



MetalFlow®

Machining Fluids

Our technology, your solution

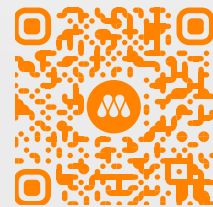
METALFLOW metal working fluids are the result of decades of experience in the field of design, development, and manufacturing of water miscible cutting fluids and pure oils.

Solutions with technological character that incorporate the latest advances in lubri-coolants and that help our clients with their waste management and allow them to comply with the most demanding environmental standards.



Our R&D department works tirelessly to improve our formulas, keep our products up to date, and respond to the industry's challenges. That's why we have developed and incorporated different technologies to our products that successfully improve the results and extend the solution's lifetime.

Optimized formulas
for any degree of
severity



Wide range of
products suitable for
any type of metal and
water hardness.

Water-miscible cutting fluids

The METALCOOL product family is comprised of water-miscible cutting fluids for all applications in the machining industry. They help control the temperature at the friction point reducing the tool's wear and facilitating chip removal while ensuring a perfect finish.

Highlights:

- Excellent anticorrosive protection of the part, machine, and tool.
- Free of nitrites, secondary amines and heavy metals.
- Cycle times reduction.
- Suitable for any type of metal

Soluble Fluids

RANGE 100

Soluble concentrates with medium/high content of mineral oil or esters. Versatile range and suitable for any type of operation, recommended when high lubrication is required such as in broaching, deep drilling and similar operations.

	Description	Water hardness
METALCOOL 111	Developed for cast iron, steel, stainless steel and aluminum alloys. Demineralized water.	0 ppm
METALCOOL 112	Recommended for stainless steel and aluminum alloys.	0 - 150 ppm
METALCOOL 114	Recommended for stainless steel and for aluminum and copper alloys.	50 - 300 ppm
METALCOOL 115	Formulated for steel, stainless steel and aluminum alloys.	>300 ppm
METALCOOL 132	Formaldehyde-free, recommended for steel, stainless steel and aluminum alloys.	0 - 150 ppm
METALCOOL 133	Formaldehyde-free, designed especially for cast iron, steel, stainless steel and aluminum alloys.	50 - 200 ppm
METALCOOL 134	Formaldehyde-free, formulated especially for copper and aluminum alloys.	50 - 300 ppm
METALCOOL 135	Formaldehyde-free, recommended for steel, stainless steel and for aluminum and copper alloys.	>300 ppm
METALCOOL 142	Formaldehyde and boron-free, advised for stainless steel and for aluminum and copper alloys.	0 - 150 ppm
METALCOOL 145	Developed for magnesium.	>300 ppm
METALCOOL 172	With EP chlorinated additives, formaldehyde and boron-free. Recommended for stainless steel, steel and for copper and aluminum alloys.	0 - 150 ppm
METALCOOL 173	Recommended for stainless steel and for aluminum and copper alloys.	50 - 200 ppm
METALCOOL 174	Boron and amine-free, designed especially for steel and for aluminum and copper alloys.	50 - 300 ppm
METALCOOL 192	With EP chlorinated additives, for all metal types.	0 - 150 ppm

Semisynthetic Fluids

RANGE 300

Semisynthetic concentrates with low/medium content of mineral or ester oils. Recommended when lubrication and cooling functions are equally important, both in general machining operations and in highly demanding processes.

	Description	Water hardness
METALCOOL 312	Recommended for cast iron, steel and stainless steel.	0 - 150 ppm
METALCOOL 314	Recommended for steel, stainless steel and copper alloys.	50 - 300 ppm
METALCOOL 322	Boron, mineral oil, and formaldehyde-free, for all metal types.	0 - 150 ppm
METALCOOL 324	Boron-free, especially designed for high severity processes. Recommended for operations with aeronautic aluminum.	50 - 300 ppm
METALCOOL 341	Boron and formaldehyde-free, especially developed for cast iron and steel.	0 ppm
METALCOOL 342	Boron and formaldehyde-free. Recommended for high-performance operations with cast iron, steel, stainless steel and aluminum alloys.	0 - 150 ppm
METALCOOL 392	With EP chlorinated additives, recommended for all types of materials.	0 - 150 ppm



Synthetic Fluids

RANGE 500

Synthetic concentrates based solely on water soluble compounds. Recommended when high refrigeration is required along with excellent detergency such as in general machining and grinding.

	Description	Water hardness
METALCOOL 512	Especially developed for grinding, polishing, and lapping operations with cast iron, steel, stainless steel and aluminum alloys.	0 - 1000 ppm
METALCOOL 522	Boron-free, recommended for grinding, polishing, and lapping operations with cast iron, steel, stainless steel and aluminum alloys.	0 - 1000 ppm
METALCOOL 532	Formaldehyde-free, recommended for tool sharpening operations.	0 - 1000 ppm

Neosynthetic Fluids

RANGE 700

Water soluble concentrates with different contents in highly lubricating additives. Used when lubrication and refrigeration functions are equally necessary and when excellent detergency is desired even in the most severe operations.

	Description	Water hardness
METALCOOL 712	Recommended for grinding and simple machining operations. Special variants for ferrous or aluminum metals available.	0 - 1000 ppm
METALCOOL 722	Boron and formaldehyde-free, especially designed for machining operations with cast iron, stainless steel and steel.	0 - 1000 ppm
METALCOOL 732	Recommended for machining operations with cast iron, stainless steel and steel.	0 - 1000 ppm
METALCOOL 742	Free of boron and formaldehyde releasers. Specifically for aluminium machining including high severity processes.	0 - 1000 ppm

Additives

Auxiliary products designed to strengthen our solutions in extreme situations or when special needs arise, maintaining the base product and allowing to act flexibly in the machine when desired.

FC RANGE

Antifoam additives for incorporation in lubri-coolant aqueous systems. Provides an immediate, long-lasting effect and an easy integration with baths in use.

RI RANGE

Anticorrosion additives for ferrous and aluminum metals developed to be incorporated in tanks and aqueous systems in use. Conserve the emulsion stability and extend the bath's lifetime.

PH RANGE

Corrective pH value additives for incorporation in circuits with coolant cutting fluids in use.

LB RANGE

Additives formulated to reinforce the lubricating power of coolant cutting fluids in use.

HS RANGE

Sequestering agents for aqueous systems in order to reduce water hardness and soap formation.

Pure cutting oils

The METALCUT product family is comprised of cutting fluids designed with highly refined mineral or synthetic oils or high-quality esters. They ensure an increase in productivity, a long life of the product in circulation, and allow to reduce the tool's wear, preventing the piece, tool, or machine from rusting.

Highlights:

- High performance and lubricating power.
- Elevated flash point and low fog formation.
- Low fluid loss with chips.
- Extreme pressure and anti-wear.

RANGE 100

Formulated with a mineral oil based, suitable for any type of severity, with a low environmental impact and a balanced composition.

	Description
METALCUT 103	Low viscosity. Recommended for grinding operations with ferrous metals and machining operations with non-ferrous alloys.
METALCUT 106	White oil based. Recommended for micromachining operations with cast iron and steel and machining operations with all types of metal.
METALCUT 109	Recommended for machining and grinding operations with all metal types. Specially formulated for yellow metals.
METALCUT 111	Recommended for machining and grinding operations with cast iron and steel.
METALCUT 120	Developed for machining and grinding operations with aluminum alloys.



RANGE 200

Formulated with biodegradable vegetal or synthetic oils, becoming an environmentally friendly range based on non-polluting additives.

	Description
METALCUT 211	Ester-based and low viscosity. Recommended for machining and microspraying operations cast iron, steel and stainless steel.
METALCUT 222	Alcohol based. Developed for microspraying operations with all types of metal.
METALCUT 232	Ester-based. Recommended for microspraying operations with all types of metal.
METALCUT 238	Ester-based. Designed for microspraying operations with cast iron, steel and stainless steel. Recommended for medium and high requirement processes.

RANGE 300

Formulated with a mineral oil based, with high performance additives to lubricate at moderate temperatures, enabling lower energy consumption.

	Description
METALCUT 312	Low viscosity. Recommended for machining operations with cast iron, stainless steel and steel. Designed for medium and high requirement processes.
METALCUT 314	Low viscosity. Recommended for steel and stainless steel machining operations. Designed for medium and high requirement processes.
METALCUT 322	Medium viscosity. Recommended for machining operations with cast iron, steel and stainless steel. Designed for medium and high requirement processes.



Auxiliary Technical Products

Supplementary products designed to be used in machinery and to facilitate its maintenance and cleaning.

	Description	Base	ISO VG Viscosity	Viscosity Index
HYDROFLOW HLPD	Highly refined hydraulic oil with detergent, anti-ageing and anti-corrosion properties for high-performance systems (presses, construction and agricultural machinery, etc.).	Mineral Oil	22-100	> 110
HYDROFLOW HLP	Highly refined hydraulic oil with anti-ageing and anti-corrosion properties for high-performance systems (presses, construction and agricultural machinery, etc.).	Mineral Oil	22-100	> 110
HYDROFLOW HV	Highly refined hydraulic oil with high viscosity index, with anti-ageing properties and anti-corrosion protection, for high performance systems (presses, construction and agricultural machinery, etc.).	Mineral Oil	22-100	> 150
GEARFLOW M	Oil for industrial gearboxes and gears with high load, temperature and speed performance.	Mineral Oil	100-320	> 90
SLIDEFLOW	Oil for sliding and slipping slideways of machine tools. Anti-rust and anti-wear capacity as well as a low friction coefficient.	Mineral Oil	32-220	> 95
CHAINFLOW	Oil for transport or drag chains of any equipment. Extreme conditions and anti-wear capacities.	Synthetic Oil	100-320	> 80
METALCLEAN 6000	Cleaning agent for bath changes in aqueous machining lubricant systems.	Water	n / a	n / a
METALCLEAN 6130	Surface cleaning agent developed to remove possible excess grease.	Solvent	n / a	n / a

PROCESSES	METALS				
	CAST IRON	STEEL	STAINLESS STEEL	ALUMINUM	COPPER
General Machining		METALCOOL 111			
			METALCOOL 112		
				METALCOOL 114	
			METALCOOL 115		
			METALCOOL 132		
		METALCOOL 133			
				METALCOOL 134	
			METALCOOL 135		
				METALCOOL 142	
				METALCOOL 173	
		METALCOOL 174		METALCOOL 174	
		METALCOOL 311			
		METALCOOL 312			
		METALCOOL 313			METALCOOL 313
		METALCOOL 314			METALCOOL 314
	METALCOOL 341				
		METALCOOL 722			METALCOOL 722
				METALCOOL 742	
				METALCUT 103	
	METALCUT 106				
	METALCUT 109				
	METALCUT 110				
		METALCUT 122			
		METALCUT 312			
	METALCUT 314				
		METALCUT 322			
High Requirement Machining			METALCOOL 112		
			METALCOOL 122		
			METALCOOL 172		
			METALCOOL 324		
		METALCOOL 342			
			METALCOOL 392		
		METALCUT 322			
Grinding, polishing, and lapping					
			METALCOOL 512		
			METALCOOL 522		
			METALCOOL 532		
		METALCOOL 712			
		METALCOOL 732			
			METALCUT 103		
			METALCUT 106		
		METALCUT 109			
Microspraying					
		METALCUT 211			
			METALCUT 222		
			METALCUT 232		
		METALCUT 238			

SPAIN - Barcelona
MEXICO - Querétaro
BRAZIL - São Paulo
INDIA - Pune
CHINA - Hefei



METALWORKING FLUIDS

- Coolants
- Cutting Oils
- Forming Lubricants

DIE CASTING LUBRICANTS

- Die Casting Release Agents
- Gravity and Low Pressure Release Agents
- Plunger Lubricants
- Industrial & Technical Auxiliary Lubricants

FORGING LUBRICANTS

- Graphite Based Release Agents
- Graphite Free Release Agents

INDUSTRIAL LUBRICANTS

- Hydraulic Fluids
- Gear Oils
- Slideway & Chain Oils
- Thermic Oils
- Boundry lubrication additives

SURFACE TREATMENTS

- Cleaners
- Surface Protectors

EQUIPMENT

- Dosing & Application Equipment
 - Monitoring Equipment
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