Master Fluid SOLUTIONS™

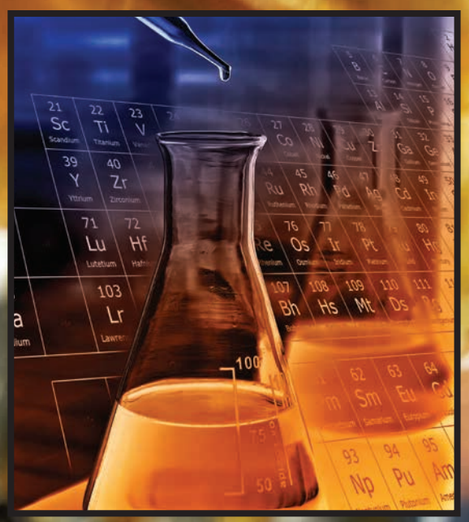
TRIM® Neat Oils

Master Fluid SOLUTIONS™

An Innovation in Oil

Experts in the field of metal cutting and grinding operations, Master Fluid Solutions is committed to research and development and the use of the premium raw materials and production methods.

TRIM® neat oils blend superior synthetic and semisynthetic, hydrocracked base fluids with carefully selected "intelligent" additives to improve cutting and grinding performance and ensure products consistently exceed market expectations.



Metalworking Fluids TRIM Master Fluid Solutions™

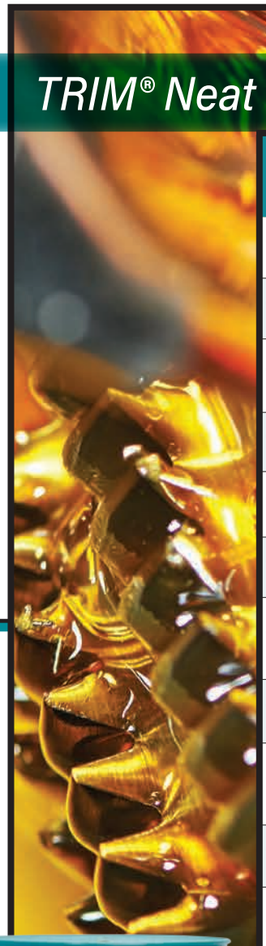
TRIM neat oils outperform standard mineral oil-based products due to:

- vastly reduced oil consumption – lower operating cost
- higher flash points – less fire risk
- very low or no mist even at high pressures – safer working environment
- free from polycyclic aromatics – improved operator safety
- very low odour and light colour – better operator acceptability
- lower foam – improved cutting and grinding performance

Whether you are superfinishing or gear hobbing, the innovative range of chlorine free Master Fluid Solutions TRIM neat oils offer you the best-in-class option.

Master Fluid SOLUTIONS™

TRIM® Neat Oils



	Physical Properties		Chemical Properties			Performance						Applications							
Product	Viscosity mm2/s @ 40°C	Colour	Flash Point °C	Extreme Pressure	Base Fluid	Ferrous	Carbide	Aluminium	Alloys	Ceramics	Exotics	Grinding	Honing	Drilling	Broaching	Tapping & Threading	Fine Machining	General Purpose	Description
TRIM® OE105	5.3	Straw Yellow	170	EP	Saturated Esters	***	***	**	*	***	*	***	***	**			***	**	Very low misting, synthetic oil-based product for honing of all materials. Also suitable for very fine machining operations.
TRIM® OG107	7.7	Pale Straw	164	–	Mineral Grp III Hydrocracked	**	**												HSS and carbide tool grinding oil based on hydrocracked oil and saturated ester. Available only in Italy.
TRIM® OG108	8.6	Colour-less	198	–	Mineral Grp III Hydrocracked	***	***	***	**	***	**	***	***	***		**	***	***	Grinding oil based on hydrocracked oil and saturated ester; for grinding HSS/carbide tools and grinding of gears. Very low misting.
TRIM® OE209	9.0	Water White	200	EP	Saturated Esters	***	***	***	**	***	**	***	***	***		**	***	***	Very low misting, synthetic oil-based product for machining/grinding all materials. Well suited to very high-pressure, chip-breaker applications.
TRIM® OG210	9.3	Pale Straw	200	EP	Mineral Grp III Hydrocracked	***	***	**	***	**	**	***	**	***		**	***	***	Grinding oil based on hydrocracked oil, saturated ester and EP additives; for hard grinding of gears and other form-grinding applications.
TRIM® OE310 NS	10.6	Pale Straw	250	EP	Ester	**		***	**		***	**	***	**	*	***	***	***	High lubricity, ester-based fluid for machining all materials. Suitable for heavy-duty machining processes where a light viscosity is also advantageous.
TRIM® OE315 NS	15.0	Pale Straw	230	EP	Ester	**		***	***		***	**	**	***	*	***	***	***	High lubricity, ester-based product for machining all materials. Specially suited to heavy-duty machining processes, such as deep-hole drilling and broaching.
TRIM® OE220 NS	20.0	Straw	230	-	Ester	***													High lubricity, ester-based product for general machining of steel, aluminium and yellow metals.
TRIM® OE322 NS	22.0	Pale Straw	235	EP	Ester	***		***	***		***	**		***	*	***	**	***	High lubricity ester-based product for machining of all materials. Proven product for machining of high-strength materials, cast metals and gear machining.
TRIM® OG225	25.3	Pale Straw	240	EP	Mineral Grp III Hydrocracked	***	***	**	***		***	**	**	**	**	**	**	***	High performance, Mineral Group III hydrocracked oil-based fluid formulated specifically for flute grinding of HSS tools.
TRIM® OE330 NS	30.0	Pale Straw	240	EP	Ester	***		***	***		***	**	***	***	***	**	*	***	Very high lubricity and EP containing ester-based oil for the heaviest duty cutting applications. Proven performer in broaching, gear cutting and honing applications.
TRIM® OE335	35.0	Straw	300	–	Ester	***		***	***		***	**	**	**	**	**		***	Very high lubricity, ester-based product especially suitable for very tough applications such as gear cutting and hobbing. Also for non-cutting metal forming.

*** Excellent ** Good * Suitable

Metalworking Fluids TRIM Master Fluid Solutions™

Master Fluid SOLUTIONS™

TRIM® Neat Oils enhance performance

Whether your precision operation involves gear cutting, hobbing, deep hole drilling, broaching, creepfeed and form grinding, honing, thread rolling, screw machining, superfinishing, other fine machining operations or the heaviest duty cutting applications, there is a TRIM neat oil just right for the job.

Production soars with TRIM OG 108

Looking for improved performance and reduced costs? Not a problem when you work with Master Fluid Solutions metalworking experts. After careful analysis of manufacturing giant MMPP (Moscow Machine-building Production Plant) Salut's machines, operation process and concerns, Master Fluid Solutions recommended a switch to TRIM OG 108.

The highly refined, hydrocracked oil-based OG 108 was the ideal choice for MMPP Salut's steel and carbide grinding of aerospace engine components and associated carbide tooling.

"Low viscosity TRIM OG 108 provides excellent detergency to keep the customer's grinding wheels clean," explains Master Fluid Solutions' representative. "This, together with excellent workpiece cooling, ensures minimal burning throughout the grinding process."

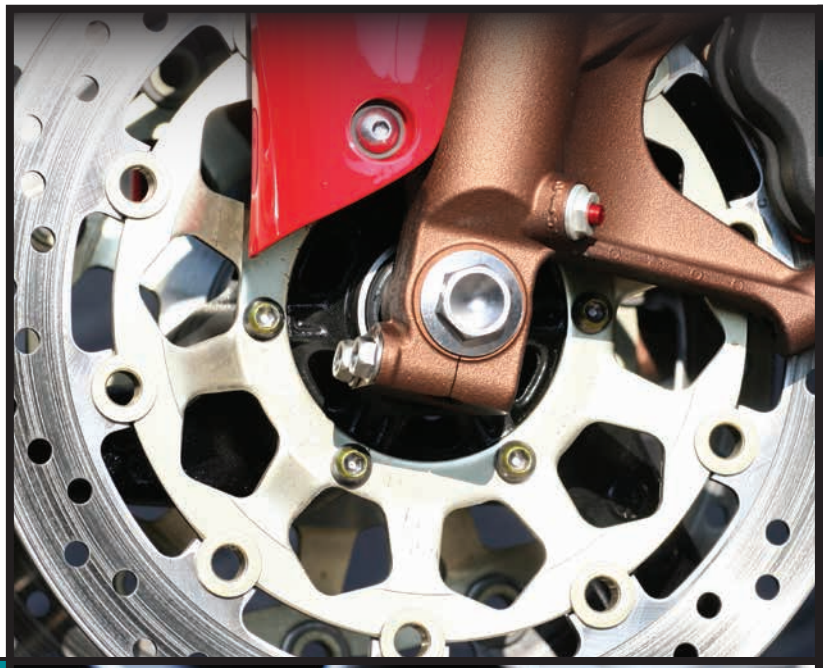
TRIM OG 108 resulted in:

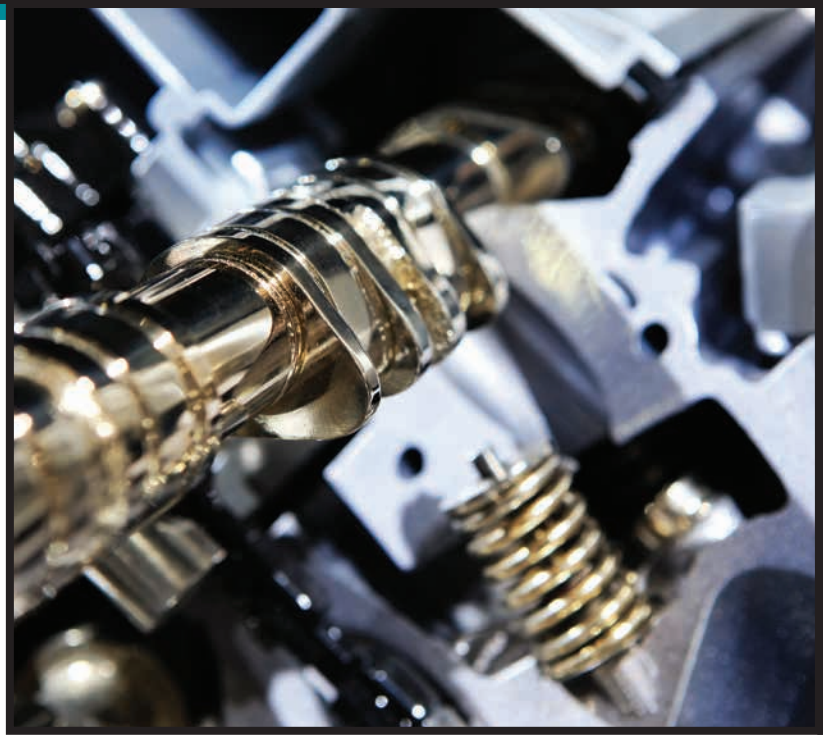
- > less misting
- > reduced costs
- > reduced fluid consumption
- > reduced machine maintenance
- > reduced parts waste
- > optimised parts quality

Overall, running TRIM OG 108 saved MMPP Salut more than 50% of their total production cost.

Contact us

Let us create a detailed, fact-based, customised 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 representative.

Master Fluid SOLUTIONS®

www.masterfluidsolutions.com/eu/en/