ESG CARBON NEUTRAL

"Beyond Excellent Lubrication Management"

Lubrication Plus SOLGE | Lubrication Plus QUMENSUS Branded by SOLGE | Lubrication Plus EP LUBDRACO

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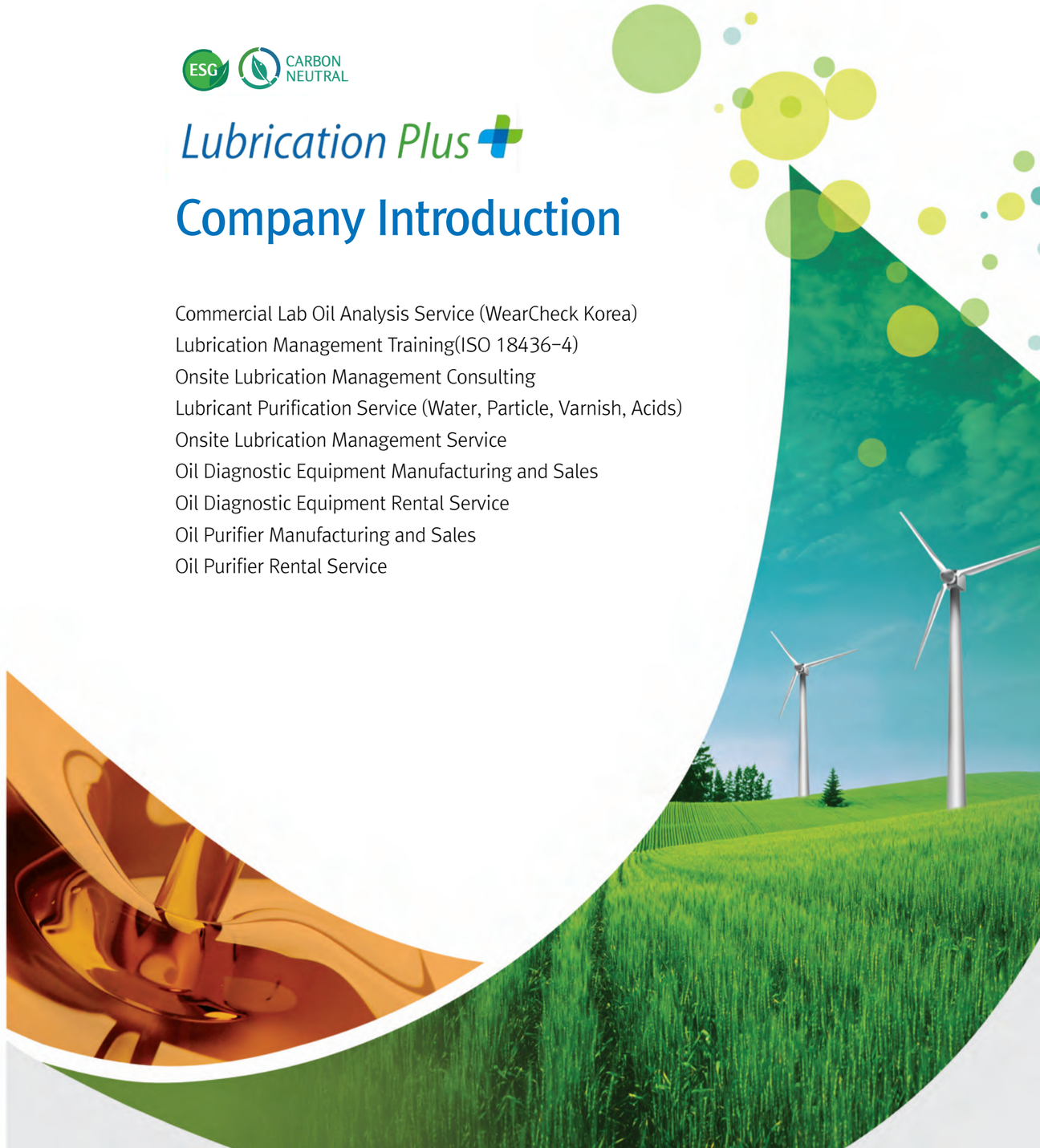
ESG CARBON NEUTRAL

Lubrication Plus

Company Introduction

Commercial Lab Oil Analysis Service (WearCheck Korea)
Lubrication Management Training(ISO 18436-4)
Onsite Lubrication Management Consulting
Lubricant Purification Service (Water, Particle, Varnish, Acids)
Onsite Lubrication Management Service
Oil Diagnostic Equipment Manufacturing and Sales
Oil Diagnostic Equipment Rental Service
Oil Purifier Manufacturing and Sales
Oil Purifier Rental Service



ESG CARBON NEUTRAL Lubrication Plus





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R&D Center | 10-4 Secheonbuk-ro 8 gil, Dasa eup, Dalseong gun, Daegu

SOGLE CORPORATION

CEO Tae Heon Kim
Foundation July 1999
Location Daegu, Korea

CERTIFICATIONS

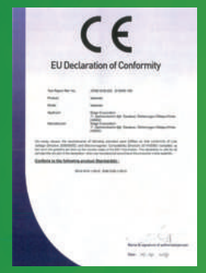
Certification Research & Development Center Certification
ISO9001: 2015 Quality Management
CE (FMS Sensor, VARTECTOR, TOMs, Oil-Mon Senor)
Patents 3 patents for overseas, 16 patents for domestic
Training ISO 18436 - 4 : Deliver ISO Compliant Lube Training



FMS_1 CE Certificate



TOMs-F CE Certificate



Vartector CE Certificate



Oil-Mon Senor CE Certificate



Watector USA Patent



SMS CE Certificate



FMA CE Certificate



FMS_2 CE Certificate



Inventory developed Technology Certificate from Korea Government



EZ-SAM FCC Certificate

Commercial Lab Services, Consulting & Training Services

Oil Analysis / Diagnosis Service

The SOLGE Oil Analysis Laboratory provides specialized oil analysis to customers as a member of global oil analysis laboratory group Wearcheck. Oil analysis service is essential tool in management programs to identity for the roots causes.

Oil Property	Kinematic Viscosity @40℃/@100℃ Electrical Resistance Acid Number (Color/Potentiometry) Base Number(Potentiometry)	Flash Point(COC/PMCC) Pour Point RULER Specific Gravity	Foamability (Seq. Ⅰ)/(Ⅰ, Ⅱ, Ⅲ) Oil Separation Air Release FT-IR
Contamination	Particle Count Flash Point Soot Index	Sulfur (XRF) Moisture (KF)/(RH) MPC(insoluble) + iMPC(soluble)	MPC(Phosphate Ester Fluids) Chlorine
Wear	PQ: Particle Quantifier	Element Analysis (19 Elements)	Patch Test

Lubricant Academy & Consulting

Since 1999, we have been providing training and consulting to industries while performing lubrication management business.
* Training Courses

	Course	International Standard	Testing & Certificate
NORIA	MLA I,II,III MLT I,II	ISO18436-4 N/A	ICML
KCIMD	Tribology I,II	ISO18436-4	KCIMD
SOLGE	Total Cleanliness Control	ISO16232	N/A

* **KCIMD** : Korea Certification Institute for Machine Diagnostics
* **ICML** : International Council for Machinery Lubrication

* Consulting
Our experts with more than 20 years of experience are providing successful consulting using our various oil analysis & diagnostic equipment.

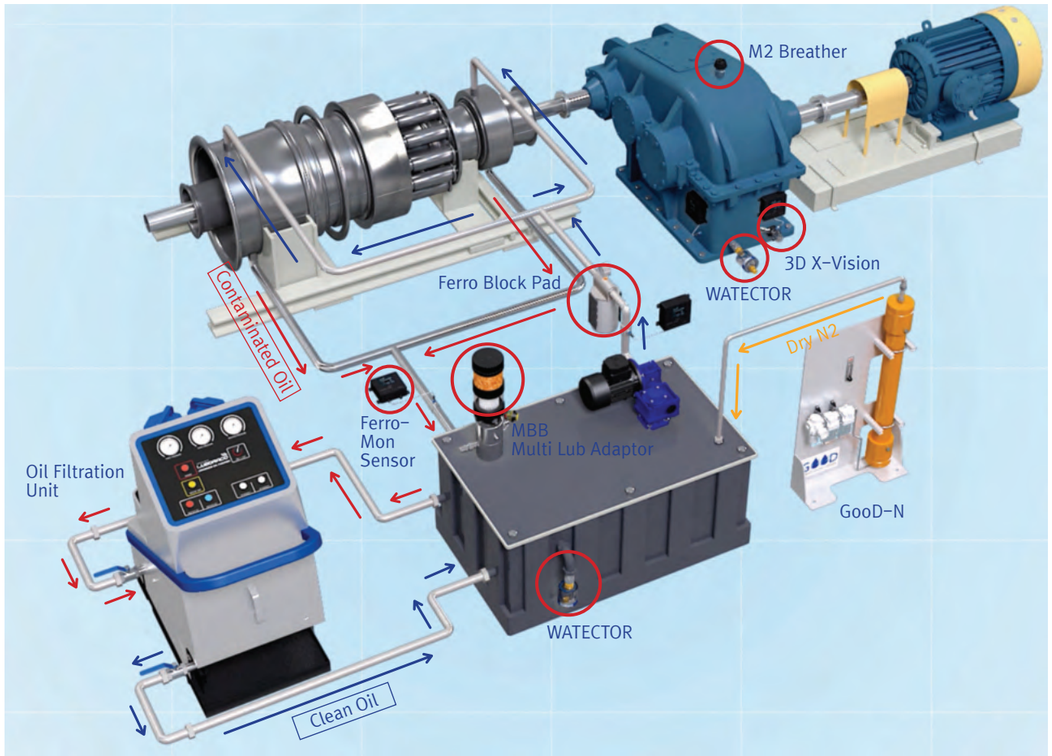
- Diagnosis and improvement of lubrication and hydraulic system
- Diagnosis and improvement of oil and fuel filters
- Consultation to establish a suitable lubrication management system or optimal oil analysis labs
- Optimal management of cleanliness of components
- Total Contamination Control
- Construction of Condition Monitoring System (Oil, AE)
- Lubrication management manual for power station and general industry
- Audit for lubrication management

Other Services

- Lubrication management consignment business
- Lubricating oil purification service
- Lubricant purifier and diagnostic equipment Rental service

| Detect |

Installation Position of Reservoir Accessory Series



BUSINESS	
Detect	Oil analysis equipment, Online sensor, Oil condition monitoring devices, Diagnostic equipment (AE, iron sensor), 3-dimensional oil level gauge, Sight glass for water
Remove	Filters, Purifiers, LMI (lubrication management tools/equipment)
Protect	Air Breather, Nitrogen Purging System
Service	Used oil analysis and diagnosis, Lubrication management consulting, Lubrication management technical training

VARTECTOR

MPC Tester according to ASTM D7843

Innovative Products



- National R&D Products
- The world's only MPC tester fully conforming to ASTM D 7843 standard
- Patented

Ferro-Mon Sensor(with control box)

Ferrous Wear Online Monitoring Sensor with Control Box & Display

Innovative Products



- National R&D products
- Patented
- Detect Ferrous debris for Wear or Severe Wear status

Integrated Ferro-Mon Sensor

Ferrous Wear Online Monitoring Sensor without Control Box & Display



- All-in-one type with probe and control board mounted on one sensor
- Detect ferrous debris for normal wear and severe wear status

Oil-Mon Sensor

Multi Parameter On-line Oil Condition Monitor Sensor



- Contamination / Oxidation / Moisture / Temperature in one sensor module
- Patented

WATECTOR

Dual Sight Glass



- Visual check of water ingress in the oil tanks or storage tanks
- Patented

3D X-Vision

3-Dimensional Oil Level Gauge



- High visibility from various angles
- Patented
- World's first dual glass type

FAC Viscometer

Portable Viscosity Precision Measuring Equipment



- Quick Check and Convenient

Parvision-Pro

Multifunctional Contamination Level Analyzer



Contamination / Moisture
Oil Life/ Particle Shape & Diagnosis
/ Particle / Measurement

QUMENSUS AN Test Kit

Optimal solution for lubricating oil acid value measurement



* Components
  - QM-AN-TS (Titration solvent) 500ML
  - QM-AN-BTT (Bulk Tirant) 250ML
  - Tirant Drops (30ML)
  - Stirring scale bottle
  - Dispensing lid
* Measuring range : 0 ~ 3 AN(mgKOH/g)
* Measurement resolution (minimum measurement unit) : 0.006mgKOH/g

| Detect |

SEW Online Moisture Sensor

High-resolution online moisture sensor for EHC oil



- Range : 0-4,000 pp(Adjustable)
- Resolution : 1ppm

Oil Condition Sensor

Oil quality & condition monitoring with dielectric property

New Product



- On-line real-time monitoring of critical oil parameters in the industry and marine applications through the dielectric property.
- Oil Remaining Useful Life(RUL) diagnosis

RH% Moisture in Oil Sensor

Water in oil monitoring by relative humidity(RH%)

New Product



- On-line moisture sensor that allows for continuous monitoring of relative humidity in hydraulic and lubricating fluid circuits.
- Range : 0-100 RH%

Acquisition Data Program

Total Oil Monitoring Program



- Monitoring Program for SOLGE Oil Sensors
- Store and display the data in the acquisition program

Data Acquisition Center

Portable Sensor Display



- Portable Hand-Held type Device
- Check the data on the monitoring screen by connecting various sensors
- Graphs, statistics and quantitative data figures for overall diagnosis

TOMS(Total Oil Monitoring System) – Monitoring device Stand type

Sensor Monitoring Solution for optimum health in standing device



- Standing type Monitoring Device.
- Monitoring system for 7/24hr installed next to lubrication reservoir

TOMS(Total Oil Monitoring System) – Monitoring device at OFU

Sensor Monitor Solution for optimum health in oil purifier unit



- Purifier with monitoring system

TOMS(Total Oil Monitoring System) – Lube and Hydraulic oil Real-time monitoring system

Sensor Monitor Solution for optimum health in oil purifier unit



- Monitoring system for Lube system and Hydraulic system
- Store and display the data in the acquisition device

EZ-SAM

Motorized Sampling Hand Pump



New Product

Motorized type / Compact handy pump / Lubricating oil, fuel oil sampling pump

VARTECTOR MPC Tester conforming to ASTM D7843-21 (the world's first product developed)

Innovative Products



[Outline]
- VARTECTOR diagnoses the risk of varnish or soot formation with the CIE Δ E and Δ a+b value in ASTM D7843-21, for the potential risk of varnish or soot in turbine oil and control oil
- The potential danger of varnish in turbine oil warns that problems such as vibration and temperature rise of turbine spindle bearings, filter clogging, poor temperature control, and degradation of turbine oil may occur

[Benefits]
- Varnish mineral based turbine oil and Soot of phosphate ester based control oil can be identified by measuring Δ E, ΔL and Δa+b
- VARTECTOR fully complies with ASTM D7843-21 for both mineral based turbine oil and phosphate ester based control oil

Ferro-Mon Sensor(with control box) Ferrous Wear Online Monitoring Sensor with Control Box & Display

Innovative Products



[Outline]
- Ferro-Mon Sensor generates magnetic flux when magnetic particles(typically Fe, Ni, etc.) are collected in the sensor probe This sensor detects and evaluates the abnormal wear state of the rotating machine by outputting the amount of magnetic material as "Fe saturation %" value in real time
- It has 2 output channels(fine debris, large debris) so that normal wear and abnormal wear can be detected separately
- Real-time monitoring of iron content(concentration %)
- Easy installation

[Benefits]
- Ferro-Mon Sensor can be applied to all equipment. Particularly, when applied to gearbox, engine, transmission, pump, bearing, etc., which are vulnerable to wear, user can get the best effect

Integrated Ferro-Mon Sensor Ferrous Wear Online Monitoring Sensor without Control Box & Display



[Outline]
- Ferro-Mon Sensor generates magnetic flux when magnetic particles(typically Fe, Ni, etc.) are collected in the sensor probe This sensor detects and evaluates the abnormal wear state of the rotating machine by outputting the amount of magnetic material as "Fe saturation %" value in real-time
- It has 2 output channels(fine particles, large particles) so that normal wear and abnormal wear can be detected separately
- Real-time monitoring of iron content(concentration %)
- Easy installation
- All-in-one type with probe and control board mounted on one sensor.

[Benefits]
- Ferro-Mon Sensor can be applied to all equipment. Particularly, when applied to gearbox, engine, transmission, pump, bearing, etc., which are vulnerable to wear, user can get the best effect

| Detect |

Oil-Mon Sensor Measuring contamination / oxidation / moisture / temperature with one sensor



[Outline]
- The Oil-Mon Sensor is an RGB light sensor. It digitizes the color of lubricating oil in RGB values and the four states such as particle contamination, oxidation, temperature, and moisture through light attenuation and scattering, so that the user can easily monitor the color of the oil through the monitor while the system is running
- Multi-parameters measurement with one sensor(4 parameters)
- Real-time data transmission by connecting to PC
- Hydraulic HPU, Wind Power Generator, Gearbox, Transmission, Mobile (Vehicle), and Other Lubrication Equipment

[Benefits]
- Reduce maintenance cost
- Reduce the cost of changing lube oil
- Easy to determine the life of lube oil
- Improves equipment reliability and extends equipment lifespan

WATECTOR Dual Sight Glass Monitoring Water Ingress in the Tank or Reservoir



[Outline]
- Can visually check degradation status of used oil
- Can visually check ferrous wear particles by built-in magnetic rod
- Suitable for condition management by visually identifying amount of free water ingress
- Prevent oil leakage by dual protection chamber even in case of breakage caused by frozen water during winter season

[Application]
- Gearbox, Pump
- Oil Reservoir
- Oil Tank
- Cooler

[Benefits]
- Rapid visual detection of water ingress and discharge of water thru drain valve
- Prevention of equipment failure. Life extension of equipment and lube oil
- Easy management through visual check

3D X-Vision 3-Dimensional Oil Level Gauge



[Outline]
- Multi-function port provides sampling port. Built-in magnetic rod collects ferrous wear particles
- Minimize the possibility of leakage in case of damage by adopting double transparent chamber
- Increased safety by applying chemical-resistant and impact-resistant materials
- Hydraulic tank
- Gearbox
- Pumps
- Lubrication Equipment on the oil level check point

[Benefits]
- Prevention of equipment failure. Life extension of equipment and lube oil
- Hight visibility from various angles

FAC Viscometer Portable Viscosity Precision Measuring Equipment



[Outline]
- SH-FAC02 is a portable and high-speed kinematic viscometer integrated with an automatic cleaning system, developed to quickly and easily measure the kinematic viscosity of transparent and opaque Newtonian fluids(including new and used oils) at various sites and at various ambient temperatures
- Automatic cleaning system: It is automatically cleaned when the cleaning liquid is injected
- Rapid measurement without any restrictions on location: Measurement can be performed anytime, anywhere, and results are usually produced within 1 minute
- Long battery life : Lithium batteries
- Standard : ASTM D7279, D445
- Measurement range : 2 ~ 2000 ㎟/s(cSt)
- Accuracy : ≤1%
- Repeatability : ≤1%

Parvision-Pro Multifunctional Contamination Level Analyzer



Contamination / Moisture / Oil Life / Particle Shape & Diagnosis / Particle Measurement

[Function and Features]
- Check and save the measurement data in real time with PC and screen
- The graphic realization of the data and the real picture of the particles are displayed on the screen
- Easy to diagnose immediately on the spot
- Since the pump is built-in, it is possible to measure by connecting it to a reservoir (tank) in the laboratory or field
- Measure by connecting it to a pipe which has internal pressure
- Hard case and built-in rechargeable battery make it easy to move and measure in the field
- Hydraulic HPU, Bearing ,Transmission, Mobile Equipment (for vehicle), Gearbox, Wind Turbine, Pump, Diesel Fuel, Compressor, Diesel Engine, Other Lubrication Equipment

[Benefits]
- Reduction of maintenance cost and lube oil changing cost
- Economical lab by measuring and analyze multiple parameters with one device
- Determine lifespan of lubricants to prevent varnish problems and to replace lubricants economically
- Diagnosis of wear type makes it easy to establish countermeasures for wear problem
- Improving equipment reliability and extending equipment life by preventing catastrophic failure through immediate diagnosis of contamination

QUMENSUS AN Test Kit Optimal solution for lubricating oil acid value measurement



[Components]
- QM-AN-TS (Titration solvent) 500ML
- QM-AN-BTT (Bulk Tirant) 250ML
- Tirant Drops (30ML)
- Stirring scale bottle
- dispensing lid
- Measuring range : 0 ~ 3 AN (mgKOH/g)* Measurement resolution (minimum measurement unit) : 0.006mgKOH/g

[Benefits]
- The most economical way to test acid value (no need to purchase equipment)
- Rapid acid value measurement within 1 minute
- Reagents are packaged, so it is convenient to use. (Safe because it does not use toluene)
- It is a certified test method based on ASTM D974 and is very accurate (Accuracy: ±0.01AN, when using a micropipette)

| Detect |

SEW Online Moisture Sensor High-resolution online moisture sensor for P.E EHC Oil



[Outline]
- The first cause of degradation of EHC oil(phosphate ester) is hydrolysis due to water contamination, which generates acid and alcohol. Therefore, constant monitoring and prompt removal of moisture in EHC Oil are essential when reaches above TAN 0.2

[Benefit]
- Accurate moisture content measurement with temperature compensation
- The only on-line sensor that measures the moisture content of the existing phosphate ester control oil in terms of absolute moisture(ppm) rather than relative(RH%) values
- The SEW sensor is a moisture sensor for phosphate ester-based control oil
- It is installed in the EHC system and monitors the water contamination status of the control oil in real time.
- This sensor is supplied calibrated to be compatible with ASTM D4928, D1533, D6304 Karl Fischer Moisture Meter
- Measuring range : 0 - 6,000ppm(may vary depending on operating temperature and type of control oil)
- For the Karl Fischer Moisture Meter, consumables such as Karl Fischer reagent should be replaced periodically, but the SEW Sensor does not have any consumables during the period of use

Oil Condition Sensor Oil quality & condition monitoring with dielectric property

New Product



On-line real-time monitoring of critical oil parameters in the industry and marine applications through the dielectric property.

[Outline]
Contaminants such as oxidation products, water and glycols change the dielectric properties of oils. The more contaminated the oil, the higher the permittivity, and the change in permittivity that varies depending on the degree of deterioration of the oil is measured and displayed

[Feature]
- Measuring range : 1 to 7 steps
- RS 485 and CAN (J1939) output
- Analog output (4 ~ 20mA)
- Operating power : 12~28V
- Operating temperature : -20 to +80˚C

RH% Moisture in Oil Sensor Sensor Water in oil monitoring by relative humidity(RH)

New Product



On-line moisture sensor that allows for continuous monitoring of relative humidity in hydraulic and lubricating oils circuits.

[Outline]
By measuring the capacitance contained in the oil using the principle that the capacitance changes according to the molecular weight of water adsorbed to the polymer material, the moisture in the oil is expressed as relative humidity (RH%)

[Feature]
Measuring range : 0 to 100% RH% displayed
RS 485 and CAN (J1939) output
Operating power : 12~28V

Measuring range: 0 to 100% displayed
Analog output (4 ~ 20mA)
Operating temperature: -20 to +80˚C

Acquisition Data Display Monitoring Program Total Oil Monitoring Program



To monitor your lubricant oil with optimum health

[Outline]
It has convenient features for users to monitor oil condition from new oil to In-service oil status by displaying monitoring programs. The program can link with more than 12 sensors per oil parameters.

[Benefit]
Acquisition Data Display can hook up with Ferro mon sensor, Oil Mon sensor, Particle counter, Moisture sensor, Tan Delta sensor, Viscosity sensor, and more.

Data Acquisition Center Portable Sensor Display



Lubricant Condition Integrated Monitoring and Diagnosis Device

[Outline]
- This device can check the data on the monitoring screen by connecting various measurement sensors
- Compact, light and easy to carry
- Graphs, statistics, and quantitative data figures for overall diagnosis are displayed
- It can be applied to equipment that require early detection of lubricant contamination and abnormal failures

[Feature]
- Can monitor by connecting various measuring sensors
- Graphs and statistics, quantitative data figures are displayed
- Integrated diagnosis of lubricating oil condition
- Compact with light weight, easy to carry
- Max 4 sensors can be connected and monitored

TOMS(Total Oil Monitoring System) Monitoring device Stand type



Sensor Monitoring Solution for optimum health in standing device

[Outline]
This Model is a stand type of system capable of monitoring 7/24 lubrication by sampling from the bypass line by being fixedly installed next to the lubrication reservoir.

[Benefits]
- Online Sensor Monitoring Solution All kinds of Parameters.
- It can be provided to protect your lubricant oil for optimum health

| Detect |

TOMS(Total Oil Monitoring System) With monitoring device at OFU



Sensor Monitor Solution for optimum health in oil purifier unit

[Function and Features]

- In addition to the basic particle removal function, it can remove water by adopting a water band filter, and also can remove even degraded by-products like varnish/ sludge/acid by installing a varnish removal filter
- Flexible selection of removal target (Particles/Moisture/Degraded by-products)

[Benefits]

Online Sensor Monitoring Solution All kinds of Parameters. It can be provided to protect your lubricant oil for optimum health

TOMS(Total Oil Monitoring System) Lube and Hydraulic oil Real-time monitoring system



Lube and Hydraulic oil Real-time monitoring system

[Outline]

- This equipment is a system for effectively managing hydraulic oil.
- It can monitor the condition of oil or equipment abnormality in real-time while operating the hydraulic oil.
- It is built so that it can be stored and re-processed.
- It consists of 6 types of sensors, a transfer pump, a storage tank that stores oil, a filter unit, a monitor unit that displays data, and structures such as a frame.

EZ-SAM (Motorized Sampling Hand Pump) The World's First Motorized Handy Type Pump



[Function and Features]

- Oil collection into the sample bottle by integrated vacuum pump driven by electric motor
- Convenient and easy sampling compared to manual type
- Robust. One-handed grip, one-touch operating switch
- Adopted clamping spec for clean vacuum standard sample bottles
- Sampling speed can be adjusted by integrated speed control valve
- Samples can be collected without external contamination
- Stable carriage with shoulder strap (Optional)
- Replaceable battery

[Specification]

- Viscosity : 320cst
- Flow rate : 1 lpm

| Remove |

Lubrication Plus LUBDRACO

TOMs-F

Total Purification System

Excellent Product



Removal of Sludge / Varnish / Acid / Particle / Moisture + Real-time Monitoring

- 100 users reference for Korean Powerplant
- Patented

Ex-Dri

High-efficiency Water Removal Purifier

Innovative Products



Type	Wate	Particle	Vamish/Acid	Bulk Moisture
Type1	○	○		
Type2	○	○		○
Type3	○	○	○	

OFU

Portable Oil Filtration Unit



Selective Removal of Particles / Moisture / Sludge / Varnish/Acid

Type	Wate	Particle	Varnish/Acid	Bulk Moisture
Type1		○		
Type2	○	○		
Type3	○	○	○	

Electrostatic OFU

Electrostatic Oil Filtration Unit



- Removing Fine Particles and Degradation by-products by Electrostatic Method
- Patent pending

Ferro Block Pad

Magnetic Pad



Attached to the Spin-On Filter Housing

Handy Type Filtration Unit

New Product



The hand-held type filtration unit is easy and friendly to use in any condition to transfer or clean high-viscosity mineral oil to Lubricant oil.

| Remove |

TOMs-F Total Purification System

Excellent Product



Removal of Sludge / Varnish / Acid / Particles / Moisture + Real-time Monitoring

[Function and Features]
- Removal of particles, moisture and degradation by-products(varnish, sludge, acid) by ONE Purifier
- Monitoring of contamination, moisture, color, life span of oil(Optional)
- Unlike existing varnish removal purifiers removing only solid varnish, TOMs-F can remove soluble varnish and acid(The only Purifier in the world)
- Suitable for mineral-based turbine oil/compressor oil, and phosphate ester-based control oil
- Supplied for turbines, compressors, blowers, hydraulic equipment, etc. in domestic and overseas industrial sites
- Power plant, Petrochemical, Refinery, Paper, Cement, and Industries operating rotating machinery

[Benefits]
- Extend lifespan of lube oil and control oil. Prevent varnish formation, bearing temperature rise, malfunction and wear of control valve, and early filter clogging

Ex-Dri High Performance Disc Type Dehydration Purifier

Innovative Products



Selective Removal of Water / Particles / Sludge / Varnish / Acid

[Function and Features]
- High performance dehydration purifier by rotating disk dry with nitrogen purging method
- Remove free and dissolved water. High efficiency even for high viscosity oil upto 460 cSt
- In addition to the basic function of removing water and particles, it can remove degraded by-products(varnish / sludge / acid) by installing VR filter
- Ex-Dri adopted differentiated technology which does not destroy oil properties without depletion of additives, which is a strength against conventional vacuum purifier
- Safety and ergonomic design
- Mineral and synthetic based all lube oils
- Power plant, Petrochemical, Refinery, Steel, Paper, Cement, Military,..etc.

[Benefits]
- Prevention of equipment failure and extension of equipment and lube oil
- Prevention of varnish formation, bearing temperature rise, control valve malfunction, wear, and early filter clogging,.. etc.

OFU Portable Oil Filtration Unit



Selective Removal of Particles / Moisture / Sludge / Varnish/Acid

[Function and Features]
- In addition to the basic particle removal function, it can remove water by adopting a water band filter, and also can remove even degraded by-products like varnish / sludge / acid by installing Varnish removal filter
- Flexible selection of removal target(Particles/Moisture/Degraded by-products)
- Equipment using all mineral based oil and synthetic oil
- Power Plant, Petrochemical, Refinery, Steel Mill, Paper, Cement, Military, and others

[Benefits]
- Prevent equipment failure and extend life of equipment and lube oil
- Effects such as prevention of varnish formation, bearing temperature rise, control valve malfunction and wear, and early filter clogging, etc.

Electrostatic OFU Electrostatic Oil Filtration Unit



[Function and Features]
- Effective removal of sub-micron particles (Hard & Degradation by-products) by electrostatic method
- It removes a large number of particles even though it is a small volume of circular collectors
- It is very easy to replace the consumable collectors

[Benefits]
- Effective & economical removal of sub-micron particles
- Easy to Maintain & Operating the Unit

Ferro Block Pad Magnetic Pad



Attached to the Outside of the Spin-On Filter Housing

[Function and Features]
- Remove fine particles(ferrous wear particles) with below 1㎛
- Remove non-ferrous metal particles
- Extend life of spin-on filter element
- Extend life of lube oil and additives
- Permanent use
- Reduce equipment wear and prevent failure of hydraulic system
- Lubrication / Hydraulic filter housing
- All spin-on filters for vehicles and stationary equipment

[Benefits]
- Prevention of equipment failure, life extension of equipment and lube oil
- Extension of line filter life

Handy Type Filtration Unit

New Product



The hand-held type filtration unit is easy and friendly to use in any condition to transfer or clean high-viscosity mineral oil to lubricant oil.

[Outline]
It has convenient features for users to clean from new oil to in service oil to remove contamination. The hand- held type filtration unit is possible to clean from high viscosity to low viscosity of Industrial oil

[Feature]
Weight: Light weight less than 10kg
Filtration Rating: Beta 1,000 Various micron size filters available
Flow Rate: Max up to 15L/min
Viscosity : Up to 320 cSt

| Protect |

Medium Breather MBB(Magic Block Breather)

Module Replacement Type Particle and Moisture Air Breather

Innovative Products



- Individual mounting and replacement of particle removal module and water removal module
- Maximize lifespan of the desiccant by built-in check valve
- Oil mist elimination adaptor available

Small & Medium Breather M³ Air Breather

Multi-functional Particle / Moisture Removal Air Breather

Innovative Products



- Remove moisture and prevent moisture ingress from the air
- Small and medium-sized equipment such as lubrication/hydraulic tanks, gearbox, pumps, bearing housings, and other reservoirs
- Prevent moisture contamination of lube oil/hydraulic oil and prevent ingress of external contaminants

Small Breather M² Air Breather

Mini Air Breather with 1㎛ Filter to Remove Fine Particles



- Applied micron filter to collect 1 micron or larger particles
- Prevent moisture ingress in outdoor equipment
- For small-sized reservoir, pumps

GOOD-N

Dry Nitrogen Purging Unit



Removing moisture from the lubrication system and blocking ingress of external contaminants

Oil Mist Adaptor

Adapter for Oil Mist Removal



Coupled with Air Breather

Multi-Lub Adapter Kit

Multi-Purpose Adapter



For Air Breather, Sampling Port, Oil Purifier Port,.. etc.
- Patented

LUBE PLUS

Electromechanical Automatic Lubricator



Geared motor drive / Grease pouch / Battery pack

Medium Sized Breather MBB(Magic Block Breather) Module Replacement Type Particle and Moisture Air Breather

Innovative Products



[Function and Features]
- Individual mounting and replacement of particle removal module and water removal module
- Remove fine dust particles and prevent ingress of external contaminants
- Remove moisture and prevent moisture ingress from the air(Silica gel applied)
- Built-in check valve to extend life of the moisture module with one-way airflow
- Length of the moisture removal housing can be selected
- Easy to check particle filter life by built-in differential pressure indicator(Optional)
- Can visually check replacement time by desiccant color(Orange → Violet)
- Non-hazardous silica gel is applied
- Large and medium-sized equipment such as lubrication/hydraulic tanks, gearbox, pumps, bearing housings, and other reservoirs
- Power plant, Petrochemical, Refinery, Steel, Paper, Cement, Military and others

[Benefits]
- Easy to check visually replacement time by desiccant color
- Prevent equipment failure and extend life of the equipment and lube oil as well
- Prevent moisture contamination of lube oil/hydraulic oil and prevent ingress of external contaminants

Small & Medium Sized Breather M³ Air Breather Multi-functional / Micron / Moisture Air Breather

Innovative Products



[Function and Features]
- Remove fine dust particles and prevent ingress of external contaminants
- Remove moisture and prevent moisture ingress from the air(Silica gel applied)
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[Benefits]
- Easy to check visually replacement time by desiccant color
- Prevent equipment failure and extend life of the equipment and lube oil as well
- Prevent moisture contamination of lube oil/hydraulic oil and prevent ingress of external contaminants

| Protect |

Small Sized Breather
M^2 Air Breather Mini Air Breather with 1㎛ Filter to Remove Fine Particles



[Function and Features]
- Applied micron filter to collect 1 micron or larger particles
- As it is sealed by O-ring, no additional sealant is required
- Robust and corrosion-resistant material
- Prevent moisture ingress in outdoor equipment or equipment exposed to water and water spray environments by adopting hydrophobic filter media
- Prevent oil mist generation, environmental pollution and oil loss by adopting fine filter
- Pump, Gearbox
- Small sized reservoir
- Recommend to switch over vent plug with M2 Breather

[Benefits]
- Prevent equipment failure and extend life of equipment and lube oil
- Prevent moisture contamination of lube oil and ingress of external contaminated particles

GooD-N Dry Nitrogen Purging Unit

Removing moisture from the lubrication system and blocking ingress of external contaminants



[Function and Features]
- A unit that generates super-dry nitrogen(max. dew point -60℃ or below) by connecting utility(compressed) air from the site
- Prevents condensation by continuously injecting dry nitrogen into reservoir or tank, prevents ingress of external contaminants through air and removes moisture in lubricating oil
- Prevents oxidation of oil with air(oxygen) by supplying nitrogen
- Lubrication / Hydraulic tanks, Reducers, Bearing Housings, Oil Storage Tanks, and other reservoirs
- Power plant, Petrochemical, Refinery, Steel, Paper, Cement, Military and others
- Especially recommend for cooling tower reducers, steam turbine bearings, wind turbines, and EHC units that are exposed to high moisture

[Benefits]
- Prevention of equipment failure. Life extension of equipment and lube oil
- Prevention of moisture contamination of lubricating oil, and ingress of contaminated particles

Oil Mist Adaptor Adapter for Oil Mist Removal

Coupled with Air Breather



[Function and Features]
- Collects oil mist and returns it back into the tank
- Robust metal product
- Easy to install and remove
- lubrication / Hydraulic Tank, gearbox, Bearing, Storage Tank, Reservoir
- Equipment generating oil mist

[Benefits]
- Can remove small amount of oil mist
- Prevention of oil level decrease due to mist generation

Multi-Lub Adapter Kit Multipurpose Air Breather Adapter



Air Breather, Sampling Port, Oil Purifier Port,.. etc.

[Function and Features]
- Adaptor for connection of air breather + pressure indicator port + sampling port + purifier port
- Stable sampling work at fixed position
- Completely sealed system preventing external contaminants ingress to the inside
- Prevent external moisture ingress by installing desiccant breather

[Application]
- Lubrication/Hydraulic oil tank top

[Benefits]
- Stable sampling work for oil analysis
- Reduce confounding factors for contamination during sampling work

LUBE PLUS Electro-mechanical Automatic Lubricator



[Function and Features]
- Easy installation to access lube point minimizes the risks of workplace accident
- Reliable lubrication by overcoming high back pressure
- Minimize downtime by replacement while machines are running
- Simple setting & quick monitoring saves work time and increase working efficiency
- The unit can be turned off during machine shut down
- Cost saving by exchanging the replacement kit
- Automotive, Chemical, Cement, Pulp/Paper, Electronic, etc

[Benefits]
- Reliable, clean and accurate lubrication by delivering right amount of lubricants at the right time 24 hours a day
- Reusability and environment friendly materials for simple disposal can minimize the impact on the environment