



**Master Fluid**  
SOLUTIONS®

*TRIM® Targets  
Performance*



**INNOVATIONS**  
FOR LONGER SUMP  
AND TOOL LIFE

*High-performance cutting and grinding fluids aimed at the munitions industry*

When it comes to firearms, there's only one standard – that of ultimate dependability. Gun manufacturers, as well as their customers – military combatants, police and security officers, sportsmen, and private individuals – target ultimate precision, utmost accuracy, and assured repeatability.

Rely on TRIM® high-performance solutions as if everything depended on it – because in this business, it does.



## TRIM® MicroSol® 690XT



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Meeting tight demands of the munitions industry head-on, TRIM® MicroSol® 690XT is the pinnacle of high-performance microemulsions. It delivers unsurpassed lubricity with dramatically extended tool life and exceptional foam control.

MicroSol 690XT provides outstanding surface finish, tool life, and machinability on a range of industry materials including: 4140, 4150, and molybdenum carbon steels; 316 and 17-4 stainless steels; and 6061 and 7075 aluminums. With an ultra, low-foam profile, MicroSol 690XT tackles high-pressure, high-volume applications with ease. An excellent alternative to the increased consumption of high-mineral soluble oils, or the tooling under-performance and machine incompatibility issues of a synthetic, MicroSol 690XT has garnered many contracts for military production.

For peak performance 24/7, make it MicroSol 690XT.

### Case Study

OPERATION: Drilling, tapping, button rifling, and heavy milling of 416 stainless and other gun-material metals

#### APPLICATION:

Mega Arms is a high-production USA manufacturer of precision-built AR-15 barrels and components. Running their high-volume, high-pressure machining operations 24/7, they had been experiencing issues with excessive foam. They changed from one 'premium' coolant, then to another. A third coolant originally performed well, but over time the foaming problem returned. Finally, they made the switch to MicroSol 690XT with astounding success. In the two years they have been running MicroSol 690XT they have experienced excellent foam control, outstanding tool life, and extremely long sump life.

Mega Arms is completely sold on MicroSol 690XT.



TRIM® MicroSol® 690XT



## TRIM® MicroSol® 585XT



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Also from the MicroSol family is the highly lubricious TRIM® MicroSol® 585XT semisynthetic, microemulsion coolant. Offering high performance and remarkable sump life without chlorinated EP additives, MicroSol 585XT is excellent for high-pressure, low-foam applications.

MicroSol 585XT is exceptional for drilling, tapping, reaming, turning, and grinding the wide variety of gun manufacturing steel, stainless, and aluminum alloys. The extremely hard-water tolerant, fast-wetting coolant markedly extends sump life and provides superior corrosion protection along with substantial savings on time and material.

For exceptional lubricity, surface finish, and return-on-investment, use MicroSol 585XT.

### Case Study

OPERATION: Machining, cutting, milling, and turning aluminum, steel, and stainless steel

APPLICATION: A manufacturer of high-quality, intricate, precision parts in Tuscon, AZ has been totally impressed with the low cost of ownership of MicroSol 585XT. Not displeased with their previous quality coolant, they tested the MicroSol 585XT to see if they really could achieve measurable cost savings. After an impressive trial that produced pristine parts, they switched their operations over to MicroSol 585XT more than TWO YEARS ago and still have not changed the sump. Besides the obvious coolant savings due to longer sump life, they have had no machine downtime for sump cleaning. In addition, they experience less carryoff, cleaner machines, and substantially reduced disposal costs.

The manufacturer attests that their cost reductions using MicroSol 585XT have been remarkable!



## TRIM® E925



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The outstanding chlorine-free emulsion for high performance and premium surface finish, highly lubricious TRIM® E925 flies through production of otherwise difficult machining operations.

For challenging applications such as reaming barrels or turning difficult aluminum alloys and high tensile-strength steels, high-performance E925 premium emulsion delivers extraordinary sump and tool life with lower costs. The chlorine-free proprietary formula delivers more lubricity to point-of-cut with excellent stain and corrosion resistance.

Take aim at productivity, repeatability, performance, and profitability with TRIM E925.

### Case Study

OPERATION: Forging and machining 7075 aluminum

APPLICATION:

The North Carolina customer is a Tier One supplier for one of the largest firearms companies in the world. Manufacturing AR-15 lower components, they machine 7075 aluminum in a Haas vertical milling center (VMC). With the addition of a new machine, they had issues with too much mist from the petroleum-based coolant they were using in their relatively low-ceiling environment. A Master Fluid Solutions' representative suggested a change to environmentally-friendly E925.

They achieved measurably reduced mist and good operator acceptance, but got so much more than expected... with E925 they have no foam, have doubled their sump life, and with 40% to 50% increase in tool life, they did not need to change their PCD diamond tool in the first six months! Impressed with the results, they have switched over all their machines to E925!



TRIM® E925



## TRIM® OM 287



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For arms manufacturers producing precision-drilled barrels using dedicated gun-drilling machines, the hard-working, multi-metal compatible TRIM® OM 287 straight oil is an excellent performer.

With superior lubricity for efficient metal removal, TRIM OM 287 straight oil offers better cooling for accurate, precise deep-hole drills on steel and aluminum alloys. Nonstaining, OM 287 resists corrosion while providing extended tool life and an excellent finish. Versatile and easily washed off, OM 287 performs well on all steels as well as other ferrous and nonferrous metals in a variety of operations.

For high-performance machining, choose TRIM OM 287.

### Case Study

OPERATION: Drilling various steels and stainless steel

APPLICATION: A West Coast customer who is a very high-volume, precision parts manufacturer, drills steels and stainless steel using TRIM OM 287 straight oil. They have run OM 287 with great success for more than a decade and are completely satisfied with its ability to maintain tight tolerances on their precision parts.

When they switched to OM 287 with its excellent lubricity, they saw dramatically extended tool life, which has added up to significant savings on tooling costs over the past 12 years!

Achieve excellent finishes and tool life with dependable OM 287 straight oil.



TRIM® OM 287



### Contact us

Let us create a detailed, fact-based, customized analysis to prove just how much we can save your operation in time, material, and cost, while improving quality, with the premium coolant just right for your production.

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



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