

# Safety Automation and Oil Conditioning System



At Sanocs , We provide next-gen solutions and innovative technical products in the field of Machine Safety, Oil filtration & Condition Monitoring, and Liquid Particle Counter. We also offer reliable services for Machine Safety Risk assessment with Implementation and Laboratory oil analysis reports. Each of our products focuses on avoiding any kind of premature failures and breakdown across a wide range of industries.



## About us



5000+ Sq. ft  
Warehouse &  
Office Space



In house Design  
&  
Installation Team



6 + Safety  
Automation  
Partner



14+ Years of field  
experience with  
Hands on expertise

## Our Vision



**Our Vision is Safer Workplace for Everyone and Preventing Premature Breakdowns of Machinery.**

At Sanocs, we are deeply proud to lead the way as providers of cutting-edge solutions and groundbreaking technical products. Our expertise lies in Machine Safety, Oil Filtration & Condition Monitoring, and Liquid Particle Counting, where we consistently deliver innovative solutions to meet the evolving needs of our customers

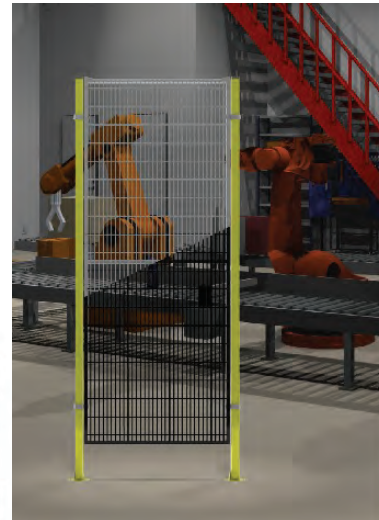
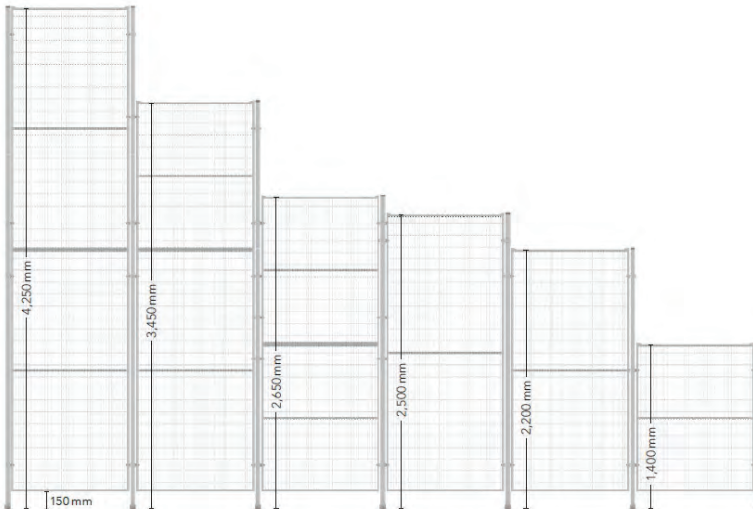
## Our Solution

- Safety Fence / Machine Guarding
- Safety Automation Products
- Perimeter and Warehouse Guarding
- Customized Guards for Moving Items
- Robotic Safety Fence
- Conveyor Guarding
- Aluminum Profiles & Guards
- Oil filtration Systems
- Conditioning Monitoring System
- Oil Particle Counters
- NAS Testing serviceOil Analysis Reports





Troax machine guarding and machine safety products meet all the requirements set in the European Machinery Directive, 2006/42/EC – requirements which your installation should meet today as well as into the future when you have supplemented or extended your machine guarding system with new mesh panels, doors and locks



## Machine Guarding

safety Fence sytem standard heights are from 1,400 mm to 4,250 mm. The panels are available in eight widths, from 200 mm up to 1,500 mm, and the 150 mm floor gap allows for easy cleaning. Both panels and posts can be customized to create the desired dimensions. Fitting details, panels and posts for all our systems are kept in stock and can be delivered immediately.





## Warehouse Partitioning

Troax offers flexible systems of modular protective walls for warehouse partitioning and machine guarding. The systems are based on posts with different fittings that are combined with sturdy panels of metal mesh, steel sheet or polycarbonate. The posts fit several fitting systems so you can create the optimal combination for your machine guarding. Troax machine guarding systems have captive fixings that remain in place even when the guard is disassembled, as required by the Machinery Directive

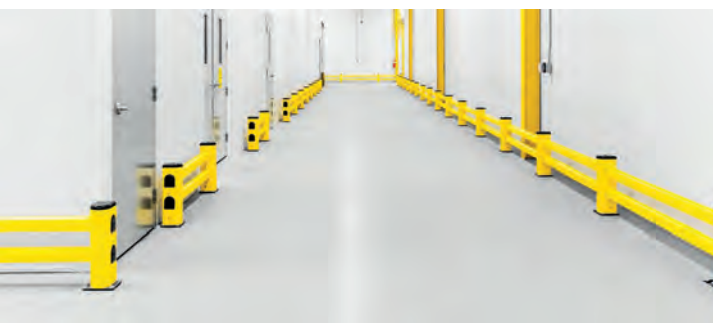


## Other Active Safety Products

Barrier systems, including barriers and bollards, are crucial for workplace safety in production halls, warehouses, and distribution centers. Troax offers steel and polyethylene options to suit diverse needs. Active Safety utilizes advanced technology to detect and address hazards in real-time, complementing physical barriers. Modular and adaptable products enable integration of various applications for tailored safety solutions.









# EUCHNER

More than safety.

EUCHNER offers a comprehensive range of high-quality industrial safety products designed to protect personnel and machinery in various applications. From safety switches and interlocks to safety sensors and control systems, EUCHNER's innovative solutions ensure compliance with international safety standards while enhancing productivity and efficiency. With a focus on reliability and performance, EUCHNER products provide peace of mind for operators and contribute to a safer work environment. Explore our catalogue today to discover the perfect safety solution for your needs.



## Some Of Installation Images





## Door Locking Safety Switches In Plastic & Metal Housing



## Door Locking RFID Safety Switches



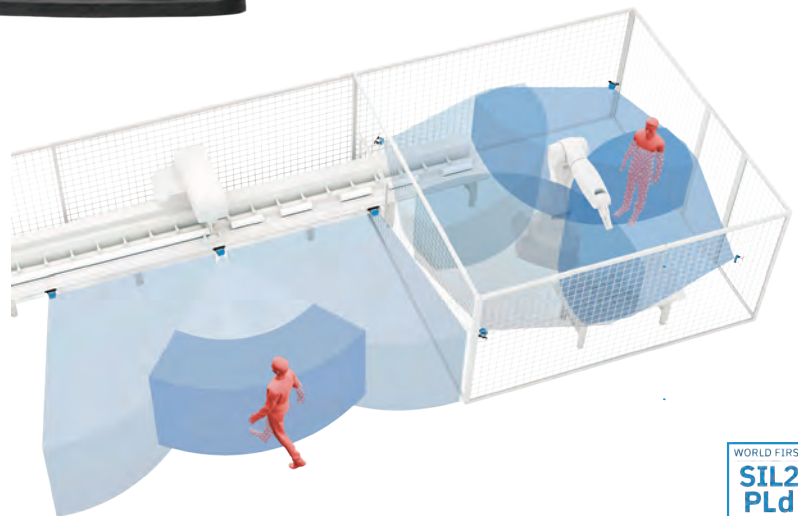
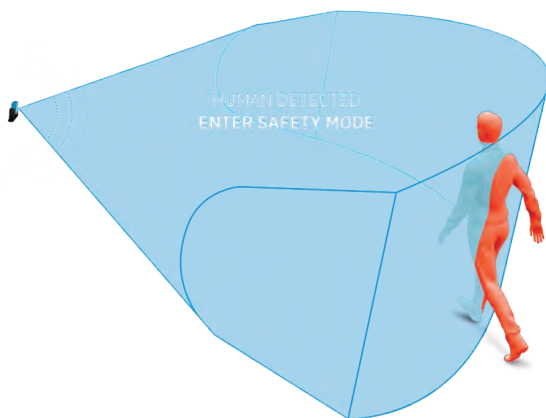
## Other Key Safety Products





# INXPECT

The next generation safety products modern technology that offers superior safety Inxpect safety products are made for advanced industrial automation and robotics systems based on radar technology. Our products can detect the entrance and presence of operators in dangerous areas and stop machinery from restarting until the area is free of people, also in the presence of dust, debris, smoke and dirt.



## ACCESS PROTECTION

System monitors the dangerous area:

- OSSDs are in ON-state
- Sensor sensitivity is low
- Static objects are automatically excluded
- Reaction time is 100ms

AREA  
ENTERED

AREA  
CLEARED



## RESTART PREVENTION

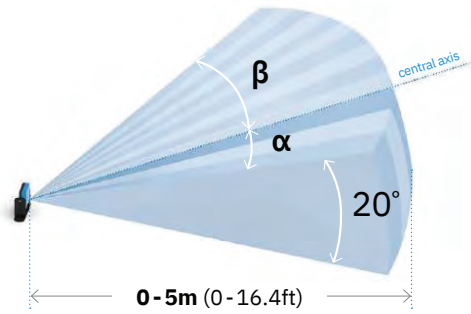
System scans the area for micro-movements:

- OSSDs are in OFF-state
- Sensor sensitivity is high
- Static objects are automatically excluded
- System requires a restart timeout before switching back to access detection mode

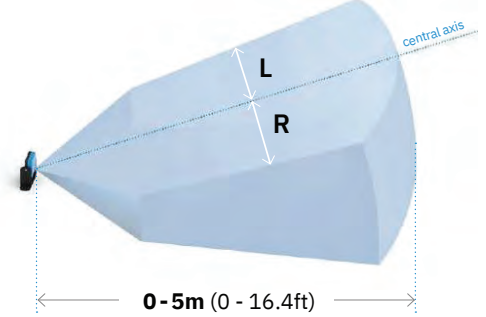




**Asymmetrical FOV**  $\alpha: 0^\circ-50^\circ$   $\beta: 0^\circ-50^\circ$



**Corridor FOV**  $L + R \geq 20\text{cm}$



**5m**

Range sensor

**4s**

Restart timeout

**2m/s**

Max target speed

**20°**

Vertical plane

**9m**

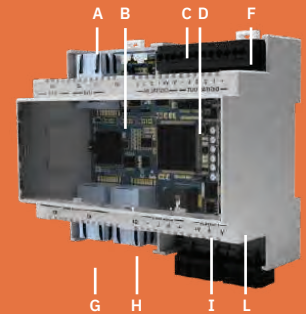
Range sensor

**RCS**

Selectable

- A- I/O terminal block
- B- System status LED
- C- Micro USB port
- D- Fieldbus status LED
- E- SD card (only for C201B-P)
- F- Ethernet port

- G- Power supply terminal block
- H- CAN bus terminal block for connecting the first sensor
- I - Ethernet Fieldbus port n.1
- L- Ethernet Fieldbus port n.2

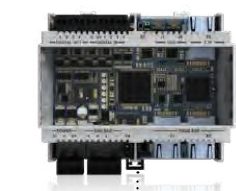


**MODBUS**

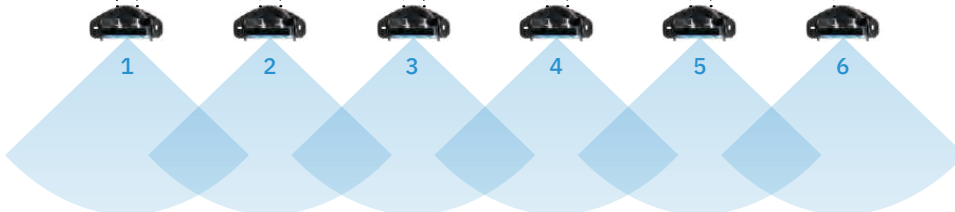
**FSoE**  
and MODBUS

**PROFIsafe**  
and MODBUS

INXPECT  
CONTROL UNIT



INXPECT  
SMART RADAR  
SENSORS





## **REER** *Your future's safe!*

Safety is essential in every workplace. It becomes even more crucial in highly automated environments. Thanks to our collaboration with world-leading companies in the machine-tool, automotive, packaging, and palletization industries, ReeR is able to offer a wide range of safety devices such as light curtains, programmable controllers, photocells, laser scanners, and interfaces able to meet the demands of any application. ReeR specializes in the field of optoelectronic curtains for automation, measurement, and control.



- Safety light curtains: finger, hand and body detection
- Safety light grids: multi-beam (2, 3 or 4 beams for access control)
- Unique features and a comprehensive range of accessories
- Standard versions with automatic restart
- Integrated function versions with selectable automatic/manual restart
- Operating range up to 20 m, protected height up to 2,2 m



## MOSAIC M1

[1100000] [1100002] Standard Master Unit

8 digital inputs

2 inputs for Start/Restart interlock and EDM

2 pairs OSSD safety outputs (PNP 400 mA)

2 status outputs (PNP 100 mA)

4 test outputs (for short-circuit monitoring)

Field-bus interface with MBx modules



- Detect the presence/absence of an object
- Perform a count
- Detect a position
- Detect a shape or profile
- Measure dimensions

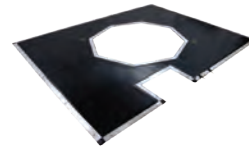
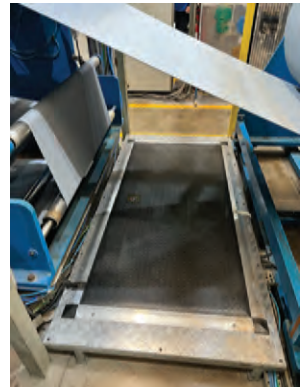
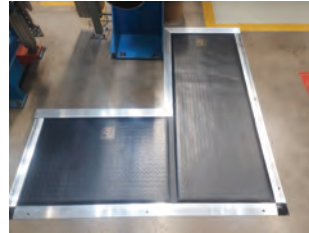




## Safety Mats

Sensitive safety mats are sensors for monitoring surfaces. They detect the presence of one or more people, through the pressure exerted on them. Made of self-extinguishing PVC, it is the primary element for monitoring access to potentially dangerous areas, such as:

- Close proximity of manufacturing machines with moving parts;
- Chemically active areas;
- Electrically hazardous areas;
- Areas subject to high or low energy radiations;
- Potentially explosive areas and anywhere potentially dangerous for human safety.



## Safety Bumper

A sensitive bumper is a shockproof safety sensor designed to protect people from injuries and injuries resulting from potential impacts with moving machinery parts. The crushing generates an electrical signal which, received by an electronic control unit, generates the blocking of the movement of:

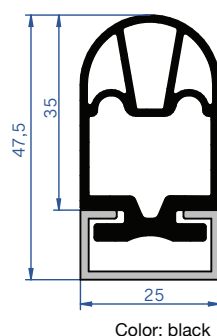
- Mechanical parts or moving components;
- Surfaces of self-propelling means;
- Electrically hazardous areas;
- Gate or door leafs.



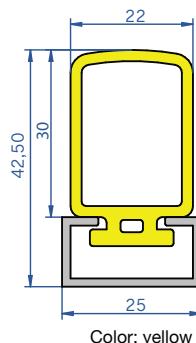
## Safety Edge



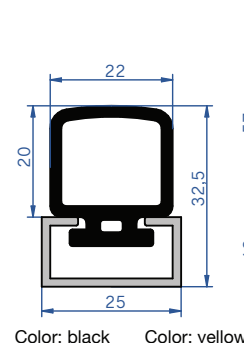
Mod. BOS 2540



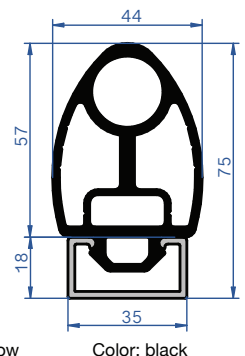
Mod. BOS 2230



Mod. BOS 2220



Mod. BOS 4060

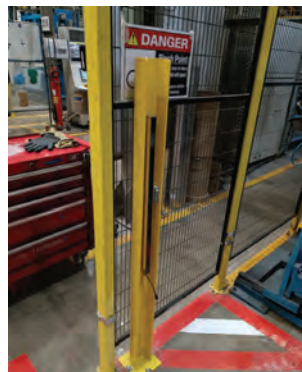




## Our Turnkey Solution

Ensure peace of mind with our Safety Automation Service. Our comprehensive solution integrates advanced technologies to proactively detect and mitigate potential hazards in real-time. With our expertise, your workplace safety is enhanced, minimizing risks and promoting a secure environment for your operations. Trust us to safeguard your assets and personnel, ensuring compliance and peace of mind.

- Safety Risk Assessment for the machine by Machinery Safety Expert
- Safety Fence drawing and layout
- Installation of Safety Fence
- Mounting of Safety Switches
- Customized Machine guard as per standard
- Commissioning of other Safety Products e.g. Safety Light Curtain, Safety Area Scanner, Safety Controller etc
- Wiring of all safety products up to control panel.





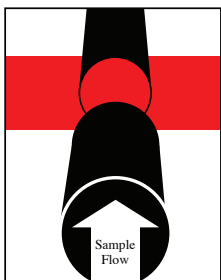
Particle measuring technology is used to control cleanliness of liquids and to identify quality deficiencies and excessive wear in order to avoid eventual costly machine failures. PAMAS particle counters measure solid particulate contamination of liquids and control the efficiency of filters and the cleanliness of liquids.

Particles circulating at high speed and pressure in the liquids of turbines, power plants, gear-boxes and offshore applications are capable of damaging mechanical parts of the system.

Particles affect both the quality of liquids (e.g. contaminants in pharmaceutical solutions, drinking water or process water), and also the connected components and machines (e.g. in aviation and hydraulics in general).

#### Volumetric sensors

100 % Sample volume

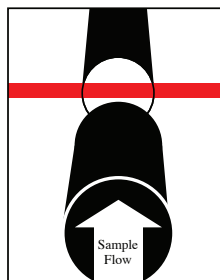


Laser beam

Perform particle sizing and counting of 100 % of the sample flow

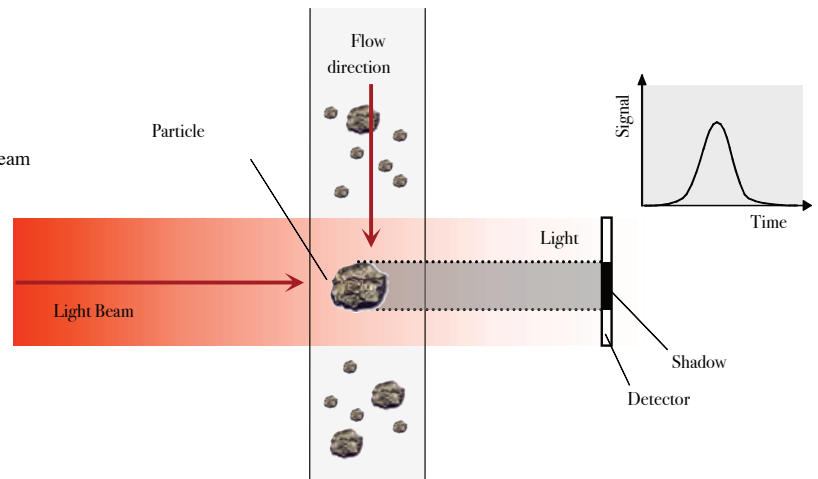
#### In-Situ sensors

Optically defined sample area



Laser beam

Perform particle sizing and counting of an optically defined sample area of only a few percent of the whole sample flow



## PAMAS Liquid Particles Counter



#### Contamination control and Condition Monitoring of

- hydraulic oil systems
- lube oil systems
- test rigs
- parts cleaning
- Hydraulic oils
- Turbine and insulation oils
- Gear and engine oils
- Water based hydraulic fluids
- Phosphate ester based hydraulic fluids
- Fuels
- Highly volatile fluids
- Parenterals, protein solutions according to common pharmacopoeias
- Water
- Suspensions
- Cleaning fluids
- Sea and brackish water
- Korrosive fluids
- Hydraulic Oil
- Turbine and insulation oils
- Gear and motor oils
- Fuels
- Phosphate ester based hydraulic fluids
- Water based hydraulic fluids



## PAMAS S40

- Robust & Lightweight Design (8 kg)
- Customizable Measurement Settings
- Intuitive Touch Screen Operation
- Automatic Sample Flow Control
- 32 Adjustable Size Channels
- Wide Pressure Range (Pressureless to 6 bar/420 bar)
- Internal Storage for 4,000+ Measurements
- Real-time Display and Printing via Integrated Thermo Printer
- Laboratory-level Accuracy
- Long Battery Life (4+ hours)
- Calibrated to ISO 21501-3 or ISO 11171 standards, traceable to NIST.  
4–70  $\mu\text{m(c)}$  (ISO 11171)



- Historical ISO 4402 calibrations available  
2–100  $\mu\text{m}$  (ISO 4402)

## PAMAS SBSS

- Customisable measurement settings
- 16 freely adjustable size channels  
(32 channels upon request)
- Pressure sampling up to 10 bar
- Optional vacuum cycle for sample degassing
- Integrated magnetic stirrer
- Use of any sample vessel with a max. diameter of 7 cm and a height of 18 cm
- Measuring volume of 1 to 1,000 ml
- Automatic sample flow and volume control via a stepper motor driven syringe module
- Interchangeable syringes with 1 ml, 10 ml and 25 ml volume
- 1–200  $\mu\text{m}$  (ISO 21501-3)      • 4–70  $\mu\text{m(c)}$  (ISO 11171)
- 1–100  $\mu\text{m}$  (ISO 4402)      • Max. particle concentration: 24,000 P/ml at 25 ml/min



## PAMAS S50

- Four onboard analogue inputs for 4–20 mA signals.
- Parallel data transmission available for size channels 4, 6, 14, and 70  $\mu\text{m(c)}$ , or serial data transmission for all eight size channels.
- Early alert system triggers in case of abrasion, ensuring timely maintenance.
- Model with integrated pump available:
- Without pump: Operates within 0.2 – 20 bar pressure range.  
With additional pump: Works within 0 – 6 bar pressure range,
- supporting viscosity up to 1000 cSt (depending on system pressure).
- Calibration range: 4–70  $\mu\text{m(c)}$  as per ISO 11171 standards







## DS Oil conditioning system (Off-line fine filter system)

Removes particles, water, varnish, moisture, oxidation, acidity and degradation products that contaminate Oil



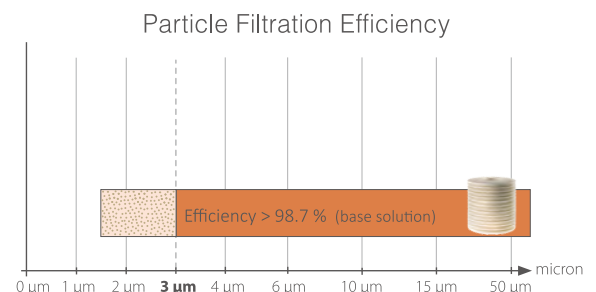
Generally, Less than 0.5% of a plant's maintenance budget is allocated to purchasing lubricants. However, the repercussions of inadequate lubrication can affect up to 30% of the plant's total maintenance costs annually.

Contamination, such as metals, dust particles, sand, and rubber, can infiltrate oil and harm machinery. These insoluble materials, when present in hydraulic fluid, can reach up to 500,000 particles per 100 ml that are 5  $\mu$ m or larger, posing a threat to equipment functionality and longevity.

## DS Filter Insert



Contamination Capacities	Size
	27/27
Solids, kg	4
Water, ltr	2
Varnish, kg	4



## CONTAMINATION CAPACITIES

Based on field experience we have observed that the total Dirt Holding Capacity (DHC) is dependent on shape and density of particles and other variables within an oil system.

When saturated, the total weight of accumulated contamination depends on the application, the combination of contaminants, as well as the density of the captured contamination.





## Filtration Capability

• Particle Filtration Capacity of DS Filters per pass

- $\beta(3)=75$  [EFFICIENCY=98.66%] absolute
- $\beta(0.8)=2$  [EFFICIENCY=50%] nominal

Huge specific surface area of DS filters can hold  $\geq 4-16$  kgs of evenly distributed contamination and degradation media like

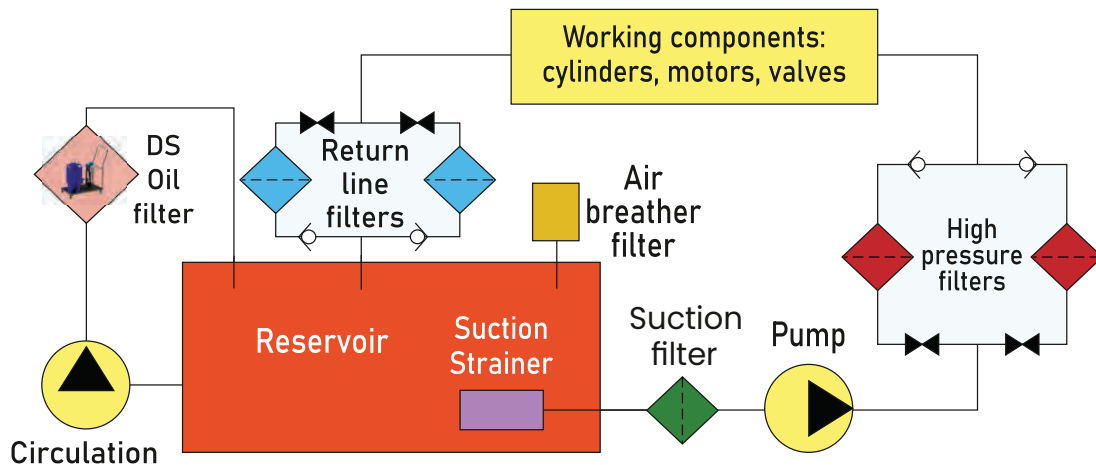
- \* Particles
- \* Varnish
- \* Acidity
- \* Moisture
- \* Oxidation
- \* Slurry

• Water Absorption capacity of each element is half that of its total contamination holding capacity

"upstream particulates/ ml	"downstream particulates/ ml	Beta Rating	% Efficiency
1000 ,000	500 ,000	2	50%
1000 ,000	50 ,000	20	95 %
1000 ,000	13000	75	98 .7%
1000 ,000	5,000	200	99 .5%
1000 ,000	1000	1000	99 .9%

DS system pump takes in fluid from the equipment tank (at lowest point) and passes it through the filter insert. From the insert center the Oil flows through the filter bottom and returns back to the main tank. The pressure drop and contamination absorption of the filter insert is monitored on the pressure gauge of the DS system. The filter outlet port is in the housing bottom. The filtered Oil should be returned to the main equipment tank and to be close to the suction pipe of the principle system pump suction chamber.

**Note: Return point has to be non-pressurized.**





## Aluminium Profile Solution & Accessories:



- **Durable Aluminium Profiles:** Constructed from high-grade aluminium for strength and longevity.
- **Modular Design:** Easily configurable and adaptable to various setups and layouts.
- **Full Range of Accessories:** Includes corner connectors, brackets, end caps, hinges, locks, and more for seamless integration and functionality.
- **Customizable Options:** Tailor the solution to your specific requirements with a variety of sizes, shapes, and finishes available.
- **Enhanced Safety:** Provides robust protection for machinery, equipment, and personnel, ensuring workplace safety and compliance with regulations.
- **Easy Installation:** Quick and straightforward assembly process with minimal tools required.
- **Reliable Support:** Backed by our expert team for guidance and assistance throughout the installation process.





## Our Esteemed Customers

**adani**

**POLYCAB**  
IDEAS. CONNECTED.

**Parlé Agro**

**VOLTAS · beko**

 **YOKOHAMA**

 **amcor**

**Amul**

**MRF**

**JSW**

 **MAGNA**

**AM/NS  
INDIA**

 **UFLEX**

**CEAT**

  
**JK PAPER LTD.**  
*Creating lasting impressions*

  
**SUZUKI**

  
**SAINT-GOBAIN**

  
**ADITYA BIRLA GROUP**

  
**OWENS  
CORNING**



# We Deal in



## Contact us



+91-987-924-2755



[inquiry@sanocs.in](mailto:inquiry@sanocs.in)



SANOCS Pvt. Ltd. Plot 21, Panchratna Green – Industrial Park,  
Nr. Pirana Village, Ahmedabad 382425