iron, stainless steel, carbon steel, bearing steel and other ferrous metals; aluminium alloy, copper alloy, titanium alloy, high temperature alloy, magnesium alloy and other non-ferrous metals.	It is suitable for rough machining of high-strength materials such as finishing turning, milling, tapping, drilling, boring, deep hole drilling, pull pins, etc. that require large cutting force, fast cutting speed and feed speed, and high requirements on machine tools and tools (we generally call it heavy-duty processing). Generally, the requirements for machine tools and cutting tools are relatively high.	Rough machining of large parts, heavy machinery manufacturing, aerospace, etc.
Semi-Synthetic Fluid	The resulting diluent is a transparent or translucent liquid, generally with a total oil content of 60% or less.	Cast iron, stainless steel, carbon steel, bearing steel and other ferrous metals; aluminium alloy, copper alloy, titanium alloy, high temperature alloy, magnesium alloy and other non-ferrous metals.	It is suitable for processing medium-strength materials with medium cutting force, cutting depth, and feed speed such as cutting, milling, tapping, drilling, and boring (we call it medium-load processing). The requirements for machine tools and tools are relatively low.	General mechanical parts, mold manufacturing, automobile parts.
Fully-Synthetic Cutting / Grinding Fluid	The resulting diluted liquid is a transparent or slightly translucent liquid and generally does not contain oil.	Cast iron, stainless steel, carbon steel, bearing steel and other ferrous metals; aluminium alloy, copper alloy, titanium alloy and other non-ferrous metals.	It is suitable for grinding, cutting, milling, tapping, drilling and other processing of low-strength materials or high-precision requirements with small cutting force, small cutting depth, slow feed speed (we call it low-load processing)	Precision parts, electronic component manufacturing, workpieces with high surface quality requirements.

Note: When selecting products, the selection needs to be based on the actual processing requirements and the actual performance possibilities of the target product to avoid choosing the wrong product.

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Jaeger Oil & Chemical Co., Ltd.

400-900-9628

www.jaegerlube.com