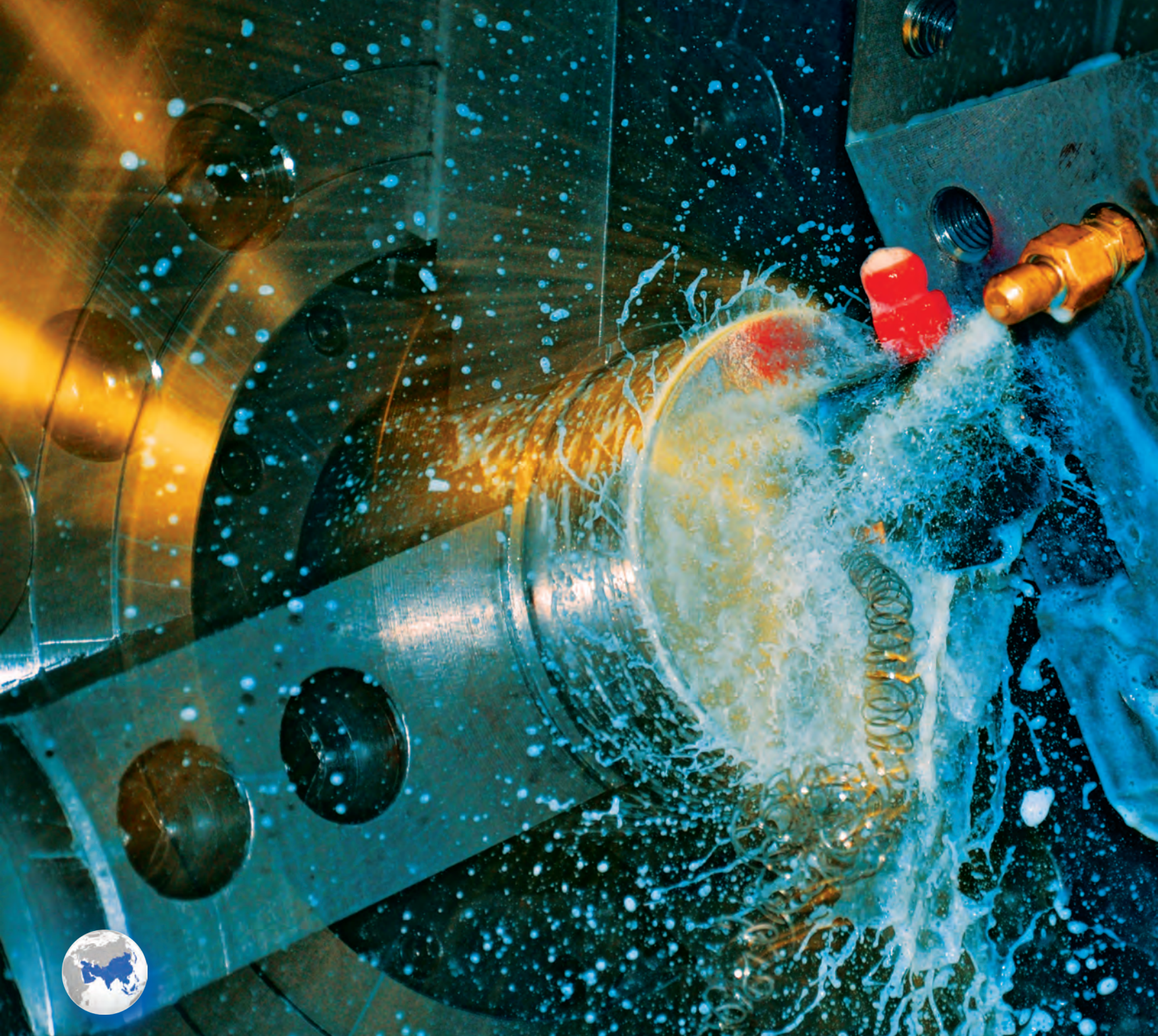




*Improve Your Performance
Streamline Your Production
Enhance Your Profitability*





TRIM® Family of Products – The Solutions You Need



CUTTING & GRINDING FLUIDS

Cutting and grinding fluids that lead the industry

Master Chemical has been recognized for more than 60 years for its TRIM family of metalworking fluids for all types of cutting and grinding operations. TRIM fluids meet the demands of specialized industries such as automotive, aerospace, and medical parts manufacturers.

For the full range of synthetics, semisynthetics, and soluble oils, TRIM offers customers longer tool and sump life, better finished parts, and a better bottom line.

TRIM coolants help customers realize

- > significantly reduced fluid costs
- > lower machine tool costs
- > reduced downtime and labor
- > lower disposal costs
- > assured code compliance
- > a safer work environment for employees
- > immediate savings to the bottom line

COOLANTS/TRIM MICROSOL®	
TRIM® MicroSol® 690XT <i>High-lubricity, Low-foam Premium Semisynthetic NEW!</i>	Ultimate lubricity. Robust stability package for long life. Exceptional foam control. Excellent environmental and regulatory profile. Boron free and nonchlorinated. Multi-metal compatible.
TRIM® MicroSol® 585XT <i>Nonchlorinated Semisynthetic</i>	Extended-life, high-lubricity, microemulsion coolant delivers excellent cooling and mechanical lubricity. Well suited for machining and grinding gray iron, mixed metal situations, and titanium alloys.
COOLANTS/EMULSION	
TRIM® E709 <i>Long-life Emulsion</i>	Long lasting, highly stable, extremely hard-water tolerant emulsion; high performance in wide application range for machining, grinding, high-speed turning, milling. Rejects tramp oil for increased sump life without costly additives.
TRIM® E206 <i>Long-life Emulsion</i>	Highly stable emulsion for superior sump life and low mist/low carryoff. Excellent for high-speed milling and turning in most materials. Higher speeds and feeds, long sump life, and low use rates mean higher productivity and profits.
CoolPAK® COMSOL IIQF <i>High-lubricity Emulsion</i>	Highly lubricious, formaldehyde-free emulsion; good lubricity and corrosion inhibition for aluminium and soft gummy materials. Good rust protection for copper parts and other ferrous metals. Provides long sump life.
CoolPAK® COMSOL IIC3 <i>Emulsion for Alloy Wheel Machining</i>	Economical product offers excellent lubricity and superior corrosion protection for alloy wheel machining. Single product for both roughing and finishing lines; reduces 'built-up edge' issues associated with alloy wheel machining. Leaves protective film to protect aluminium against scratches from stringy chips during machining.
COOLANTS/SEMISYNTHETIC	
TRIM® SC310 <i>Microemulsion Semisynthetic</i>	Highly versatile for machining/grinding a very wide range of materials– cast iron, steels, copper alloys, many plastics, and composites; superior corrosion inhibition on all ferrous/nonferrous metals. Extremely tolerant to hard water.
TRIM® SC445FF <i>Formaldehyde-free, Low-oil Semisynthetic</i>	Economical, formaldehyde-free, low-oil semisynthetic provides long sump life. Clean running performance on cast iron/ferrous metals with excellent rust protection.
TRIM® SC410 <i>Chlorine-free Semisynthetic</i>	Chlorine-free, semisynthetic coolant made with Master Chemical's vegetable-derived, ester lubricants. Clean running in moderate-duty machining/grinding of both ferrous and nonferrous materials. Excels at ferrous surface and cylindrical grinding and with machining 'gray iron' castings.
TRIM® SC620 <i>Premium Low-oil Semisynthetic</i>	High lubricity, low foam, low odor semisynthetic for high-performance machining and grinding. Rejects tramp oil and extends coolant life; save time and material. Finishes rival those of soluble oils, multi-metal compatibility.
COOLANTS/SYNTHETIC	
TRIM® C115 <i>Synthetic</i>	High-performance synthetic fluid for working cast iron and mild steels; provides excellent cooling and chip settling, good tramp oil rejection, and machine cleanliness while leaving a protective film on the machine tool.
TRIM® C270 <i>High-performance Synthetic</i>	Synthetic coolant concentrate operates at very high fluid pressures and volumes with little or no foam. Very stable formula; exceedingly long operational life with consistent performance. Our most popular cutting fluid product.
TRIM® C350 <i>Premium, High-lubricity Synthetic</i>	Longer tool life, less residual stress on machined parts. PRTR compliant; NO chlorine, phenol, nitrite, copper, triazine, silicone; NO NPE or SARA 313 chemistry. Rust protection on aluminum, titanium, nickel, and steel alloys.
TRIM® C385 <i>Premium Ferrous Machining Synthetic</i>	Very-high performance, easy-to-use for high-tech ferrous materials including stainless steel and Inconel.® Very high levels of usable lubricity at the point of cut; can be used for honing cast iron.
NEAT OILS	
TRIM® OV 2200 NEW! <i>Premium Vegetable-based Oil</i>	Bio-based straight oil for machining difficult alloys and steels. Environmentally friendly and V.O.C. free. No chlorine, sulfur, or animal fat. Reduces unpleasant odors and residues.
TRIM® OM 287 <i>Versatile Cutting Oil</i>	Contains chlorine and inactive sulfur for multi-metal capability. Works well in modern higher speed "Swiss" machines and machining centers. Very easy to wash off.
TRIM® OM 303 <i>Nonchlorinated Oil</i>	Nonchlorinated medium- to heavy-duty semisynthetic straight oil. Works well in screw machines, roll form threading, and other high-lube operations.



Clean and protect with Master STAGES

Master STAGES surface treatments include cleaners and corrosion inhibitors to keep customers environmentally compliant, running at peak performance, and more profitable.

Have health or safety issues? High disposal costs? Problems with rust on parts? Whatever the production issue, there's a Master STAGES performance-proven product sure to make the difference. The Master STAGES difference: the right solution for the job at the right price.

Master STAGES in-process washing compounds for

- > spray, immersion, or ultrasonic parts cleaning
- > multi-metal operations
- > metalworking fluid removal
- > cleaners with built-in RP
- > water-based RP's
- > vibratory finishing
- > reduced disposal costs

PARTS CLEANERS	
Master STAGES™ CLEAN 2020 <i>Washing Compound for Ultrasonic and Immersion Washers</i>	Concentrated, very high performance cleaner for washing all metals including brass, copper alloy, and aluminium in ultrasonic or immersion washers. Extraordinary cleaning ability; often results in elimination of cleaning steps or reduced cleaning cycles. Long bath life and economical operation.
Master STAGES™ CLEAN 2029 "One Step" <i>Parts Washing Fluid Corrosion Inhibitor</i>	High detergent, low foam, and good in-process rust prevention with just "One Step." Mild pH for a safer work environment. Use at 3%–5% and 49°C–82°C (120°F–180°F) for best results and lowest foam.
Master STAGES™ CLEAN 2115AL <i>Low-foam Spray Washing Compound</i>	Aluminum-compatible, high-performance, low-foam synthetic washing compound; for very high-pressure spray washers, de-burring, and water jet cutting. Exceptional sump life, foam control, and tramp oil rejection.
Master STAGES™ CLEAN 2430 <i>Near-neutral Washing Compound</i>	Mild pH, highly concentrated, washing compound/corrosion inhibitor for aluminum and steel alloys, cast iron, copper, brass, bronze, and zinc. Great detergency and long life in single and multi-stage spray washers.
Master STAGES™ CLEAN 3011 <i>Residue-free/Multi-metal Cleaner</i>	Concentrated washing compound/corrosion inhibitor. No foam at room temperature in high-pressure spray washers. Removes light oils, water soluble cutting and grinding fluid residues. Leaves thin rust-inhibiting film.
CORROSION INHIBITORS	
Master STAGES™ RPO 12 <i>Long-term Corrosion Inhibitor</i>	Long-term, indoor rust preventative that leaves a soft, waxy protective film to provide up to 24 months indoor rust protection. Compatible with all metals; can be applied by dip, spray, or brush-on methods.
Master STAGES™ RPO 6BF <i>Barium-free, Low-odor, Corrosion Inhibitor</i>	Nonstaining, water displacing, and thin-film rust preventative for use on a variety of metals, bearings, precision parts. Six to eight months protection for indoor and in-process parts in storage, as well as parts in transit.
Master STAGES™ NOCOR® E6 <i>Low V.O.C. Emulsion, Corrosion Inhibitor Concentrate</i>	Super-concentrated, barium-free, water-based emulsion protects steel and ferrous metals for up to six months indoors at dilutions of 4%–16%. Low V.O.C., economical. Moderate pH, very low odor, nonflammable.
Master STAGES™ NOCOR® S2 <i>Water-soluble Corrosion Inhibitor</i>	Use NOCOR S2 at 3%–7% in water for up to two months indoor rust prevention. Barium free, low V.O.C., and economical to use. Can be used in rinse stage of parts washers.
MAINTENANCE CLEANERS	
Master STAGES™ Task2™ Grime Fighter Master STAGES™ Task2™ All Purpose Cleaner Task2™ Glass Cleaner	Super concentrated, industrial strength cleaner/degreaser. Safe on all metals. For removal of heavy, oily, or greasy soils. Spray bottle cleaning of machines. For cleaning glass and plastic surfaces.
Master STAGES™ CLEAN F2™ <i>Non-butyl Multi-purpose Cleaner</i>	Strong and super concentrated for use on floors and hard surfaces. Very economical to use and safe for human contact at 20% concentration!
Master STAGES™ Whamex™ <i>Machine Tool Sump and System Cleaner</i>	Safe, fast-acting concentrated formula saves machine cleaning downtime while removing the oily residues, scums, and insoluble soap deposits that reduce coolant life.
Master STAGES™ Whamex™ XT <i>For Semisynthetics and Synthetics</i>	Same safe, fast-acting concentrated formula as Whamex yet made for synthetics and semisynthetics. Nonfoaming; saves machine cleaning downtime, removes oily residue and scum and extends coolant life.
Master STAGES™ CLEAN AMO™ <i>Natural-solvent Cleaner and Degreaser</i>	A maize 'N Orange.™ Natural solvent cleaner that can be mixed with water and used for a wide range of industrial cleaning jobs. Outstanding at removing oily, greasy, or resinous soils at room temperature.



XYBEX® Fluid Recycling Equipment



FLUID RECYCLING EQUIPMENT

Increase profitability with XYBEX

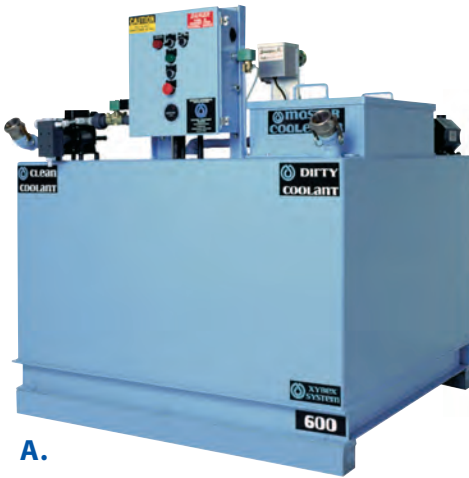
Master Chemical, the pioneers of coolant technology, also invented systems for recycling those same coolants and even cleaners. Since properly maintained coolant can last almost indefinitely, a fluid management and recycling program using XYBEX equipment pays for itself with savings in material costs, disposal expense, and reduced downtime.

Maximize your productivity and minimize waste with XYBEX fluid recycling equipment from Master Chemical, *The Coolant Management Company*®.

XYBEX equipment to maximize productivity, minimize waste

Some examples of our full line of quality equipment:

- A. XYBEX System 600
- B. 120V Electric Yellow Bellied Sump Sucker™
- C. Li'L Sucker™
- D. MCC Reversible LIQUI-VAC™
- E. Master Coalescer II™
- F. SCROUNGER® Jr. Oil Skimmer
- G. UNIMIX™
- H. Master Mix™
- I. The Whammer™
- J. Palm Abbe™ Digital Refractometer



A.



B.



C.



D.



E.



F.



G.



H.



I.



J.



Committed to your business

With our production facilities and offices in Asia, Master Chemical products and services are available to help you with continuous improvements, waste minimization, and better return on investments.

For prices or additional information, contact your Master Chemical Corporation Distributor.

www.masterchemical.com

©2015 Master Chemical Corporation. TRIM®, XYBEX®, SCROUNGER®, MicroSol®, NOCOR®, CoolPAK®, and The Coolant Management Company™ are United States registered trademarks of Master Chemical Corporation; A maize 'N Orange™, CLEAN AMQ™, CLEAN F2™, TASK2™, Whamex™, Yellow Bellied Sump Sucker™, Master Coalescer II™, Li'L Sucker™, UNIMIX™, MCC Reversible LIQUI-VAC™, Master Mix™, and The Whammer™ are trademarks of Master Chemical Corporation. Dec 21, 2015