MAULI
TECHSOL

Over Two Decades Of Innovation, Quality & Service







Solutions to Oil Contamination

Industries

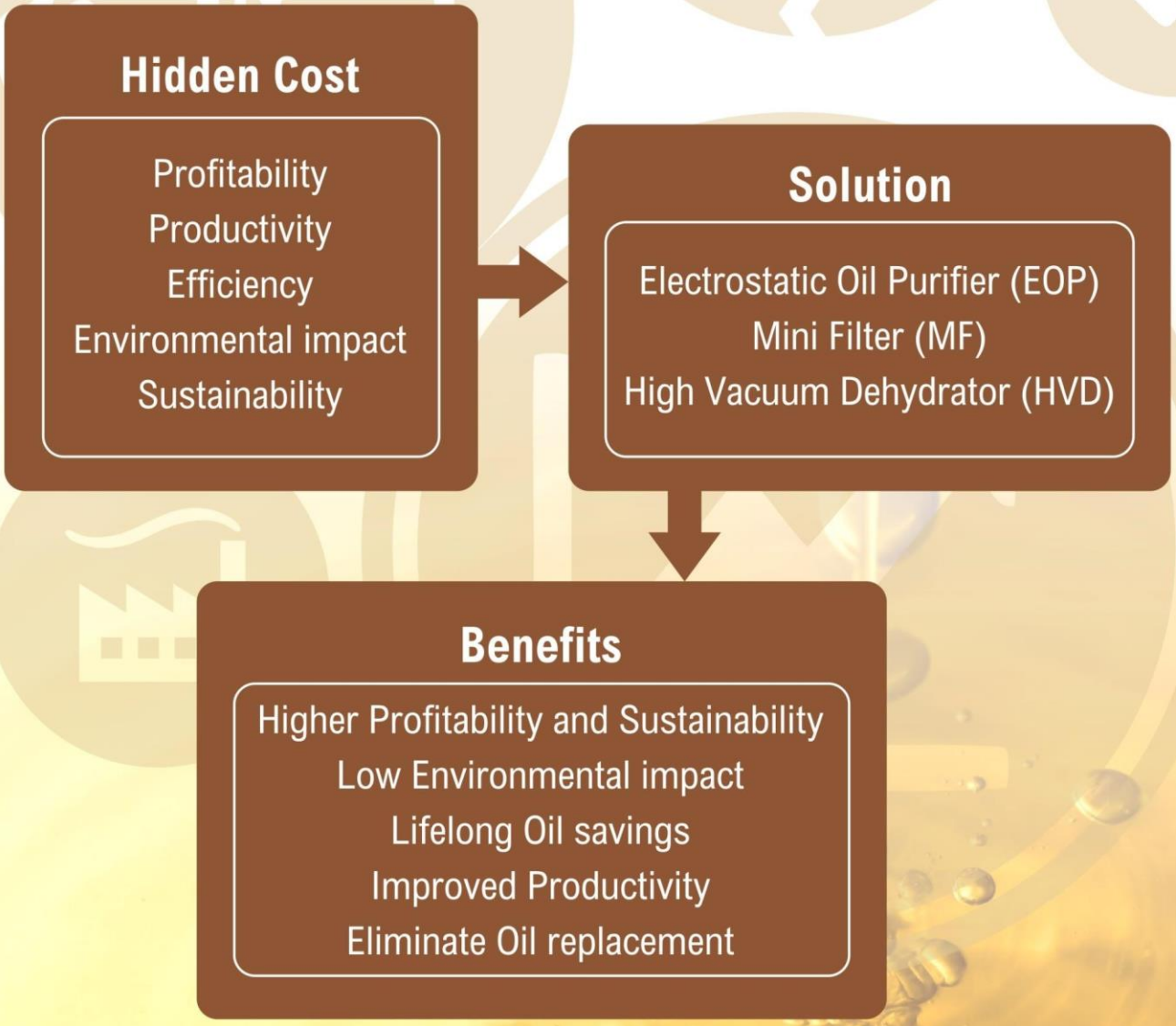
Mining, Automobile, Engineering, Oil & Gas, Shipping, Aircraft, Power Generation, Cement, Steel, Plastic & Rubber Moulding.

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



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 Oil, maintaining your machine's performance & efficiency. It is an elegant, modular & comparatively lightweight machine based on electrostatic Oil cleaning principal reaching sub micronic level cleanliness.

Proven Hydraulic Circuit never fails on it's own

Oil Contamination

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

Causes

Internally generated contamination

Airborne dust, dirt, rust in the environment

Metal particles (abrasive wear, corrosion, surface fatigue etc.)

Dangers

Cycle time variance & Increase in rejections

Premature system failure & High downtime

Viscosity change: System wear & tear

High environmental cost of disposal

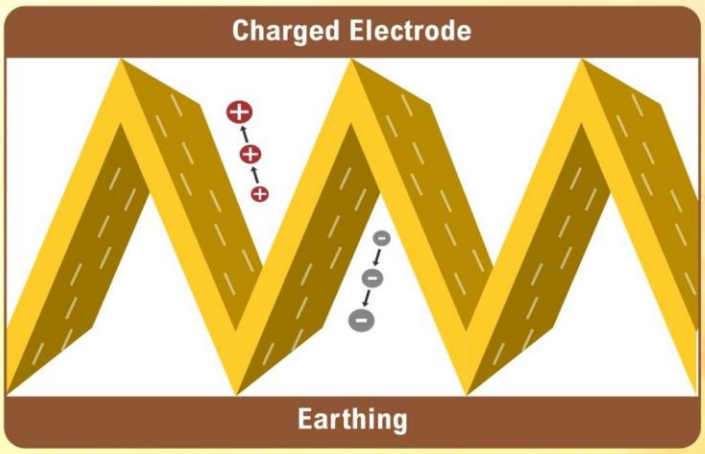
Electrostatic Oil Purifiers remove contamination at the oxidation stage preventing machine damage

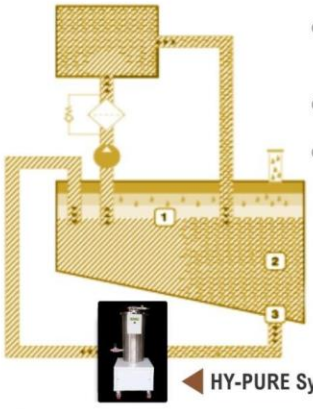
- Removes contamination of < 1 micron
- Economy of scale, unlike conventional filters
- Operates even at 1000 ppm moisture contamination
- Protects soluble additives
- Clean Oil can be reused indefinitely

The Economics of Recycling Oil

- No Oil change: 90-95% savings in new Oil
- Reduction in downtime of machinery
- Increased production nos. & Decreased no. of rejects
- Payback period less than one year*
- Low operation & maintenance cost (< 1 unit/ 24 hrs.)

The Principle





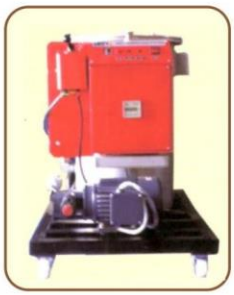
HY-PURE System's Oil Purification

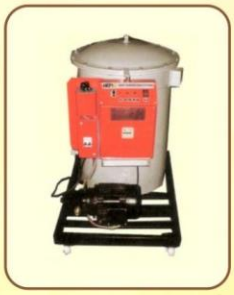
- Avoiding oxidation, hydrolysis and acid build-up
- Filtering corrosion residue
- Removal of gumming and micro particles

- 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

Capacity (Ltr.)	Dimension (mm)	Weight (kg)	Pump Flow Rate (LPM@1440 RPM)
10	400 x 250 x 920	40	2-5
25	400 x 400 x 775	60	5-10
50	400 x 400 x 1050	80	10-15
100	600 x 600 x 1150	120	15-20
200	1250 x 600 x 1150	185	30-40

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.
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

Oil Contamination Patch Test Kit

This Kit enables the determination of Oil cleanliness level before & after its filtration. The contamination level can be clearly judged by seeing the color of patch, by passing the Oil through a membrane of 'sub-micronic pores'.

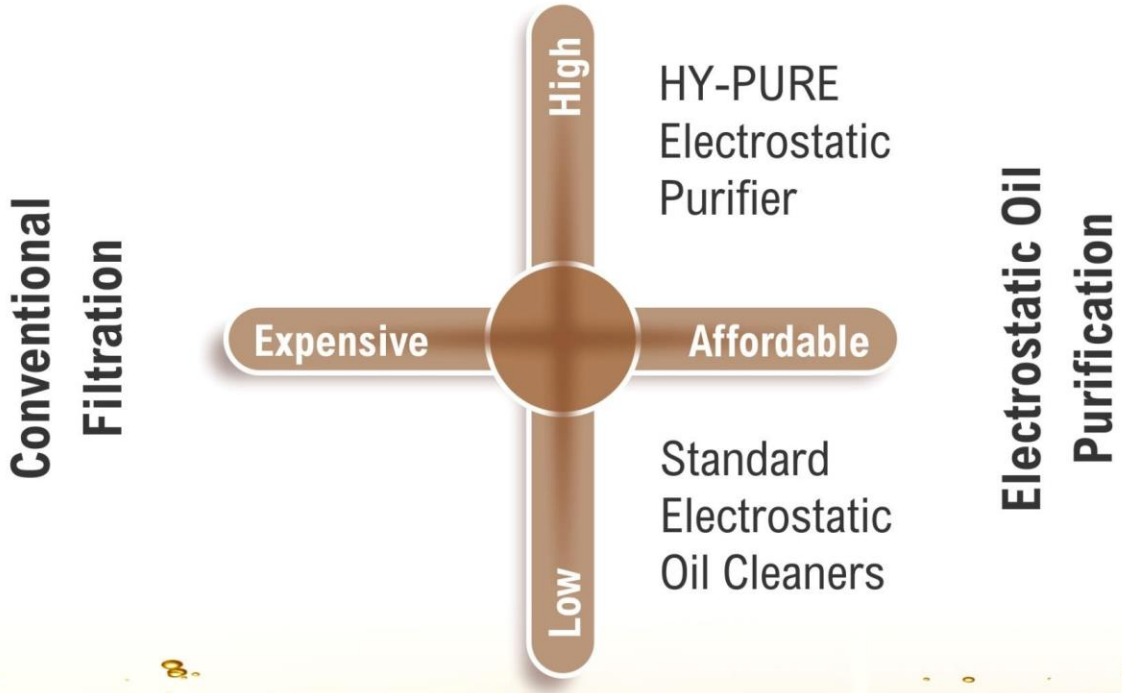
Result

Heavily Contaminated ⟷ Purified Oil

Make Oil your asset

Our Competitive Advantage

Ability to Superclean Oil at 1000 ppm moisture

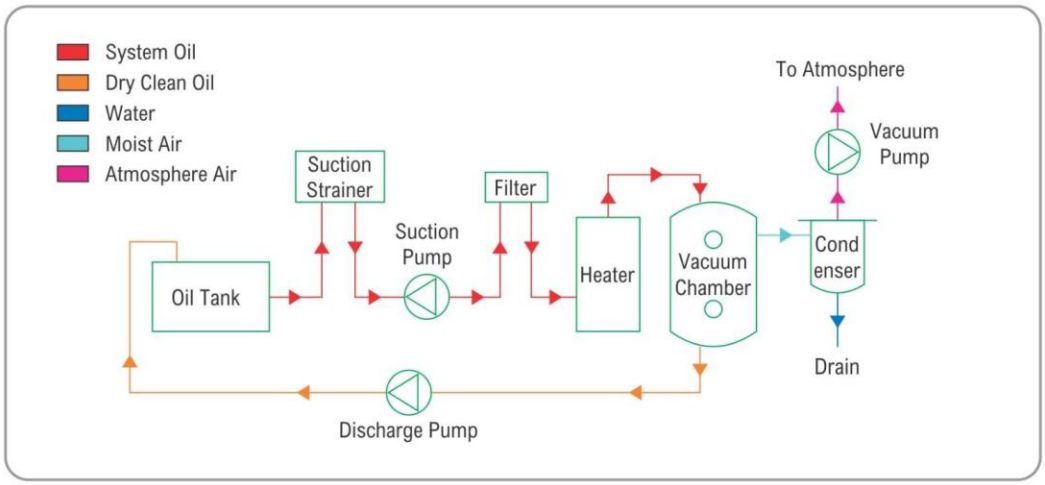


Mini Filter

- 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

High Vacuum Dehydrator



Technical Data

Inlet connection	: ½“ BSP
Outlet connection	: 3/4“BSP
Circulation flow rate	: 15 to 20 LPM (50 Hz)
Heater power	: 6 KW
Filter type	: Suction Strainer
Viscosity	: 10…320 CST
Dewatering rate	: 1 Ltr / Hr
Protection class	: IP 65
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
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.