



tess-san®

Tess-San Genel Endüstri Maddeleri San. ve Dış Tic. Ltd. Şti.

METAL WORKING FLUIDS



Easy Way of Metal Working

www.tess-san.com.tr

Mineral Based Metal Working Fluids

Universal mineral based metal working fluids which are recommended to be used in the production of mineral oil based, ferrous and non-ferrous materials.

EUROLUB TE 210

EUROLUB TE 210 ES

Semi Synthetic Metal Working Fluids

These fluids are produced with the latest technological formulations and can supply all the needs of the new technology high speed machines. Also they solve the putrefaction problems due to rust and bacteria formation. They are supported by the EP(Extreme Pressure) additives which provide excellent emulsion stability even in the hard waters. They guarantee very high team life and excellent surface roughness in the most challenging operations. At high turnover rates (>6000 rev/min), nonfoaming products provide long store life with specially chosen additives. Besides turning, milling and all cutting and grinding operations, these metal cutting fluids can be used successfully in screwing, broaching and reaming operations at high concentrations.

FORCE K 102

TESS-SAN EUROLUB TE 255

FORCE K 102 TUBE

TESS-SAN EUROLUB TE 280

FORCE K 102 S

TESS-SAN EUROLUB TE 290

COLDEX 58 UCM

TESS-SAN EUROLUB TE 290 UC

COLDEX 2042 CF

COLDEX 2053 AF

Synthetic Metal Working Fluids

These fluids are developed for the applications prominent cooling performance especially grinding performance. They provide a safe working area by being convenient for environment and human health besides the maximum lifetime on the rust and bacteria inhibitors. They are %100 biodegradable.

EUROGRIND A

EUROGRIND ACo

EUROGRIND K 305

FORCE K 102 B

FORCE K 102 DK

Copper Wire Drawing Fluids

Wire drawing fluids are developed for the purpose of drawing the copper and copper-alloys in every size. It keeps clean the benches with the excellent carrying and detergent properties. It provides excellent surface quality by preventing copper surface corrosion with convenient Ph range. Thanks to its special formulations, it provides a clean working area by ensuring maximum emulsion life with high stability.

EURODRAW TE 410

EURODRAW TE 438

EURODRAW TE 418

EURODRAW TE 448

EURODRAW TE 428

Rust and Corrosion Preventives

Preventive oils which are developed for the purpose of preventing corrosion and rusting during stocking, transporting of all kind of iron and steel materials. Various type products can be recommended according to the desired protective film layer, time and easy cleaning properties.

TESS-SAN EUROLUB CP 510

TESS-SAN EUROLUB CP 536 S/75

TESS-SAN EUROLUB CP 575

TESS-SAN EUROLUB CP 520

TESS-SAN EUROLUB CP 536 S/150

TESS-SAN EUROLUB CP 585

TESS-SAN EUROLUB CP 536

TESS-SAN EUROLUB CP 545

TESS-SAN EUROLUB CP 585 D

TESS-SAN EUROLUB CP 536 S/50

TESS-SAN EUROLUB CP 550

Ph Increases and Corrosion Inhibitors

Auxiliary chemicals which are used for preventing of corrosion occurred after the test of impermeability. They increase the corrosion performances of the metal working fluids. They are used for the purpose of breaking of distilled water corrosion tendency.

EUROLUB ANTICOR TE-50

EUROLUB ANTICOR TE-50 D

Blanking Oils

These oils are reinforced with the oxidation preventing additives which provide working for long hours with high performance. They are durable with high pressure and temperature. With the containing corrosion preventing additives they increase the cutting tool life and prevent high temperature hazing and tarnishing problems. They are successfully used in Screwing, Hobbing, Deep Drawing, Broaching, Taper Grinding, Honning And Grinding Operations.

TESS-SAN EUROLUB CX 705

TESS-SAN EUROLUB CX 730

TESS-SAN EUROLUB BR 40

TESS-SAN EUROLUB CX 710

TESS-SAN EUROLUB CX 735

TESS-SAN EUROLUB BR 60

TESS-SAN EUROLUB CX 720

TESS-SAN EUROLUB CX 740

TESS-SAN EUROLUB HON A

TESS-SAN EUROLUB CX 750

TESS-SAN EUROLUB HON A EP

Glass Grinding Fluids & Coolants

Cutting and cooling fluids which are specially developed for the use in glass working industry which is aimed to achieve maximum edge life and excellent quality. Also maximum yield is aimed with the diversified products for straight board cutting and radius cutting operations. They have an easy cleaning property after cutting.

TESS-SAN EUROLUB GC 620
TESS-SAN EUROLUB GC 630
TESS-SAN EUROLUB GC 640

TESS-SAN EUROLUB GC 660
TESS-SAN EUROLUB GC 670
TESS-SAN EUROLUB GC 680
TESS-SAN EUROLUB GC 690

Deep Drawing Oils

While cold formalizing of metal plates, these deep drawing oils make smooth varnishing surfaces by forming an excellent film layer at high temperature and pressure conditions without causing hazing. They are also easy to clean in degreasing baths.

TESS-SAN EUROLUB DD 920
TESS-SAN EUROLUB DD 920 YI
TESS-SAN EUROLUB DD 920 YI/74
TESS-SAN EUROLUB DD 920 YII
TESS-SAN EUROLUB TF 940

TESS-SAN EUROLUB TF 950
TESS-SAN EUROLUB TF 950 D
TESS-SAN EUROLUB DD 970
TESS-SAN EUROLUB DD 980

Forging Oils

These products can give optimum results of the extrusion of the iron materials, stamping operations regarding by the all kind of ferrous and nonferrous materials, cold and hot forging operations. Especially usage of developed graphite free products presents significant advantages on production of aluminum and brass parts. Product interaction is zero and leaves a clean surface.

TESS-SAN EUROLUB FO 1050 G
TESS-SAN EUROLUB FO 1060 WG
TESS-SAN EUROLUB FO 1060 W

TESS-SAN EUROLUB FO 1060 WN
TESS-SAN EUROLUB FO 1070

Die Casting Lubricants

These mould release products which are modified with the special additives for die casting of coloured metals and alloys which have low melting point like aluminum, magnesium, zinc and zamak. Thanks to its special additive containing, these lubricants don't cause a hazing at high temperature and pressure conditions. They prevent surface defects and provide excellent casting surface by easy release of part from the mould. They don't damage the after casting processes(dying and coating).

TESS-SAN EUROLUB ALP 5
TESS-SAN EUROLUB DL 111
TESS-SAN EUROLUB DL 150
TESS-SAN EUROLUB DL165

TESS-SAN EUROLUB DL 170
TESS-SAN EUROLUB DL 190
TESS-SAN EUROLUB DL-PG
TESS-SAN EUROLUB DL-PS

Plastic / Rubber Industry Lubricants

Mould release products which formulised based on the silicon or synthetic oil while die casting process of plastic and rubber materials.

TESS-SAN EUROLUB MR 1830
TESS-SAN EUROLUB MR 1840
TESS-SAN EUROLUB MR 1850

TESS-SAN EUROLUB MR 1870
TESS-SAN EUROLUB MR 1350

Hydraulic System Oils

They show highly efficient performance thanks to oxidation, rust and foam preventive additives. With easy pumping and filtering properties they decrease the manufacturing costs. They can be used in hydraulic systems at very high temperature and pressure by means of their thermal stability.

EUROLUBRIC VG 32
EUROLUBRIC VG 46

EUROLUBRIC VG 68
EUROLUBRIC VG 100

Non-Flammable Hydraulic Fluids

Water and ester based products which provide long oil life and viscosity index and prevent corrosion with high temperature endurance property. They are used for strengthening the extremely dangerous operations which working at very high temperatures such as; mining, coke industry, automotiv industry, die-casting, hydraulic pressing.

COLDEX HFD 46
COLDEX HFC 46

Slideway Oils

They are formulized for the lubrication of slideways at machine tools. Due to the increased adhesiveness they don't drip easy through slideways or bears and they don't elapse from the shafts. They provide high protection against wear and corrosion.

EUROWAY 46

EUROWAY 100

EUROWAY 68

Textile Oils

They are antistatic oils which are developed for the production of wools and synthetic threads. They prevent wears and fractures by reducing frictions to minimum amount. With high fiber cohesion property they gain resistance and dimension to threads. They prevent static charging. They don't let the corrosion and bacteria formations with anticorrosive, antioxidant and antimicrobial additive content.

EUROSOL 100 T

EUROSOL 100 TD

Electro Erosion Fluids

They form an amazing surface quality by balancing the load distribution between the electrode and the workpiece at erosion benches. They provide a safe working area with high flash point. There isn't any ignition or burning risk.

TESS-SAN EUROLUB EDM ER 75

TESS-SAN EUROLUB EDM ER 100

Emulsion Performance Additives

Antifoams: Auxiliary chemical which is used for the purpose of removing the foam that may arise at very soft water and high pressure working areas of metal working emulsions.

Biocide & Disinfectants: Auxiliary chemicals which are used for increasing the metalworking fluids life, cleaning the tank and the system. They are used for removing bacteria, mold, yeast.

Antifoams:

TESS-SAN EUROLUB ANTIFOAM S

Biocide & Disinfectants:

TESS-SAN EUROLUB TE-SD

TESS-SAN EUROLUB TE-B

Biocide & Disinfectants:

TESS-SAN EUROLUB TE-BI

TESS-SAN EUROLUB TE-F

TESS-SAN EUROLUB TE-WR

Industrial Cleaners

These chemicals are used to achieve convenient surfaces before dying or coating operations and cleaning of oil, rust and impurities that may arise during and after metal working processes.

Degreasing Chemicals:

They are used for cleaning of dusts of aluminum, iron and steel surfaces

Rust Removers:

They are developed for the use of removing any kind of rust formation from the surfaces.

Degreasing Chemicals:

EUROLUB CLEANER TE-D

EUROLUB CLEANER TE-DS

TESS-SAN EUROLUB ST 67

TESS-SAN EUROLUB ST 70

EUROLUB CLEANER TE-S

Rust Romovers:

TESS-SAN EUROLUB RR 850

TESS-SAN EUROLUB RR 860

TESS-SAN EUROLUB RR 870

Emulsion Control Equipments

Equipments which are used to control of the necessary values to provide a proper working area so as to prolong the life of used emulsion and produce convenient parts. By rutin basic controls, hard-to-solve problems that may arise in the future is aimed to remove.

PH meter, PH paper

Conductivity meter

Water Hardness Kit

Refractometer

Dosage Pump

Bacteria Test Kit

CNC Bench Filter Paper

Metal Working Fluids
 Water soluble metal working fluids which are produced with the new technological formulations; are developed so as to keep the CUTTING EDGE and TOOL LIFE at maximum by providing optimum lubrication and cooling during. They give the excellent results by forming long lasting emulsions even in the most difficult operations thanks to containing EP ADDITIVES and BIOCIDES suitable with the emulsion. They prevent the problems like odor, corrosion, adhesion and accumulation etc. They resolve the factors that cause the skin irritation thanks to its ph balance and long life. Possible problems that may arise at the Al, Cu, brass and casting materials are removed in TESS-SAN products by developed formulations considering processing metal parts.



Usage Areas:
 Turning, Milling, Drilling, Screwing, Hobbing, Sawing, Broaching, Reaming, Grinding, Tube Milling



Metal Working Fluids Application Guide

OPERATION	Synthetic Eurogrind Serie	Ep Synthetic TE 300 Serie	Ep Semi Synthetic TE 200 Serie	Ep Mineral TE 210 Serisi	Cutting Oils CX 700 Serie
Surface Grinding	○	○	○		
Cylindrical Grinding		○	○		
Centerless Grinding	○	○	○		
Lathe / Router		○	○	○	
Cutting			○	○	○
Reaming/ Tapping			○	○	○
Deep Drilling			○	○	○
Broaching					○
Hobbing			○	○	○
Screwing			○	○	○
Automat Benches			○		○
Fellow Benches					○
Tube Drawing		○	○	○	○
MATERIAL					
Carbon Steel	○	○	○	○	○
Stainless Steel	○	○	○	○	○
Tool Steel	○	○	○	○	○
Casting	○	○	○	○	
Copper Alloy			○	○	
Aluminum Alloy			○	○	○
PROCESS WEIGHT					
Light	○	○	○	○	
Mid Heavy		○	○	○	○

This table is prepared for informing. Please contact us for the right choice depending on the operating conditions and used materials
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- 1st Choice
- 2nd Choice



DECREASE OF TIP LIFE	Insufficient concentration	Arrange the concentration by adding needed product.
	Contamination	Find and remove the contaminated substance which may cause the decrease in tool life. These substances could be excessive leak oil, surface cleaning agent/ detergent etc.
	Quality of water	If the hardness of water is less than 200 ppm(11 A.S), that may cause the emulsion instability and decrease in tool life.
	Stability problem in emulsion	It may cause the decrease in tool life because lubrication may decrease. Look for the solution 'stability problem in emulsion'
	Use of wrong tool or proses parameters in operation	Make sure using the right tool.
	Change of materials	Control the used material
CORROSION	Insufficient concentration	Arrange the concentration by adding needed product.
	Bad water quality, water corrosion	Use better quality water
	High Temperature / Moisture	Reduce temperature and moisture, use preventive oil.
	Contamination	Find and remove the contaminated substance. These substances could be heat treatment chemical, surface cleaning agent/ detergent etc.
	Corrosive atmosphere	Determine the corrosive smoke and ventilate
	Usage / Storage	Use clean, plastic brackets when the parts are drying. Use preventive oil in long term storages.
FOAM	Insufficient or excessive concentration	Arrange the concentration by adding needed product.
	Contamination	Find and remove the contaminated substance. These substances could be cleaning agent/ detergent etc.
	Water quality	Usage of softened water(if hardness of water lower than 100 ppm) may cause the foam in some metal working fluids.
	Operation type	Some operations for example surface grinding, may cause the foam formation. During selection of metal working fluid, operation should be considered.
	Low level of metal working fluid	Fill the tank/reservoir till observe a distance enough to allow air outlet.
	Mechanical problems	Check the filtration system, liquid distribution/flow or feedback system.