HY-PURE
PRODUCTS PVT. LTD.

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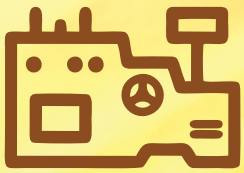
Over Two Decades Of Innovation, Quality & Service



Solutions to Oil Contamination

Industries

Mining, Automobile, Engineering, Oil & Gas, Shipping, Aircraft, Power Generation, Cement, Steel, Plastic & Rubber Moulding.

HY-PURE : A sustainable solution for Oil contamination

Does Oil contamination affect you?

Over **95%** of hydraulic failures are the result of **dirty Oil.**
Oil does not wear out.....it becomes **Contaminated.**

The result is
Systems Malfunction and Catastrophic Degradation

Hidden Cost

Profitability
Productivity
Efficiency
Environmental impact
Sustainability

Solution

Electrostatic Oil Purifier (EOP)
Mini Filter (MF)
High Vacuum Dehydrator (VDU)

Benefits

Higher Profitability and Sustainability
Low Environmental impact
Lifelong Oil savings
Improved Productivity
Eliminate Oil replacement

Our solutions effectively remove **99.9%** of **Moisture, Oxidation Products, Varnish, Ultrafine Particles** and other **Contaminants** from Oil.

Never change your Oil again!

Electrostatic Oil Purifier

Unlike how a human body can purify contaminated blood, a machine cannot purify contaminated Oil.

However with our Electrostatic Oil Purifier, you can always have clean and dry Oil, maintaining your machine's performance & efficiency. It is an elegant, modular & comparatively light weight machine based on electrostatic Oil cleaning principal reaching sub micronic level cleanliness.

A proven Hydraulic Circuit never fails on it's own

Oil Contamination

Heat — Pressure — Moisture

- **Oxidation**
- **Varnish (Liquid)**
- **Tar (Semi solid)**
- **Sludge (Solid)**

Causes

Internally generated contamination

External contamination usually comes from airborne particles dust, dirt & moisture

Dangers

Cycle time variance & Increase in rejections.

Premature system failure & High downtime.

Viscosity change, System wear & tear &

High environmental cost of disposal.

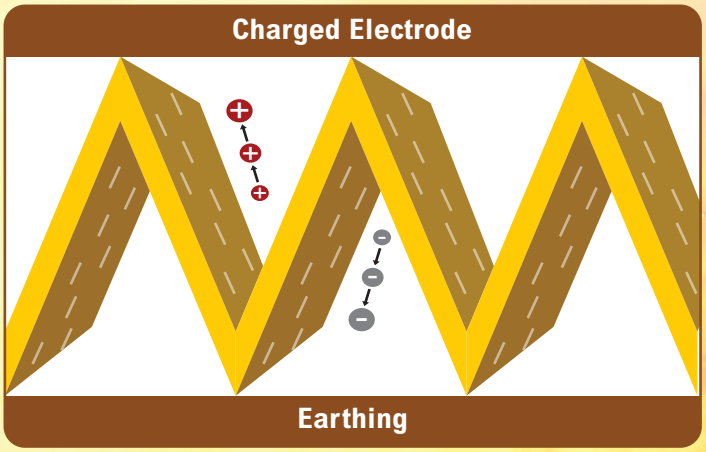
Electrostatic Oil Purifiers remove contamination at the oxidation stage preventing machine damage & oil degradation

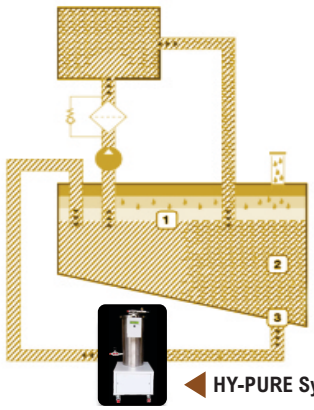
- Removes contamination of < 1 micron
- Economy of scale, unlike conventional filters
- Operates even at 1000 ppm moisture contamination
- Protects soluble additives
- Clean and dry Oil can be used indefinitely

The Economics of Recycling Oil

- No Oil change: 90-95% savings in new Oil costs.
- Reduction in downtime of machinery
- Increased production nos. & Decreased no. of rejects
- Payback period less than one year*
- Low operation & maintenance cost

The Principle





HY-PURE System's Oil Purification

- Avoiding oxidation, hydrolysis and acid build-up
- Filtering corrosion residue
- Removal of gumming and micro particles

- A multipass Oil purification system based on electrostatic principles
- High voltage (20 Kv) is applied across the Oil via electrodes
- Contaminants become charged and adhere to collectors.
- Maintains Oil at ISO 4406 / NAS 1638 standards
- We have developed a SMPS based High Frequency Modulation using MOSFET technology to generate 18 to 20 Kv at 80000 Hz with a Fold Back System. (Proprietary technology) This technology can minimize water contamination interference upto 1000 ppm.

Worlds fastest electrostatic purification system

Electrostatic Oil Purifier

Machine Specification

Model	Reservior Capacity (liters)	Pump Flow Rate (LMP@1500 RPM)	Dimentions (LxWxH) in mm	Weight (kg) Approx without Hose
EOP-10	10	Approx 4 ltr	450x400x685	40
EOP-25	25	Approx 10 ltr	650x450x810	60
EOP-50	50	Approx 15 ltr	650x450x950	80
EOP-100	100	Approx 20 ltr	750x 550x995	100
EOP-200	200	Approx 40 ltr	1250x600x1150	185

Power

230 V 50 Hz AC 1 Phase
415 V 50 Hz AC 3 Phase
110 V 60 Hz AC 1 Phase (U.S. Standard)
12 V/24 V DC

Inlet Oil Conditions & Limitations

Temperature < 100°C
Viscosity <320 CST.
Above 320 CST will be customised
Water Content <1000 ppm

Type of Oil

☑ Transformer Oil, Lubricant Oil, Gear Oil, Compressor Oil, Hydraulic Oil & Turbine Oil

☒ Detergent based Oils like Engine Oils

Cleaning time depends on the viscosity and level of contamination in oil.

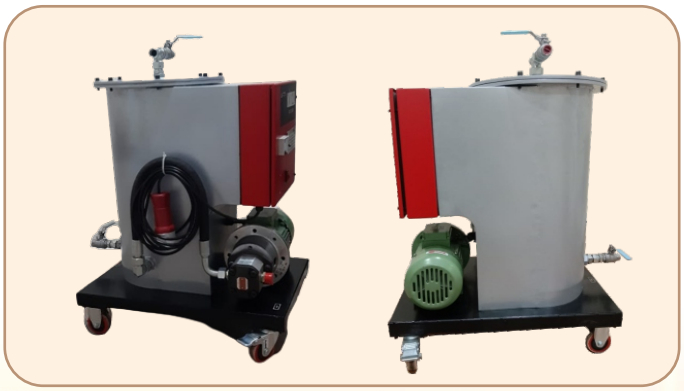
SR No	Model	Capacity of tank for which EOP is recommended
1	EOP-10	Min to 1500 liters
2	EOP-25	1500 to 2500 liters
3	EOP-50	2500 to 5000 liters
4	EOP-100	5000 to 10000 liters
5	EOP-200	10000 to 20000 liters

Make Oil your asset

FLAME PROOF EOP Machines - As Per ATEX Standards

Customised EOP Machines- For Special Application

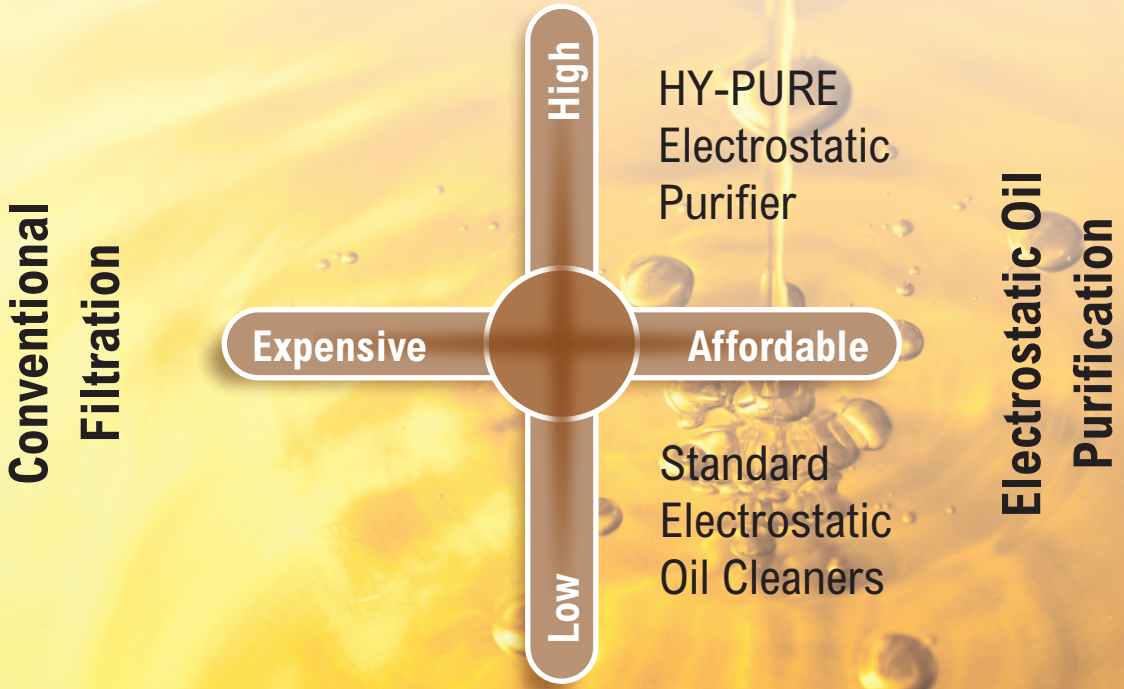
Our New/ Upcoming Models



Make Oil your asset

Our Competitive Advantage

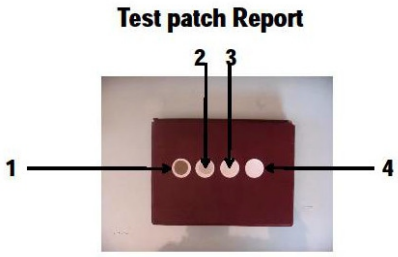
Ability to Superclean Oil at 1000 ppm moisture



Highest moisture handling capacity in the world

Oil Contamination Patch Test Kit

Oil Contamination Patch Test Kit



1 - Test Patch - Contaminated Oil
2 - Test Patch- After Cleaning for some time
3 - Test Patch- After Cleaning for some more time
4 - Test Patch- Cleaned Oil.

This Kit enables the determination of Oil cleanliness level before & after its purification, by passing the oil through a 0.8 micron membrane and seeing the difference in the colour of the patch.

Result

Heavily Contaminated ⟷ **Purified Oil**

Mini Filter

- World's lightest and most compact filtration system
- Range from 3 microns to 25 microns spin on filters
- Weighs only 15 Kgs
- L 350 X H 550 X W 280 mm
- Power requirements: 110 V, 60 Hz, or 230 V, 50 Hz and 24 V DC
- Pump flow rate 10 LPM
- Approved by MNC for onsite usage
- Comes with choking indicator

World's lightest and most compact filtration system

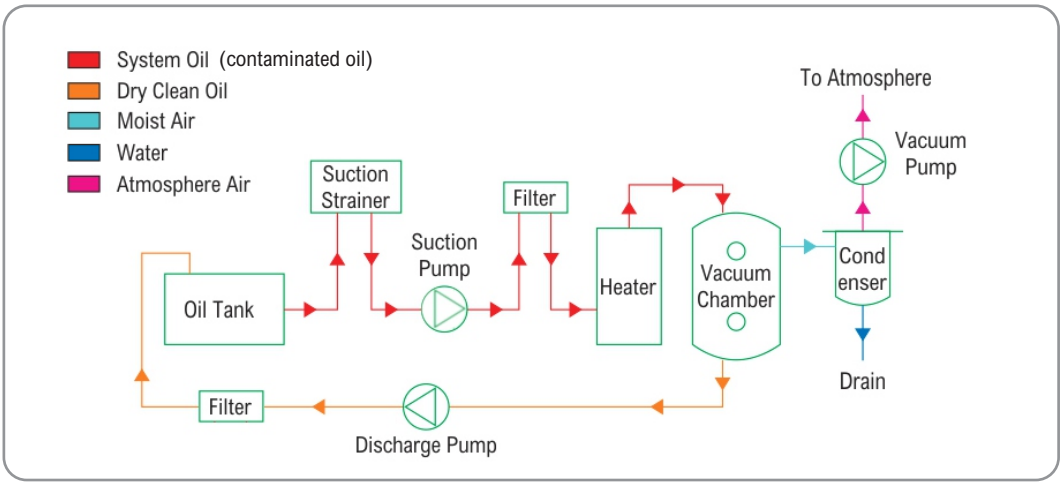
Hyper Oil Purification System

Centrifuge + Vacuum Dehydrator+ Electrostatic Oil Purifier (EOP)

Technical Data

Electrical Power Supply	: 415V, 3 Phase, 50Hz, 4 wires
System Flow rate	: 10 LPM approx
Suction pump Motor(M1)	: 0.5 HP
Suction Pump(P1)	: 10 LPM approx
Discharge Motor(M2)	: 0.5 HP
Discharge Pump(P2)	: 10 LPM approx
Discharge Motor(M3)	: 1 HP
Discharge Pump(P3)	: 15 LPM approx
Vacuum Pump	: 17 M3/H
Heater	: 2 KW
Compressor	: 275 W
Inlet Hose Pipe	: R1 3/4”
Discharge Hose Pipe	: R1 1”
Oil Tank T1 Capacity	: 60 Litre
Vacuum Chamber Capacity	: 55 Litre
Overall Dimensions	: 1600mmx1000mmx1650mm
Weight	: 470 kg approx

High Vacuum Low Temperature Dehydration Unit (VDU)



Technical Data

Inlet connection	: 3/4“ BSP
Outlet connection	: 1“BSP
Circulation flow rate	: 10, 20, 40, 80 LPM (50 Hz)
Heater power	: 6 KW to 16 KW
Filter type	: Suction Strainer
Viscosity	: 10…320 CST
Dewatering rate	: 1 Ltr / Hr (Depending on level of moisture)
Protection class	: IP 55
Ambient temperature	: 0° C to + 50° C
Fluid temperature	: 45° C (Depending on altitude of site)
Operating Vacuum	: Max 760 mmhg (Depending on altitude of site)
Supply Voltage	: 415 / 440 V 50 Hz 3 Phase 16 A
Dimensions	: L 1500 x W 900 x H 1500 mm (10 to 20 LPM)
Weight	: 300 kgs approx

Also available with Moisture Sensor, Particle Counter and EOP

The company reserves their rights to upgrade specifications to implement advances in technology.

Manufactured by

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Marketed and Serviced by

We upgrade with technology