Master Fluid SOLUTIONS®

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Exacting solutions for the most pristine, reliable parts

TRIM® high-performance cutting and grinding fluids and Master STAGES™ cleaners satisfy the stringent demands specific to medical industry manufacturers. Our experts work with customers to ensure their cytotoxicity standards are achieved. Our fluids ensure pristine, reliable parts when machining, grinding, drilling, and tapping stainless steel, titanium, nickel-based alloys, peek, and composites.

Having earned more than 100 aerospace approvals, our products will meet your rigorous demands with flying colors.

Metalworking Fluids
TRIM
Master Fluid Solutions™

With our full line of groundbreaking TRIM® microemulsions, speciality cutting and grinding fluids, and hard-working straight oils, we have the solution to meet your meticulous standards and boost your production.

Achieve cutting edge operations with TRIM® cutting and grinding fluids

> reduce fluid and tool costs
> reduce downtime and labor
> lower disposal costs
> ensure code compliance
> excellent operator acceptance
> provide safer workplace
> deliver savings to the bottom line

TRIM Coolants	
TRIM® HyperSol™ 888NXT ***NEW!*** *neo-synthetic precision aerospace machining fluid*	Revolutionary, patented neo-synthetic technology offers unsurpassed versatility and performance on metals common to the medical industry– nickel alloys, stainless steels, and titanium alloys– along with superior lubricity. Low foam, low odor, long running, it meets the most strict environmental regulations.
TRIM® MicroSol® 690XT *High-lubricity, Low-foam Premium Semisynthetic*	Highest lubricity MicroSol. Robust stability package for long life. Exceptional foam control. Excellent environmental and regulatory profile. Boron free and nonchlorinated. Multi-metal compatible.
TRIM® MicroSol® 692XT ***NEW!*** *Premium, High-lubricity, Low-foam Microemulsion*	Ultimate lubricity. Delivers extended sump and tool life, greater bio stability, and better foam control versus previous generation semisynthetic microemulsions. Compatible with very wide range of materials including titanium, high nickel alloys, steels, copper, and aluminum alloys.
TRIM® MicroSol® 585XT *Nonchlorinated Semisynthetic*	Extended-life, high-lubricity, microemulsion coolant delivers excellent cooling and mechanical lubricity. Ideally suited for machining/grinding high-tech metals and titanium alloys. Multiple aerospace approval ratings.
TRIM® MicroSol® 685 *High-lubricity Semisynthetic*	Heavy-duty soluble oil performance with the cleanliness of a semisynthetic. For a very wide range of materials including stainless steel, titanium and nickel-based alloys, composites, and peek.
TRIM® E860 *Low-foam, High-lubricity Emulsion*	Highly-stable, competitively priced emulsion for superior sump life and low-mist/low carryoff. For consistent machining, grinding, and cutting a wide range of materials and applications.
TRIM® SC520 *General-purpose Semisynthetic*	Low odor, low cost for the multi-material, multi-operational shop. Controls built-up edge, improves tool life. Superior machining results on high-speed milling and turning. Controls chip welding on soft, gummy materials.
TRIM® OM 287 *Versatile Cutting Oil*	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 *Nonchlorinated Cutting/Lubricating Straight Oil*	Nonchlorinated medium- to heavy-duty semisynthetic straight oil. Works well in screw machines, roll form threading, and other high-lube operations.
TRIM® OV 2200 *Premium Vegetable-based Oil*	Bio-based straight oil for machining difficult alloys and steels. Environmentally friendly and V.O.C. free. Nonchlorinated, no sulfur or animal fat. Reduces unpleasant odors and residues.

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Exacting solutions for the most pristine, reliable parts

Have health and safety issues? Less than spotless parts? High disposal costs? Environmental worries? Whatever your production concerns, we have a hard-working Master STAGES solution to keep you running at peak performance.

To clean and protect, rely on hard-working Master STAGES™

> provide excellent cleaning in spray, immersion, or ultrasonic parts vibratory finishing applications
> preform multi-metal operations
> broad contaminant fluid removal
> protect parts from corrosion
> reduce disposal costs

Master STAGES Parts Cleaners	
Master STAGES™ CLEAN 2017 *Heavy-duty Spray Cleaner*	Removes heavy soils and oily residue. Often used for removing heavy RP coatings and buffing compounds.
Master STAGES™ CLEAN 2029 "One Step" *Parts Washing Fluid/Corrosion Inhibitor*	High detergent, low foam "One Step" has mild pH for a safer work environment. For best results and lowest foam for spray washing use at 140°–180°F (60°–82°C) at 3%–5%. For immersion washing at 70°–160°F (21°–71°C) at 5%–10%.
Master STAGES™ CLEAN IP 2019s *Silicated Low-foam Cleaner*	Very low foaming, concentrated. Remove straight oils and coolants from metal parts. Excellent yet very economical cleaner. Rejects oil for easy skimming or centrifuging to extend bath life.
Master STAGES™ CLEAN 2020 *Ultrasonic and Immersion Washers*	High in detergency; highly effective at removing coolant, oil, and grease on multiple metals. CLEAN 2020's oil-rejecting properties mean longer bath life and economical operation.
Master STAGES™ CLEAN 2030 *Ultrasonic and Immersion Washers*	Concentrated, very high performance cleaner for washing all metals in ultrasonic or immersion washers. Oil-rejecting properties for longer bath life and economical operation.
Master STAGES™ CLEAN 2430 *Near-neutral Washing Compound*	Mild pH, highly concentrated. Great detergency and long life in single and multi-stage spray washers.
Master STAGES™ RINSE 100 *Mild Alkaline Detergent*	Combination of soap and detergent with pine oil. Excellent degreaser; safe on most metals.

Master Fluid SOLUTIONS®

Ensuring quality assurance

Master Fluid Solutions has earned the valued ISO 9001:2008 certification in the metalworking industry. Our Quality Assurance and Continuous Improvement Techniques ensure our products reach the highest standards of quality and repeatability — yours.

NSF®

Data-driven, customer-specific analysis from our experts

For existing and potential customers, we often conduct an extensive case study to present hard data-driven analysis of their operation.

First, our highly-trained filed technicians and sales reps carefully collect on-site data, then, our lab conducts an extensive battery of tests, and finally, we present a visually-explicit A3 report (actual customer studies at left).

Some facilities experience problems with residue on parts, workers' health issues, regulatory compliance, high disposal costs, or may simply be looking for ways to increase profitability without sacrificing quality. Our A3 report provides valuable answers to these or a myriad of other issues.

Given the hard facts, customers can move forward with decisions to improve specific production issues, solve problems, and lower costs. It adds up to a lot of sense– *dollars and sense.*

Case Study A

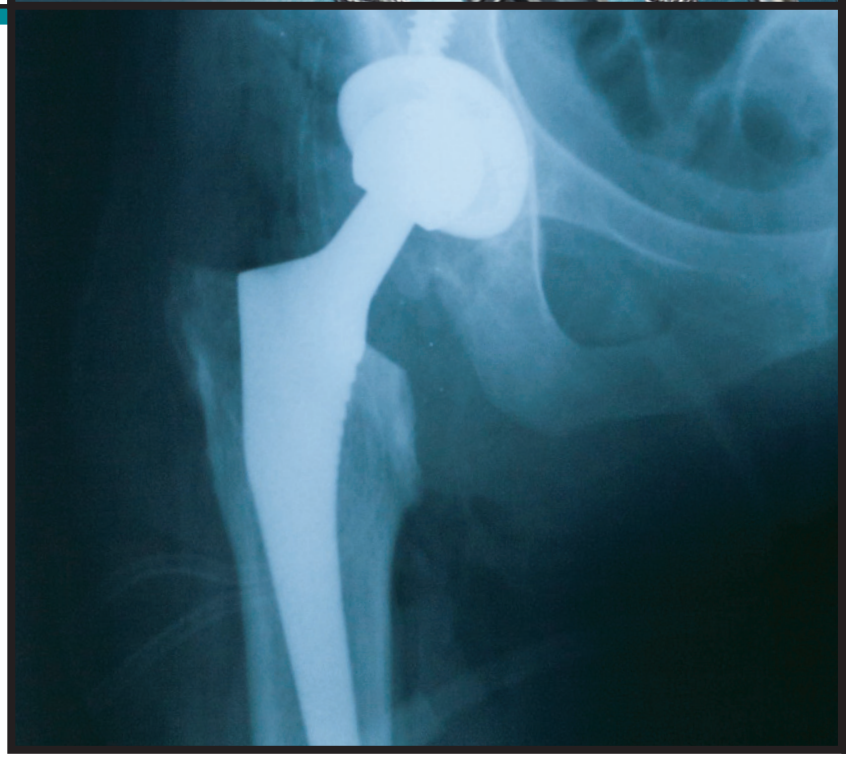
Company EM, a manufacturer of joint replacement systems and medical tools, was using four coolants in their operation; they wanted to reduce the number of coolants and possibly achieve cost savings without sacrificing part quality. Backed with test results as shown in the study, TRIM® MicroSol® 685 has been used as the single coolant and results show a 24.4% cost savings per year due to a reduction in product usage and disposal costs as well as a lengthened fluid life.

Case Study B

An A3 analysis of their cleaning process was also performed for Company EM. They had a multi-step process to clean parts of spray washing, dunk tank immersion cleaning, and a final two-part ultrasonic cleaning. Cost savings, without sacrificing cleanliness, was the focus of the report. Through extensive tests on cleaners and processes, Master Fluid Solutions found the customer could eliminate one cleaning process, use less cleaner itself, and consume less energy through the use of Master STAGES CLEAN 2017 – for a combined savings of 44% per cent per year in cleaner material and process energy costs.

Contact us

Let Master Fluid Solutions create a detailed, fact-based, customized analysis to prove just how much we can save your operation. And you can reduce your time and material costs, while improving quality, with the premium coolant just right for your production.



For prices or additional information, contact your Master Fluid Solutions Representative.

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