OilWear[®] is a range of online sensors for monitoring particles in fluids. They are based on a patented technology of digital image and video processing, which achieves outstanding and reliable results at low cost.



DilWear® SHAPE SERIES



OilWear® S



atten2's OilWear® \$100 is an online sensor that quantifies particles larger than 4µ present in fluids, classifies them by size according to ISO, NAS or SAE standards, and determines their origin.

The determination of origin is achieved by classifying the particles larger than 20µ according to their size and shape, to determine the root cause: fatigue, sliding or cutting. This feature, which makes OilWear® \$100 unique, is achieved by using the embedded expert system where the knowledge and expertise of IK4-TEKNIKER laboratory analysts has been dedicated.

Even with its high performance OilWear® \$100 is a competitive sensor in terms of cost, designed to be permanently installed on a single or on multiple machines, providing real-time information on fluid contamination.

OilWear® \$100 provides key information to carry out a predictive maintenance strategy. Early stages of machine failures can be easily identified by the measurement of abnormal amount of particles.

OilWear® \$100 has a fully modular design, and its measure module, which is the main responsible for the counting and classification of the particles, can be easily integrated into the oil Condition Monitoring System, simply ensuring minimum flow conditions in the oil that is monitored.



Your partner in reliability

APPLICATIONS

- -> Component wash fluids
- Cutting fluids
- Aqueous solutions
- Coolants
- Water glycols
- Mineral and synthetic oils
- → Hydraulic and lubricating fluids
- Fuels



BENEFITS

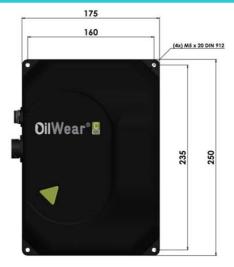
- → Plug & Play, the sensor offers a standard output with single plug.
- → Output: ISO 4406, NAS 1638, SAE AS4059, etc.
- → Classification of particles of over 20 µm depending on their root cause: fatigue, sliding, cutting.
- → Early information on the state of the machine is provided.
- → It prolongs the life of the fluids and cuts machine downtime.
- → It provides rapid, reliable information on the contamination of the fluids.
- → Full integration with SCADA/PC/PLC by means of analogue and digital communications.
- → Self-diagnosis, self-calibration and self-compensation.
- > Possibility of stipulating warning levels.
- Possibility of stipulating the size ranges of the particles to be counted.
- Possibility of integrating with OilHealth®, whereby a single sensor provides information on oil degradation and contamination.

SPECIFICATIONS

DilWear®



DIMENSIONS





MEASURED VARIABLES

MEMORY

PROTECTION CLASS

CERTIFICATIONS

PREDITEC

IRM

Particle classification according to: ISO 4406:1999 // SAE 4059 ISO 4406:1987 // NAS 1638

	Particle Classification according to SHAPE and SIZE · Fatigue wear · Sliding wear
	· Cutting wear
CALIBRATION	ISO 11171
PRECISION	±1 ISO code
ADDITIONAL VARIABLES	Sensor Temperature Air Bubble detection
MOUNTING POSITION	Vertical
SUPPLY VOLTAGE	24 V
POWER CONSUMPTION	<1A
ANALOG OUTPUT	0-10 V (4–20 mA) [Upon Request]
DIGITAL OUTPUT	RS485 (ModBUS: RTU) Ethernet RJ45 (ModBUS: TCP/IP, FTP, Telnet)
ALARMS	3 configurable alarms (level) [Upon Request]
OPERATING PRESSURE	Maximum 20 bar
OPERATING TEMPERATURE	From 0°C to 70 °C
VISCOSITY RANGE	To 460 cSt
FLOW RATE	Self-regulated
SENSOR SIZE/WEIGHT	250 x 175 x 115mm / 3.000 gr
HYDRAULIC CONNECTIONS	1/8" BSP (x2)
MATERIALS	Stainless steel

atten2 info@atten2.com www.atten2.com

Tel. 976 200 969 · Tel. 916 121 163 · Fax 976 362 340 www.preditec.com · www.irm.es · info@preditec.com Oficinas en: Madrid, Zaragoza, Barcelona ,Albacete,

A Couña, Tarragona y Cádiz

IP65

CE, GL pending

Last 500 samples (measurement and sample image)