

2021

COMPANY BROCHURE



SOLVING TOMORROW'S CHALLENGES TODAY.

©2021 One Eye Industries Inc. All rights reserved.



THE LEGEND OF ONE EYE

THE NAME 'ONE EYE' COMES FROM A LEGENDARY STORY OF COURAGE AND DETERMINATION

The company name is based on the story of a one-eyed grizzly bear who lived in the heart of the Canadian Rockies.

The story goes something like this:

One dark night, a large, ferocious grizzly broke into a hunter's camper. The startled hunter fired at the snarling grizzly as it was charging through the camper door. In self-defense, the terrified hunter grabbed rifle and put a bullet straight through the grizzly's eye; the startled bear took off and escaped into the forest. Afterwards, famous hunters and intrepid game wardens desperately searched the forest to find this dangerous, wounded bear.

He was never caught.

He anticipated every trap. He outsmarted his competition. He became the cunning phantom grizzly named One Eye. As time passed, the legend of One Eye grew just as the grizzly grew larger, more powerful, and more menacing every year. So potent is this legendary bear, that in the end, even all his offspring were powerful, menacing, and one-eyed! One Eye's intelligence, grit, and ability to beat the odds is the a perfect representation of our company and brand.



OUR MISSION

To be the trusted partner of
industrial machinery operators around the world.

WHY OUR CUSTOMERS CHOOSE US

OEI magnetic filtration is the simplest way to achieve rapid payback with the lowest risk by extending the life of rotating equipment. As a result, safety is improved while substantially reducing costs and the environmental impact of operations.

SOLVING TOMORROW'S CHALLENGES, TODAY.

They say, "necessity is the mother of invention." Perhaps we invent to fulfill basic needs. We see a void and we believe we can make that void go away. Sometimes though, our goals are loftier than that, and we actually believe our world can become substantially better.

This is the true motivator behind invention.

However, some inventions are flawed – where obsolescence is planned and built into the solution itself. Occasionally, something as fundamental as the approach to solving a problem can cause other problems. OEI decided to take a loftier approach:
we believe we can solve tomorrow's challenges with today's technology, and magnetic filtration can address a variety of needs while also challenging our imagination's limitless possibilities where the industrial world is concerned.

For 18 years, we've focused on achieving rapid payback with minimal risk. We believed we could improve safety while also reducing the environmental impact of operations, and we've proven we can do it time and again. We strive for longer-lasting equipment with better reliability and reduced operating costs. This is what drives us. This is our better world.

This is our better solution. We keep a sharp focus on all of these goals because being mindful of the changing world enables us to identify and solve challenges that others may not have even seen yet.

PROVEN AROUND THE WORLD

GLOBAL SUCCESS ACROSS DIVERSE INDUSTRIES

OEI magnetic filtration is employed internationally by leaders in the oil and gas, mining, commercial and residential building, manufacturing, transportation, food, pharmaceutical, defense, petrochemical, and marine industries. OEI magnetic filtration systems apply to engines, gearboxes, hydraulics and pneumatics, processed products, cooling systems, and water systems. Each filter employs a magnetic filter element with a patented radial field configuration for high holding strength. These systems operate with minimal flow restriction and are proven to capture both ferrous and non-ferrous contamination in rotating equipment applications. The first OEI filtration system was installed in 2001, and has been proven successful in over 40 countries.

See proven results for your specific application at oneeyeindustries.com/results.

CANADIAN MANUFACTURING

OEI's corporate headquarters and manufacturing facility are located in Calgary, AB, Canada. Global OEI authorized distributors are trained to aid in determining the most effective filtration solution for their application.

One Eye Industries Inc.

4344 12th Street SE

Calgary, AB

T2G 3H9



WHY ONE EYE INDUSTRIES



PROFIT

PROFITABILITY

OEI designs and manufactures reusable magnetic filtration systems for equipment fluids. As the sustainable alternative to conventional filters, each filter is optimized for its application and exceeds fluid cleanliness standards. This helps to prevent failure, reduce unplanned maintenance, and minimize downtime. The initial cost of an OEI product is quickly realized in the continued savings the product brings to any reliability program.



SAFETY

WORKPLACE SAFETY

Preventing unplanned maintenance and extending service intervals results in reduced travel to and from sites, exposure to elements, treatment of toxic materials, and the opportunity for injury. Optimal fluid cleanliness extends the life of critical systems by preventing component, system, and eventual equipment failure and replacement. This allows for extended service intervals and a reduction in labour-intensive maintenance. Increased uptime ultimately means increased production.



ENVIRONMENT

ENVIRONMENTAL RESPONSIBILITY

With a product life of 18+ years, OEI technology helps to reduce your environmental footprint. As the alternative to conventional filtration, each filter is cleanable, requires minimal consumables, and operates without the use of utilities. Reusable components reduce the environmental impacts and costs associated with the disposal and replacement of conventional filters, fluids, and other equipment components.

SERVING INDUSTRIES AROUND THE WORLD



OIL & GAS
WELL STIMULATION

OEI provides unique solutions with proven success protecting high-pressure pumps, compressors, and injectors, as well as standard systems such as hydraulics, reservoirs, engines, and gearboxes.



OIL & GAS
PLANT

OEI offers innovative and performance-driven magnetic filters that reduce plant operating costs. OEI filters have application on all rotating equipment in midstream and downstream plants.



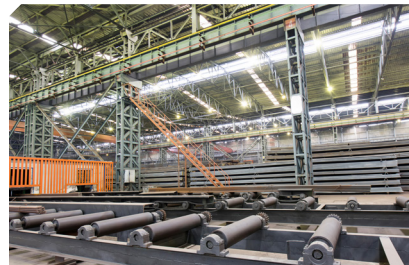
POWER
GENERATION

OEI has an extensive range of products tailored to meet the demanding applications of power generation facilities. Filters protect equipment, reduce downtime, and improve profitability.



PULP & PAPER

OEI magnetic filtration meets the demand for pulp and paper processing with minimal flow restriction and optimized application designs. These filters are perfect for pulp slurries and produced water.



MANUFACTURING

Effective filtration of industrial manufacturing fluids is critical to facility operations and product quality. Filtration is important for CNC machining, parts washing, hydraulics, water systems, and engines.



FOOD
PROCESSING

In food production, contamination can manifest in the water, air, blending, processing, storage, or transport of product. OEI filtration improves final product quality of fresh and processed foods.



Effective filtration within aircraft and military equipment is vital to ensure all systems are protected from wear contamination that damages system components and leads to equipment failure.



Mobile equipment costs are ever increasing from operation, labour requirements, and capital investments. OEI filters reduce costs by minimizing fluid, filter, and component replacement.



OEI filters prevent scored injectors, damaged engine components, poor lubrication quality, and deteriorated hydraulic components on aerospace, marine and vehicle equipment.



Boilers, chillers, water loops, and heat exchangers all require quality filtration of hard wear particles (iron, silica, sodium) to protect tight-tolerance components from wear and failure.



OEI cleanable filters require maintenance intervals of 6 months to 1 year. We strive to be the most trusted partner for maintenance technicians operating in the most demanding locations.



The global impacts of fuel emissions and water quality are provoking governments to source clean technologies for improved municipal operations. OEI meets the requirements for these types of initiatives.

PROVEN RESULTS IN DEMANDING APPLICATIONS



HYDRAULICS

Protect your hydraulic equipment from fluid degradation. Sub-micron filtration is critical to protect valves and bearings which ensures your hydraulic systems perform to expectations.



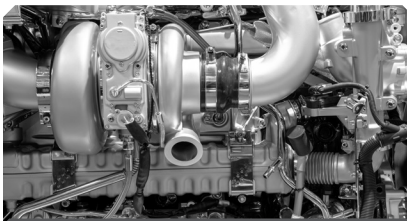
PNEUMATICS

Protect instrumentation such as valves, bearings, pneumatic motors, and air breathers. Solid particles contaminate air systems through ambient air intake, corrosion, and carbon build-up.



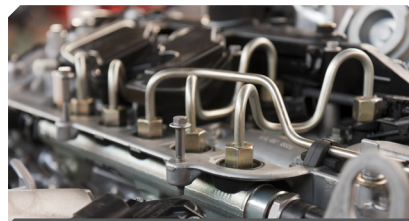
PUMPS

Protect pump components from wear contamination with the assurance that your pump won't cavitate. OEI filters operate with minimal flow restriction so they don't starve pumps.



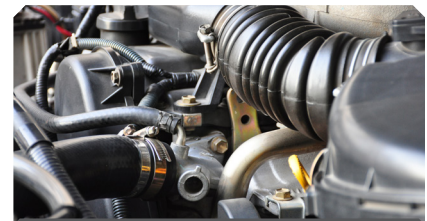
ENGINES

Extend service intervals. OEI technology applies to natural gas, diesel fuel, and steam turbine engines. The OEI advantage is high holding capacity filters with continuous filtration in bypass.



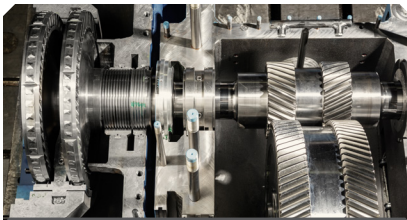
FUEL SYSTEMS

Reduce emissions by protecting high-pressure fuel injectors from sub-micron wear contamination that wears nozzles and degrades engine performance and burn efficiency.



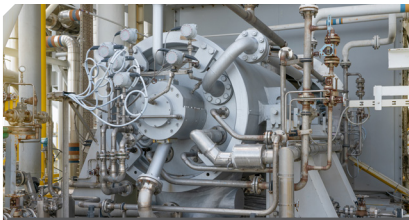
COOLANT LINES

Protect engines from glycol leakage that leads to sludge deposits, oil-flow restriction, cold engine seizures, additive precipitation, formation of corrosive acids, and oil balls.



GEARBOXES

Put an end to wear contamination that causes 80% of your equipment failures. Prevent the degradation of gearbox components that leads to catastrophic system failure.



COMPRESSORS

Eliminate engine lube oil degradation. Protect close tolerance components, like seals and valves, that are critical to the operation of compressors.



TOTAL PROTECTION KITS

Protect mobile equipment bumper to bumper. Magnetic filtration kits protect all system fluids: coolant, hydraulic fluid, water, fuel, and lube oil.



PROCESS & UTILITY WATER SYSTEMS

Protect utility and process water from rust and corrosion contamination. Common applications are cooling lines, boiler feed lines, reservoirs, and process water lines.



PRODUCT LINES

Successfully filter pulp slurry, production materials, foods, or fluids. OEI filters are designed to meet application parameters such as flow rate, viscosity, and pressure. OEI has proven success improving final product quality in various production applications.



PARTS WASHERS

Move away from conventional bag filters to improve product quality and earn repeat sales. Contaminated washer fluid is the reason why machined products fail painting and final quality control.



MILLING MACHINES

Improve the quality of cooling/cutting oil used in your CNC machines to extend operating life, ensure efficient heat transfer, prevent re-cutting or welding of filings, and reduce the risk of tooling fracture.



SUMPS & RESERVOIRS

Protect your mobile and stationary equipment by employing OEI magnetic filtration to remove the contamination that degrades components and builds up sludge in reservoirs and sumps.



HEAT EXCHANGERS

Improve heat transfer efficiency by capturing the particle contamination sourced from airborne entry, corrosion contamination, and mineral deposits.

CORE TECHNOLOGY

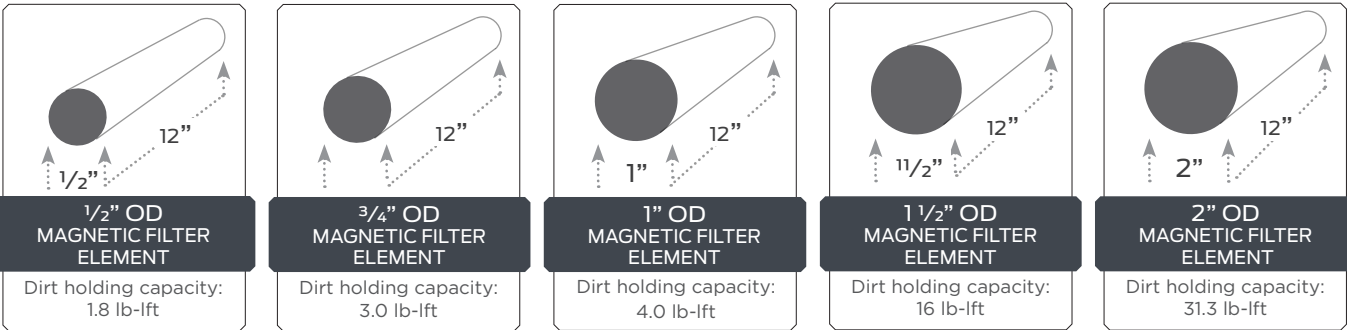
DESCRIPTION

The patented magnetic filter element attracts ferrous wear particles down to 4 microns and below with up to 95+% efficiency. The magnetic filter element attracts both ferrous and non-ferrous particles. The radial magnetic field design offers incredible holding strength and a high dirt holding capacity.

OEI magnetic filter elements are employed in various housings designed with calculated dwell times for optimal filtration. Magnetic filter elements come in five sizes from 1/2" to 2" outer diameter (OD) (shown below).



1" magnetic filter elements with varying loads of contamination. Dirt holding capacity*: 3.97 lb-ft.



*Dirt holding capacity is the quantity of contaminant mass a filter element can trap and hold before the maximum allowable back pressure, or delta P level, is reached.

CORE TECHNOLOGY BENEFITS

CLEAN AND REUSE

OEI products are reusable for 18+ years, and require minimal consumables. Conventional filters require frequent, costly changeouts, and disposal.

PREDICTIVE MAINTENANCE

OEI Magnetic Filter Elements are effective predictive maintenance tools when used for condition monitoring. When removed for inspection, magnetic filter elements will have varying quantities of contamination. Abnormally high quantities of contamination indicate component failure. The composition of contamination will identify which components are stressed, worn, or failing.

Visual analysis of the quantities of wear contamination collected on magnetic filter plugs can determine component failure. Analysis of wear particle compositions and sizes will determine early component wear.

GOES WHERE NO CONVENTIONAL FILTER HAS GONE BEFORE

OEI magnetic filters can be installed on suction lines to protect pumps without risk of cavitation. Unlike conventional filters, they accommodate space restrictions and unique applications such as splash oil gearboxes, reservoirs, and small coolant lines.

CAPTURES NON-FERROUS CONTAMINATION

Non-ferrous particles are magnetically captured because of cross-contamination. Particles become statically charged from flow velocity. This charge is a principal force of particle adhesion; iron particles contaminate non-ferrous particles by adhering to their statically charged surface. Another form of cross-contamination occurs when sub-micron iron particles embed in softer non-ferrous particles after abrasive impact.

PREVENT OXIDIZATION AND VARNISH

OEI effectively removes iron and steel particles under 10 microns that are known to promote oil oxidation because of their catalytic properties. Oxidation can deplete additives that protect against wear, corrosion, sludge, varnish, and viscosity changes that affect the thickness of films between bearing surfaces, friction, control of temperature, and energy consumption.

NO WORMHOLING OR CHANNELING

OEI filters eliminate the opportunity for wormholing and channeling that conventional paper, fiberglass, and polymer media filter elements are subject to.

Wormholing: when wear contamination punctures the filter media.

Channeling: when fluid flows through punctured holes because it takes the path of least resistance.



ORDERING

OEI DATA FORM

OEI magnetic filters are optimized for fluid viscosity, flow volume, flow rate, temperature, mobility, and mounting requirements. Use of the OEI Data Form will provide the necessary specifications for OEI to determine which product will provide optimal efficiency.

Inquire online at oneeyeindustries.com/order.

PROJECT INFORMATION

Project No.		Application	
Location		Fluid	
Client		Email	
Agent/Distributor		Phone	

PROBLEM / QUERY

--

TECHNICAL DATA

OPERATING DATA		
Operating Pressure		Unit
Operating Temp.		Unit
Max. Flow Rate		Unit
Viscosity		Unit
Liquid Density		Unit
Reservoir Size		Unit

DESIGN DATA		
Design Pressure		Unit
Design Temp.		Unit
Redundancy	Single-pass*	Multi-pass**
VESSEL CONNECTIONS		
	Size (in)	Port Type
Inlet		
Outlet		

ADDITIONAL INFORMATION & CROSS REFERENCES

--

*Single-pass: Fluid will pass through the magnetic filter once; ex. Transfer station.

**Multi-pass: Fluid will pass through the magnetic filter multiple times.

ALL PRODUCTS: OVERVIEW

One Eye Industries offers a series of products designed to help organizations achieve rapid payback with the lowest risk by extending the life of rotating equipment:

- 1 ADD-VANTAGE 9000 SERIES**
 The ADD-Vantage 9000 magnetic filtration system employs a magnetic element and a stainless steel cloth element in its design for high efficiency filtration and replaces conventional spin-on cartridge filters.
- 2 SCRUBBER SERIES**
 OEI Magnetic Filter Scrubbers employ an OEI Magnetic Filter Element in a special housing that ensures maximum dwell time for high efficiency filtration. These systems install on both suction and return lines of low and high pressure applications.
- 3 Y-STRAINER SERIES**
 OEI Magnetic Y-Strainers employ a magnetic filter element as a replacement of conventional Y-strainers. Designs with and without a screen are available.
- 4 FILTER PLUG SERIES**
 OEI Magnetic Filter Plugs employ rare-earth magnets and are the high quality replacement for OEM magnetic drain plugs. These filters are effective predictive maintenance tools when contamination is analyzed to determine component wear.
- 5 MAGNETIC FILTER PAD SERIES**
 OEI Magnetic Filter Pads enhance all spin-on filters by capturing the wear contamination (sludge) < 10 microns that disposable filters fail to remove. These filters extend fluid life by 2 - 3.
- 6 EMERGENCY MAGNETIC PATCH**
 The OEI Emergency Magnetic Patch provides an immediate, temporary solution to pipe wear or rupture by magnetically adhering to surfaces and preventing leakage. This patch helps to prevent unscheduled production.



- 7 SPECIALTY EQUIPMENT DESIGNS**
 OEI offers custom filters for OEM equipment applications such as chain cases, sump filters, transmission plates, pump jacks, and mud tanks. Other OEI specialty designs replace or enhance OEM conventional filters such as CAT, Komatsu, Parker, Schroeder or PALL.
- 8 KIDNEY LOOP SYSTEM SERIES**
 OEI Kidney Loop Systems are self-contained filtration units for offline filtration, fluid transfer of mobile or stationary equipment, and flushing of storage reservoirs. These systems employ multiple magnetic filters for filtration of wear contamination down to 4 microns and below.





SOLVING TOMORROW'S CHALLENGES, TODAY.

OneEyeIndustries.com
4344 12 Street SE
Calgary, AB T2G 3H9
Canada