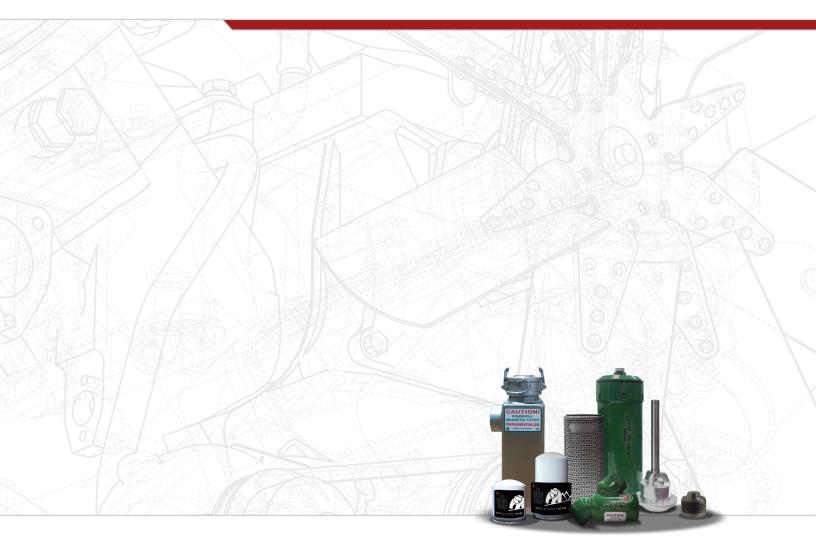


### PRODUCT CATALOG





### SOLVING TOMORROW'S CHALLENGES TODAY.

©2019 One Eye Industries Inc. All rights reserved.

### 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.



### TABLE OF CONTENTS

ORDER FORM	4
ONE EYE INDUSTRIES COMPANY AND PRODUCTS	5
CORE TECHNOLOGY: MAGNETIC FILTER ELEMENTS	8
ADD-VANTAGE 9000 SERIES	14
ADD-VANTAGE 9000-VS: STAINLESS STEEL	24
ADD-VANTAGE 9000-800: HIGH FLOW	26
ADD-VANTAGE 9000-HP: HIGH PRESSURE	28
ULTRASONIC ENVIRO-WASH 9000	30
SCRUBBER SERIES	32
MAGNETIC FILTER SCRUBBER-IL INLINE	38
Y-STRAINER SERIES	40
MAGNETIC FILTER PLUGS	44
BEAR TRAP MAGNETIC FILTER PADS	46
MAGNETIC PATCH	48
KIDNEY LOOP SYSTEMS	50
HYDRAULIC POWER UNIT (HPU)	54
SPECIALTY MOBILE APPLICATIONS	56
INDUSTRIAL AND FOOD PRODUCTION APPLICATIONS	58
SALES DEMONSTRATION KIT	60
TERMS AND CONDITIONS	62

### **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.

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

			Application	٦	
Location			Fluid		
Client			Email		
Agent/Distributor			Phone		
ROBLEM / QUERY					
ECHNICAL DATA					
OPERATING DATA DESIGN DATA					
Operating Pressure	Unit	Design	Pressure		Unit
Operating Temp.	Unit	Design	Temp.		Unit
Max. Flow Rate	Unit	Redund	ancy	Single-pass*	Multi-pass**
		VESSEL CONNECTIONS		IS	
Viscosity	Unit			Size (in)	Port Type
Liquid Density	Unit	Inlet			
1	Unit	Outlet			

### 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 prevents unscheduled production.

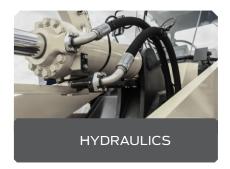


- 7 SPECIALTY EQUIPMENT DESIGNS
  OEI offers custom filters for OEM equipment
  applications such as chain cases, sump filters,
  transmission plates, pump jacks, and mud
  tanks. Other OEI specialty designs replace or
  enhance OEM conventional filters such as CAT,
  Komatsu, Parker, Schroeder or PALL.
- 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.

### PROVEN RESULTS IN DEMANDING APPLICATIONS



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



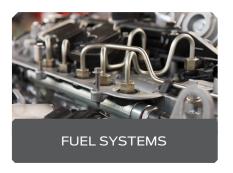
Extend service intervals. OEI technology applies to natural gas, diesel fuel, and steam turbine engines. The OEI advantage is high holding capacity filters with continuous filtration in bypass.



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.



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.



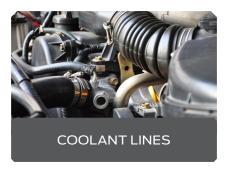
Reduce emissions by protecting high-pressure fuel injectors from sub-micron wear contamination that wears nozzles and degrades engine performance and burn efficiency.



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



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.



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.



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



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



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.



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.



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.



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.

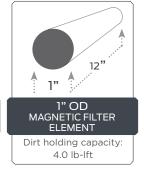
OEI magnetic filter elements are employed in various housings designed with calculated dwell times for optimal filtration. Magnetic filter elements come in five sizes from 1/2° to 2° outer diameter (OD) (shown below).



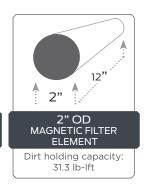
1" magnetic filter elements with varying loads of contamination. Dirt holding capacity\*: 3.97 lb-ft.











<sup>\*</sup>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.



### MAGNETIC FILTER ELEMENT

### **EFFICIENCY**

Ferrous Contamination Filtration	Captures ferrous wear particles down to 4 $\mu$ and below with up to 95+% efficiency.
Non-Ferrous Contamination Filtration	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.

### **OPERATING PARAMETERS**

Droccure Dating	Standard	< <b>34.5 bar</b> (500 psi)
Pressure Rating	High Pressure	< 689.5 bar (10000 psi)
Tomporature Dating	Standard	< 150° C (300° F)
Temperature Rating	High Heat	< 300° C (600° F)
Flow Rate	Housing Dependent	
Bypass Setting	Continuous	

### **CLEANING**

Remove the magnetic filter element from the housing, then remove the contamination with a lab cloth/non-fiber cloth that absorbs the contamination. Save the cloth in a sample bag to send for analysis.

Use the magnetic filter element as a predictive maintenance tool by removing contamination with a lab cloth or rubber glove and depositing it into a sample jar. Send the contamination for analysis to determine the source of equipment component wear and prevent system failure.

### **MATERIALS**

Magnetic Filter Element	Rare-earth magnets are configured in a patented radial field design	
Casing	Stainless Steel	

### LIMITED WARRANTY

### SERVICE LIFE

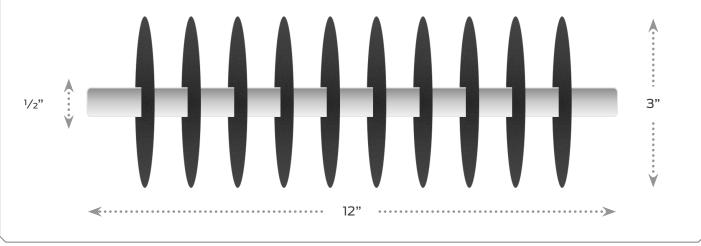
Magnetic Filter Element	3 years	Magnetic Filter Element	18+ years
-------------------------	---------	-------------------------	-----------

### ¹/₂" OD X 12" L

### **SPECIFICATIONS**

Holding Strength	57 ft-lb
Dirt Holding Capacity	1.8 lb-lft
Length Options	9", 12", 24"

Radial Magnetic Fields (12")	10
Radial Magnetic Field Diameter	3"
Magnetic Surface Area (12")	68.7 in³

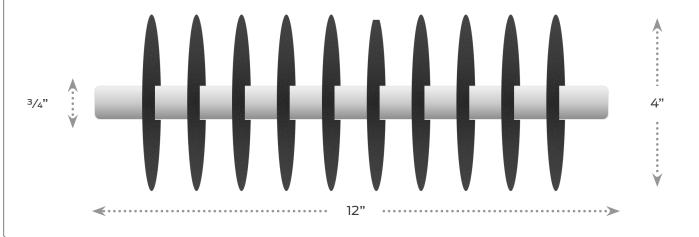


### 3/4" OD X 12" L

### **SPECIFICATIONS**

Holding Strength	123 ft-lb
Dirt Holding Capacity	3.0 lb-lft
Length Options	9", 12", 24", 36"

Radial Magnetic Fields (12")	10	
Radial Magnetic Field Diameter	4"	
Magnetic Surface Area (12")	125.2 in <sup>3</sup>	

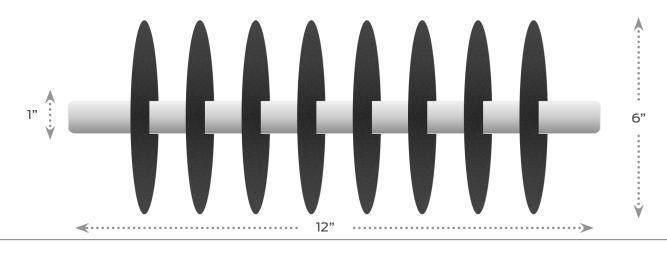


### 1" OD X 12" L

### **SPECIFICATIONS**

Holding Strength	270 ft-lb
Dirt Holding Capacity	4.0 lb-lft
Length Options	9", 12", 24", 36"

Radial Magnetic Fields (12")	8
Radial Magnetic Field Diameter	6"
Magnetic Surface Area (12")	195.5 in³



### 1 1/2" OD X 12" L

Holding Strength	500 ft-lb	Radial Magnetic Fields (12")	
Dirt Holding Capacity	16.0 lb-lft	Radial Magnetic Field Diameter	7"
ength Options	9", 12", 24", 36"	Magnetic Surface Area (12")	328.7 in <sup>3</sup>
		Parties Proposed Parties and P	



### 2" OD X 12" L

SPECIFICATIONS

Holding Strength 740 ft-lb Radial Magnetic Fields (12") 5
Radial Magnetic Field Diameter 8"
Magnetic Surface Area (12") 420.9 in<sup>3</sup>

# ONE EYE INDUSTRIES MAGNETIC FILTRATION PRODUCTS



### MAGNETIC FILTRATION PRODUCTS

One Eye Industries offers a series of products designed to help you achieve rapid payback with the lowest risk by extending the life of rotating equipment. Whether you require the industry-leading ADD-Vantage 9000 magnetic filter, or a specialty design. OEI is your trusted partner for equipment reliability and machine operation.









REMOTE MOUNT SPIN-ON



LOW PRESSURE

SPECIALTY: CUSTOM MEDIUM PRESSURE

SPECIALTY: INLINE

HIGH PRESSURE

SPECIALTY: FUNNEL





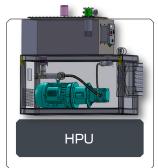












## ONE EYE INDUSTRIES ADD-VANTAGE 9000 SERIES



### **DESCRIPTION**

The ADD-Vantage 9000 includes OEI's patented magnetic filter element as well as a stainless steel cloth element. Systems are optimized for fluid viscosity, flow volume, flow rate, temperature, mobility, and mounting requirements. Depending on the application, both "inside-out" and "outside-in" flow control designs are offered.

### **BENEFITS**

- » High holding capacity allows for extended planned maintenance periods
- » Flows 43% more fluid or lube oil than conventional filters
- » Continuous filtration in bypass
- » Installs the same as conventional filters, no retrofitting required



### FLOW CONTROL

- "Inside-out" flow control designs are recommended because the magnetic filter element is the primary filter. Its high holding capacity allows for extended operating life of the stainless steel cloth element which minimizes bypassing and extends cleaning intervals.
- "Outside-in" flow control operates with the stainless steel cloth element as the initial filter. The magnetic filter element acts as a secondary filter that enhances the systems filtration capability. If this filter goes into bypass, the magnetic filter element ensures continuous protection.

### **EFFICIENCY**

	Ferrous Contamination	Captures ferrous wear particles down to 4 $\mu$ and below with up to 95+% efficiency.
Magnetic Filter Element	Non-ferrous Contamination	Non-ferrous particles are magnetically captured because of cross-contamination from static charge or embedded ferrous particles.
Stainless Steel Cloth Element Absolute Rating Pleated, Flat Screen, Perforated	10 µ, 25 µ, 40 µ, 150 µ	BETA 200 Exceeds ISO 16889 Standards
Eco-Coreless Disposable Element Nominal Rating Available on the Inline High-flow,	> 10 µ	BETA 200
High-volume	10 μ, 25 μ	BETA 1000
Stainless steel Perforated Element	1/4", 1/8", 1/16"	



### ADD-VANTAGE 9000 STANDARD SPECIFICATIONS

### **OPERATING PARAMETERS**

D	Standard Heat	< 34.4 bar (500 psi) @ < 105° C (221° F)	
Pressure/Temperature Rating	High Heat	< <b>34.4 bar</b> (500 psi) @ < <b>204°</b> C (400° F)	
Viscosity Rating	< 1,000 cSt		
Bypass Settings	<ul><li>» 0.3 bar (5 psi)</li><li>» 1 bar (15 psi)</li></ul>	<ul><li>3 bar (45 psi )</li><li>4.5 bar (65 psi)</li></ul>	

### **CLEANING**

- » Magnetic Filter Element: Remove the contamination with a lab cloth/non-fiber cloth that absorbs the contamination. Save the cloth in a sample bag to send for analysis.
- » Stainless Steel Cloth Element: Separate the filter element from the bypass assembly and clean with a solvent, soap and water, a parts washer, or ultrasonically. Then let the element air dry.
- Use the magnetic filter element as a predictive maintenance tool by removing contamination with a lab cloth or rubber glove and depositing it into a sample jar. Send the contamination for analysis to determine the source of equipment component wear and prevent system failure.

### MATERIALS

Magnetic Filter Element	Rare-earth magnets configured in a patented radial field design		
Filter Housing End Cons Mounts	Standard	Carbon Steel	
Filter Housing, End Caps, Mounts	Non-Corrosive	Stainless Steel	
Pleated, Flat Screen, Perforated Cloth-Media Element	Stainless Steel		
Eco-Coreless Disposable Elements Available on the Inline High-flow, High-volume	Z-media (Synthetic)		
	Standard	Buna	
Seals	High Heat	Viton	
	Sub-zero	EDPM	

### **INSTALLATION**

Port Size	1/2" - 3"				
Port Type	» NPT » ORB	» »	CD61 CD62	» »	BSPP BSPT Flange

Mount Type	»	Spin-on	»	Remote
	»	Inline	»	In-tank
Element Clearance	Hc	ousing leng	th + 4	4"

### LIMITED WARRANTY

Magnetic Filter Element	3 years
Housing and Components	l year

### SERVICE LIFE

Magnetic Filter Element	18+ years
Stainless Steel Cloth Element	5 years

### ADD-VANTAGE 9000 SERIES SPECIFICATIONS

TYPE	DESCRIPTION	PART NUMBER	PORT	HOUSING	FLOW	FLOW RATE @ 68 CST	TEMP. RATING	MAGNETIC FILTER ELEMENT
		9ADV9-#	N/A	3 ⁵⁄₀" OD x 7 ½" L	Outside-in	21 gpm (75 L/min)	105° C (221° F)	½" OD
DIRECT	ADD-Vantage 9000's that spin directly onto	9ADV9-#	N/A	41/4"ODx10" L	Outside-in	45 gpm (170 L/min)	105° C (221° F)	½" OD
SPIN-ON	OEM mounts.	9ADV9-#	N/A	5" OD x 9 7/8" L	Outside-in	50 gpm (189 L/min)	105° C (221° F)	³¼" OD
		9ADV9-#	N/A	5" OD x 12 ⁵/ <sub>8</sub> " L	Outside-in	60 gpm (227 L/min)	105° C (221° F)	³¼" OD
		9ADV9-388FL NPT2-B-HP	1/2" – 2"	5" OD x 12" L	Inside-out	60 gpm (227 L/min)	105° C (221° F)	³¼" OD
	Mounted ADD- Vantage to meet	9ADV9-388FF NPT2-B-HP	1/2" – 2"	5" OD x 24" L	Inside-out	120 gpm (454 L/min)	105° C (221° F)	³¼" OD
REMOTE	installation requirements of all fluid applications.	9ADV9-266FL- NPT2-B-HP	1/2" – 2"	5" OD x 12" L	Outside-in	60 gpm (227 L/min)	105° C (221° F)	³¼" OD
MOUNT SPIN-ON		9ADV9-266FF- NPT2-B-HP	1/2" – 2"	5" OD x 24" L	Outside-in	120 gpm (454 L/min)	105° C (221° F)	³¼" OD
	Screenless for low viscosity fluids like grease.	9ADV9-G12	1/2" – 2"	5" OD x 12" L	N/A	5 gpm (19 L/min)	105° C (221° F)	1" OD
	Duplex mount for continuous filtration.	9ADV9-D9L	1/2" – 2"	28" D x 13" W x 18" L	Inside-out	60 gpm (227 L/min)	105° C (221° F)	³¼" OD
		9ADV9-MIT-306	1/2" – 1"	5" OD x 11 ½" L	Inside-out	21 gpm (74 L/min)	105° C (221° F)	³/4" OD
IN-TANK	Tank-top, case-return	9ADV9-MIT-512	1/2" – 2"	5" OD x 19" L	Inside-out	60 gpm (227 L/min)	105° C (221° F)	1" OD
IN-TAINK	applications.	9ADV9-MIT-520	1/2" – 2"	5" OD x 27" L	Inside-out	120 gpm (454 L/min)	105° C (221° F)	1" OD
		9ADV9-MIT-816	1/2" – 3"	8" OD x 27" L	Inside-out	150 gpm (568 L/min)	105° C (221° F)	1½"OD
	Designed for high- volume, high-flow applications like	9ADV9-820	1" – 3"	8" W x 14" D x 30" L	Inside-out	150 gpm (568 L/min)	105° C (221° F)	1½"OD
	bulk fuel. This ADD- Vantage comes with an eco-coreless filter media option.	9ADV9-838	1" – 3"	8" W x 17" D x 50" L	Inside-out	300 gpm (1136 L/min)	105° C (221° F)	1½"OD
INLINE		9ADV9-VS116	ן"	4" OD x 16" L	Inside-out	5 gpm (19 L/min)	75° C (167° F)	½" OD
	Stainless Steel construction for water applications.	9ADV9-VS216	ן"	4" OD x 16" L	Inside-out	5 gpm (19 L/min)	75° C (167° F)	½" OD
	applications.	9ADV9-VS220	1"	4" OD x 26" L	Inside-out	10 gpm (38 L/min)	75º C (167º F)	½" OD
	Housing constructed for dispensing applications.	9ADV9-700	2"	5" OD x 16" L	Inside-out	10 gpm (227 L/min)	105° C (221° F)	<sup>3</sup> /4" OD

### **ADD-VANTAGE 9000 SERIES**

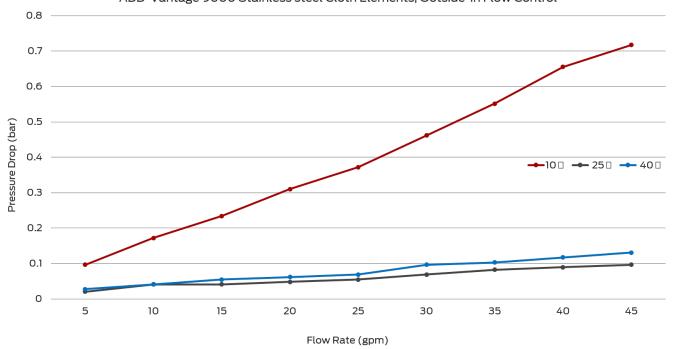
### STAINLESS STEEL CLOTH ELEMENT PRESSURE DIFFERENTIALS

### **OUTSIDE-IN FLOW CONTROL**

Housing Dimensions	5" OD x 12" L
Magnetic Element	³/4" OD
Element Efficiency	BETA 200
Fluid	Hydraulic Oil ISO 32

Flow Rate	Stainless Steel Cloth Element Micron Rating		
	10 p	25 μ	40 µ
<b>5 gpm</b>	<b>0.1 bar</b>	<b>0.0 bar</b>	<b>0.0 bar</b>
(18.9 L/min)	(1.4 psi)	(0.3 psi)	(0.4 psi)
<b>10 gpm</b>	<b>0.2 bar</b>	<b>0.0 bar</b>	<b>0.0 bar</b>
(37.9 L/min)	(2.5 psi)	(0.6 psi)	(0.6 psi)
<b>15 gpm</b>	<b>0.2 bar</b>	<b>0.0 bar</b>	<b>0.1 bar</b>
(56.8 L/min)	(3.4 psi)	(0.6 psi)	(0.8 psi)
<b>20 gpm</b>	<b>0.3 bar</b>	<b>0.0 bar</b>	<b>0.1 bar</b>
(79.7 L/min)	(4.5 psi)	(0.7 psi)	(0.9 psi)
<b>25 gpm</b>	<b>0.4 bar</b>	<b>0.1 bar</b>	<b>0.1 bar</b>
(94.6 L/min)	(5.4 psi)	(0.8 psi)	(1 psi)
<b>30 gpm</b>	<b>0.5 bar</b>	<b>0.1 bar</b>	<b>0.1 bar</b>
(113.6 L/min)	(6.7 psi)	(1 psi)	(1.4 psi)
<b>35 gpm</b>	<b>0.6 bar</b>	<b>0.1 bar</b>	<b>0.1 bar</b>
(132.5 L/min)	(8 psi)	(1.2 psi)	(1.5 psi)
<b>40 gpm</b>	<b>0.7 bar</b>	<b>0.1 bar</b>	<b>0.1 bar</b>
(151.4 L/min)	(9.5 psi)	(1.3 psi)	(1.7 psi)
<b>45 gpm</b>	<b>0.7 bar</b>	<b>0.1 bar</b>	<b>0.1 bar</b>
(170.3 L/min)	(10.4 psi)	(1.4 psi)	(1.9 psi)

### PRESSURE DIFFERENTIALS ADD-Vantage 9000 Stainless steel Cloth Elements, Outside-in Flow Control

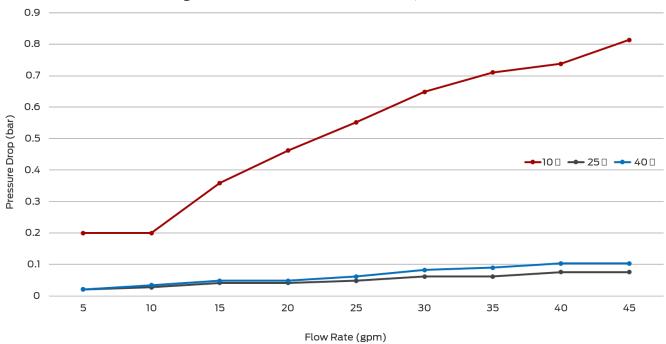


### **INSIDE-OUT FLOW CONTROL**

Housing Dimensions	5" OD x 12" L
Magnetic Flement	<sup>3</sup> /4" OD
Element Efficiency	BETA 200
Fluid	Hydraulic Oil ISO 32

Flow Rate	Stainless Steel Cloth Element Micron Rating			
	10 µ	25 µ	40 µ	
<b>5 gpm</b>	<b>0.2 bar</b>	<b>0.0 bar</b>	<b>0.0 bar</b>	
(18.9 L/min)	(2.9 psi)	(0.3 psi)	(0.3 psi)	
<b>10 gpm</b>	<b>0.3 bar</b>	<b>0.0 bar</b>	<b>0.0 bar</b>	
(37.9 L/min)	(3.8 psi)	(0.4 psi)	(0.5 psi)	
<b>15 gpm</b>	<b>0.4 bar</b>	<b>0.0 bar</b>	<b>0.0 bar</b>	
(56.8 L/min)	(5.2 psi)	(0.6 psi)	(0.7 psi)	
<b>20 gpm</b>	<b>0.5 bar</b>	<b>0.0 bar</b>	<b>0.0 bar</b>	
(79.7 L/min)	(6.7 psi)	(0.6 psi)	(0.7 psi)	
<b>25 gpm</b>	<b>0.6 bar</b>	<b>0.0 bar</b>	<b>0.1 bar</b>	
(94.6 L/min)	(8 psi)	(0.7 psi)	(0.9 psi)	
<b>30 gpm</b>	<b>0.7 bar</b>	<b>0.1 bar</b>	<b>0.1 bar</b>	
(113.6 L/min)	(9.4 psi)	(0.9 psi)	(1.2 psi)	
<b>35 gpm</b>	<b>0.7 bar</b>	<b>0.1 bar</b>	<b>0.1 bar</b>	
(132.5 L/min)	(10.3 psi)	(0.9 psi)	(1.3 psi)	
<b>40 gpm</b>	<b>0.7 bar</b>	<b>0.1 bar</b>	<b>0.1 bar</b>	
(151.4 L/min)	(10.7 psi)	(1.1 psi)	(1.5 psi)	
<b>45 gpm</b>	<b>0.8 bar</b>	<b>0.1 bar</b>	<b>0.1 bar</b>	
(170.3 L/min)	(11.8 psi)	(1.1 psi)	(1.5 psi)	

### PRESSURE DIFFERENTIALS ADD-Vantage 9000 Stainless Steel Cloth Elements, Inside-out Flow Control



### **ADD-VANTAGE 9000**

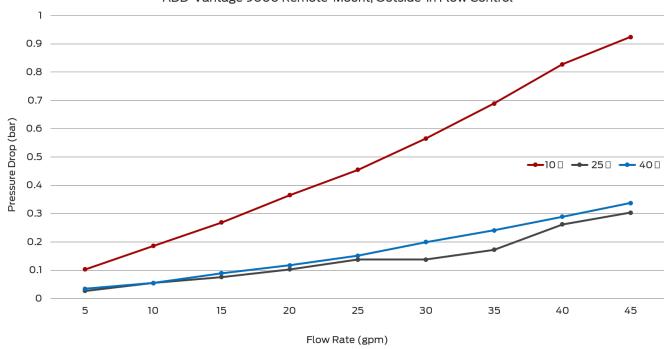
### REMOTE MOUNT PERFORMANCE DATA

### **OUTSIDE-IN FLOW CONTROL**

Housing Dimensions	5" OD x 12" L
Magnetic Element	<sup>3</sup> /4" OD
Element Efficiency	ВЕТА 200
Fluid	Hydraulic Oil ISO 32

Flow Rate	Stainless Steel Cloth Element Micron Rating			
	10 µ	25 μ	40 µ	
<b>5 gpm</b>	<b>0.1 bar</b> (1.5 psi)	<b>0.0 bar</b>	<b>0.0 bar</b>	
(18.9 L/min)		(0.4 psi)	(0.5 psi)	
<b>10 gpm</b>	<b>0.2 bar</b> (2.7 psi)	<b>0.1 bar</b>	<b>0.1 bar</b>	
(37.9 L/min)		(0.8 psi)	(0.8 psi)	
<b>15 gpm</b>	<b>0.3 bar</b>	<b>0.1 bar</b>	<b>0.1 bar</b>	
(56.8 L/min)	(3.9 psi)	(1.1 psi)	(1.3 psi)	
<b>20 gpm</b>	<b>0.4 bar</b> (5.3 psi)	<b>0.1 bar</b>	<b>0.1 bar</b>	
(79.7 L/min)		(1.5 psi)	(1.7 psi)	
<b>25 gpm</b>	<b>0.5 bar</b>	<b>0.1 bar</b>	<b>0.2 bar</b>	
(94.6 L/min)	(6.6 psi)	(2 psi)	(2.2 psi)	
<b>30 gpm</b>	<b>0.6 bar</b>	<b>0.2 bar</b>	<b>0.2 bar</b>	
(113.6 L/min)	(8.2 psi)	(2.5 psi)	(2.9 psi)	
<b>35 gpm</b>	<b>0.7 bar</b> (10 psi)	<b>0.2 bar</b>	<b>0.2 bar</b>	
(132.5 L/min)		(3.2 psi)	(3.5 psi)	
<b>40 gpm</b>	<b>0.8 bar</b>	<b>0.3 bar</b>	<b>0.3 bar</b>	
(151.4 L/min)	(12 psi)	(3.8 psi)	(4.2 psi)	
<b>45 gpm</b>	<b>0.9 bar</b>	<b>0.3 bar</b>	<b>0.3 bar</b>	
(170.3 L/min)	(13.4 psi)	(4.4 psi)	(4.9 psi)	

### PRESSURE DIFFERENTIALS ADD-Vantage 9000 Remote Mount, Outside-in Flow Control

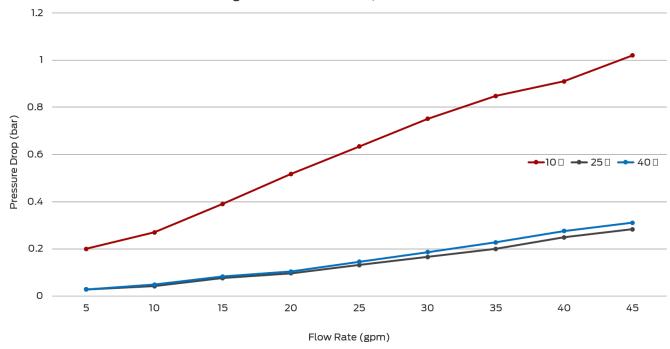


### **INSIDE-OUT FLOW CONTROL**

Housing Dimensions	5" OD x 12" L
Magnetic Element	<sup>3</sup> /4" OD
Element Efficiency	ВЕТА 200
Fluid	Hydraulic Oil ISO 32

Flow Rate	Stainless Steel Cloth Element Micron Rating				
	10 µ	25 μ	40 µ		
<b>5 gpm</b> (18.9 L/min)	<b>0.2 bar</b> (3 psi)	<b>0.0 bar</b> (0.4 psi)	<b>0.0 bar</b> (0.4 psi)		
<b>10 gpm</b>	<b>0.3 bar</b>	<b>0.0 bar</b>	<b>0.0 bar</b>		
(37.9 L/min)	(4 psi)	(0.6 psi)	(0.7 psi)		
<b>15 gpm</b>	<b>0.4 bar</b>	<b>0.1 bar</b>	<b>0.1 bar</b>		
(56.8 L/min)	(5.7 psi)	(1.1 psi)	(1.2 psi)		
<b>20 gpm</b>	<b>0.5 bar</b>	<b>0.1 bar</b>	<b>0.1 bar</b>		
(79.7 L/min)	(7.5 psi)	(1.4 psi)	(1.5 psi)		
<b>25 gpm</b>	<b>0.6 bar</b>	<b>0.1 bar</b>	<b>0.1 bar</b>		
(94.6 L/min)	(9.2 psi)	(1.9 psi)	(2.1 psi)		
<b>30 gpm</b>	<b>0.8 bar</b>	<b>0.2 bar</b>	<b>0.2 bar</b>		
(113.6 L/min)	(10.9 psi)	(2.4 psi)	(2.7 psi)		
<b>35 gpm</b>	<b>0.9 bar</b>	<b>0.2 bar</b>	<b>0.2 bar</b> (3.3 psi)		
(132.5 L/min)	(12.3 psi)	(2.9 psi)			
<b>40 gpm</b>	<b>0.9 bar</b>	<b>0.3 bar</b>	<b>0.3 bar</b>		
(151.4 L/min)	(13.2 psi)	(3.6 psi)	(4 psi)		
<b>45 gpm</b>	<b>1.0 bar</b>	<b>0.3 bar</b>	<b>0.2 bar</b>		
(170.3 L/min)	(14.8 psi)	(4.1 psi)	(4.5 psi)		

### PRESSURE DIFFERENTIALS ADD-Vantage 9000 Remote Mount, Inside-out Flow Control



### ADD-VANTAGE 9000-VS SERIES: STAINLESS STEEL

### **DESCRIPTION**

The ADD-Vantage 9000 includes OEI's patented magnetic filter element as well as a stainless steel cloth element. Systems are optimized for fluid viscosity, flow volume, flow rate, temperature, mobility, and mounting requirements. This specialty ADD-Vantage 9000 design is CRN certified.

### Flow Control

This ADD-Vantage 9000 is designed with "Inside-out" flow control designs with the magnetic filter element as the primary filter. Its high holding capacity allows for extended operating life of the stainless steel cloth element which minimizes bypassing and extends cleaning intervals.

### **BENEFITS**

- » High holding capacity allows for extended planned maintenance periods
- » Flows 43% more fluid or lube oil than conventional filters
- » Installs the same as conventional filters, no retrofitting required



### **EFFICIENCY**

Magnetic Filter Element	Ferrous Contamination	Captures ferrous wear particles down to 4 µ and below with up to 95+% efficiency.
	Non-ferrous Contamination	Non-ferrous particles are magnetically captured because of cross-contamination from static charge or embedded ferrous particles.
Stainless Steel Cloth Element Absolute Rating Flat Screen, Perforated	10 µ, 25 µ, 40 µ, 150 µ	BETA 200

### **OPERATING PARAMETERS**

Part Number	Port Size	Housing Size	Flow Control	Flow Rate @ 68 cSt	Pressure Rating	Temp. rating	Magnetic filter element
9ADV9-VS116	3/4"	4" OD x 16" L	Inside-out	5 gpm (19 L/min)	< 7 bar (100 psi)	75° C (167° F)	¹/₂" OD
9ADV9-VS216	]"	4" OD x 16" L	Inside-out	5 gpm (19 L/min)	< 7 bar (101 psi)	75° C (167° F)	1/2" OD
9ADV9-VS220	ון"	4" OD x 26" L	Inside-out	10 gpm (38 L/min)	< 7 bar (102 psi)	75° C (167° F)	1/2" OD

### **CLEANING**

- » Magnetic Filter Element: Remove the contamination with a lab cloth/non-fiber cloth that absorbs the contamination. Save the cloth in a sample bag to send for analysis.
- » Stainless Steel Cloth Element: Separate the filter element and clean with a solvent, soap and water, a parts washer, or ultrasonically. Then let the element air dry.
- » Use the magnetic filter element as a predictive maintenance tool by removing contamination with a lab cloth or rubber glove and depositing it into a sample jar. Send the contamination for analysis to determine the source of equipment component wear and prevent system failure.

### **MATERIALS**

Magnetic Filter Element	Rare-earth magnets configured in a patented radial field design
Housing	Stainless Steel
Flat Screen, Perforated, Cloth-Media Element	Stainless Steel
Seals	Buna

### **INSTALLATION**

		Mount Type	Inline
Port Type	NPT	Element Clearance	Housing length + 4"

SERVICE LIFE

### LIMITED WARRANTY

	agnetic Filter Element	3 years	- 1	Magnetic Filter Element	18+ years
Н	ousing and Components	l year		Stainless Steel Cloth Element	5 years



### ADD-VANTAGE 9000-800: HIGH FLOW

### **DESCRIPTION**

The ADD-Vantage 9000 includes OEI's patented magnetic filter element as well as a stainless steel cloth element. Systems are optimized for fluid viscosity, flow volume, flow rate, temperature, mobility, and mounting requirements. This specialty ADD-Vantage 9000 design is intended high flow, high volume, light viscosity fluids and oils.

#### Flow Control

This ADD-Vantage 9000 is designed with "Inside-out" flow control designs with the magnetic filter element as the primary filter. Its high holding capacity allows for extended operating life of the stainless steel cloth element which minimizes bypassing and extends cleaning intervals.

#### **BENEFITS**

- » High holding capacity allows for extended planned maintenance periods
- » Flows 43% more fluid or lube oil than conventional filters
- » Continuous filtration in bypass
- » Installs the same as conventional filters, no retrofitting required

BULK FUEL LUBE OIL

HYDRAULIC FLUID CHEMICALS

#### **CLEANING**

- » Magnetic Filter Element: Remove the contamination with a lab cloth/non-fiber cloth that absorbs the contamination. Save the cloth in a sample bag to send for analysis.
- » Stainless Steel Cloth Element: Separate the filter element from the bypass assembly and clean with a solvent, soap and water, a parts washer, or ultrasonically. Then let the element air dry.
- » Use the magnetic filter element as a predictive maintenance tool by removing contamination with a lab cloth or rubber glove and depositing it into a sample jar. Send the contamination for analysis to determine the source of equipment component wear and prevent system failure.



### **EFFICIENCY**

	Ferrous Contamination	Captures ferrous wear particles down to 4 $\mu$ and below with up to 95+% efficiency.		
Magnetic Filter Element	Non-ferrous Contamination	Non-ferrous particles are magnetically captured because of cross-contamination from static charge or embedded ferrous particles.		
Stainless Steel Cloth Element Absolute Rating Pleated, Flat Screen, Perforated	10 μ, 25 μ, 40 μ, 150 μ	BETA 200 Exceeds ISO 16889 Standards		
Eco-Coreless Disposable Element Nominal Rating Available on the Inline High-flow,	> 10 µ	BETA 200		
High-volume	10 μ, 25 μ BETA 1000			
Stainless steel Perforated Element	1/4" 1/8" 1/16"			

### **OPERATING PARAMETERS**

Part Number	Port Size	Housing Size	Flow Control	Flow Rate @ 68 cSt	Pressure Rating	Temp. rating	Magnetic filter element
9ADV9-820	1" - 3"	8" W x 14" D x 30" H	Inside-out	150 gpm (568 L/min)	< 34.4 bar (500 psi)	105° C (221° F)	1 1/2" OD
9ADV9-838	1" - 3"	8" W x 17" D x 50" H	Inside-out	300 gpm (1136 L/min)	< 34.4 bar (500 psi)	105° C (221° F)	1 ½" OD

### **MATERIALS**

Magnetic Filter Element	Rare-earth magnets configured in a patented radial field desig		
Filter Housing End Cans Mounts	Standard	Carbon Steel	
Filter Housing, End Caps, Mounts	Non-Corrosive	Stainless Steel	
Pleated, Flat Screen, Perforated Cloth-Media Element	Stainless Steel		
Eco-Coreless Disposable Elements Available on the Inline High-flow, High-volume	Z-media (Synthetic)		
	Standard	Buna	
Seals	High Heat	Viton	
	Sub-zero	EDPM	

### **INSTALLATION**

	<b>&gt;&gt;</b>	NPT	<b>&gt;&gt;</b>	CD61	»	BSPP	Mount Type	» Inline
Port Type	"	ODD	"	CDG	>>	BSPT		
	//	ORB	//	CD62	»	Flange	Element Clearance	Housing length + 4"

### LIMITED WARRANTY

Magnetic Filter Element	3 years	Magnetic Filter Element	18+ years
Housing and Components	1 year	Stainless Steel Cloth Element	5 years

**SERVICE LIFE** 

### ADD-VANTAGE 9000-HP: HIGH PRESSURE

### **DESCRIPTION**

The ADD-Vantage 9000 includes OEI's patented magnetic filter element as well as a stainless steel cloth element. Systems are optimized for fluid viscosity, flow volume, flow rate, temperature, mobility, and mounting requirements. This specialty ADD-Vantage 9000 design is rated and engineer stamped to 500 psi.

### FLOW CONTROL

- "Inside-out" flow control designs are recommended because the magnetic filter element is the primary filter. Its high holding capacity allows for extended operating life of the stainless steel cloth element which minimizes bypassing and extends cleaning intervals.
- "Outside-in" flow control operates with the stainless steel cloth element as the initial filter. The magnetic filter element acts as a secondary filter that enhances the systems filtration capability. If this filter goes into bypass, the magnetic filter element ensures continuous protection.

### **BENEFITS**

- » High holding capacity allows for extended planned maintenance periods
- » Flows 43% more fluid or lube oil than conventional filters
- » Continuous filtration in bypass
- » Installs the same as conventional filters, no retrofitting required



### **CLEANING**

- » Magnetic Filter Element: Remove the contamination with a lab cloth/non-fiber cloth that absorbs the contamination. Save the cloth in a sample bag to send for analysis.
- Stainless Steel Cloth Element: Separate the filter element from the bypass assembly and clean with a solvent, soap and water, a parts washer, or ultrasonically. Then let the element air dry.
- » Use the magnetic filter element as a predictive maintenance tool by removing contamination with a lab cloth or rubber glove and depositing it into a sample jar. Send the contamination for analysis to determine the source of equipment component wear and prevent system failure.



### **EFFICIENCY**

	Ferrous Contamination	Captures ferrous wear particles down to 4 µ and below with up to 95+% efficiency.	
Magnetic Filter Element	Non-ferrous Contamination	Non-ferrous particles are magnetically captured because of cross-contamination from static charge or embedded ferrous particles.	
Stainless Steel Cloth Element Absolute Rating Pleated, Flat Screen, Perforated	10 µ, 25 µ, 40 µ, 150 µ	BETA 200 Exceeds ISO 16889 Standards	
Eco-Coreless Disposable Element	> 10 µ	BETA 200	
Nominal Rating	10 μ, 25 μ	BETA 1000	
Stainless steel Perforated Element	1/4", 1/8", 1/16"		

### **OPERATING PARAMETERS**

Part Number	Port Size	Housing Size	Flow Control	Flow Rate @ 68 cSt	Pressure Rating	Temp. rating	Magnetic filter element
9ADV9-266FL- NPT2-B-HP	½" – 2"	5" OD x 12" L	Outside-in	60 gpm (227 L/min)	< 34.4 bar (500 psi)	105° C (221° F)	³¼" OD
9ADV9-266FF- NPT2-B-HP	½" – 2"	5" OD x 24" L	Outside-in	120 gpm (454 L/min)	< 34.4 bar (500 psi)	105° C (221° F)	³¼" OD
9ADV9-388FL- NPT2-B-HP	1/2" – 2"	5" OD x 12" L	Inside-out	60 gpm (227 L/min)	< 34.4 bar (500 psi)	105° C (221° F)	³¼" OD
9ADV9-388FF- NPT2-B-HP	1/2" – 2"	5" OD x 24" L	Inside-out	120 gpm (454 L/min)	< 34.4 bar (500 psi)	105° C (221° F)	³¼" OD

### **MATERIALS**

Magnetic Filter Element	Rare-earth magnets configured in a patented radial field design		
Filter Housing, End Caps, Mounts	Standard	Carbon Steel	
Fitter Housing, End Caps, Mounts	Non-Corrosive	Stainless Steel	
Pleated, Flat Screen, Perforated, Cloth-Media Element	Stainless Steel		
Eco-Coreless Disposable Elements	Z-media (Synthetic)		
	Standard	Buna	
Seals	High Heat	Viton	
	Sub-zero	EDPM	

### **INSTALLATION**

	»	NPT	<b>»</b>	CD61	»	BSPP	:	Mount Type	Inline
Port Type	"	ODB	<i>))</i>	CD63	>>	BSPT			
	<i>"</i>	ORB	"	CD62	»	Flange		Element Clearance	Housing length + 4"

### LIMITED WARRANTY

LIMITED WARRANTY		SERVICE LIFE		
Magnetic Filter Element	3 years	Magnetic Filter Element	18+ years	
Housing and Components	1 year	Stainless Steel Cloth Element	5 years	

### **ULTRASONIC ENVIRO-WASH 9000**

The OEI Ultrasonic Enviro-Wash 9000 is an integrated unit designed to remove contaminant particulates from stainless steel cloth elements. The system operates with OEI's biodegradable cleaning solution to remove carbon, soot, graphite, oils, solvent-based products, grease, soils, and protein deposits.

The system has two cleaning components: the biocleaning soak and spray cycle for standard cleanings, and the ultrasonic tank for heavy-duty cleanings.

### **OPERATING**

Cleaning System	Bio-cleaning Solution Required for Fill
Bio-cleaning Soak and Spray	25 gal
Ultrasonic Tank	10 gal



### Standard Cleaning

Every cleaning cycle:

» 30-minute cycle in the bio-cleaning soak and spray.

Every three cycles:

» 10 minutes in the ultrasonic tank followed by the 30-minute bio-cleaning soak and spray.

### Heavy-Duty Cleaning

Recommended for cleaning of heavy-duty substances like varnish.

- » 30-minute cleaning in the bio-cleaner soak and spray.
- » 10 minutes in the ultrasonic tank.

### **CAPACITY**

Cleaning System	Stainless Steel Cloth Element Length	Quantity	Installation
Bio-cleaning Soak and Spray	9 1/2"	14	Vertical
(7 tubes)	19"	7	Vertical
Ultrasonic Tank	9 1/2"	8	Vertical



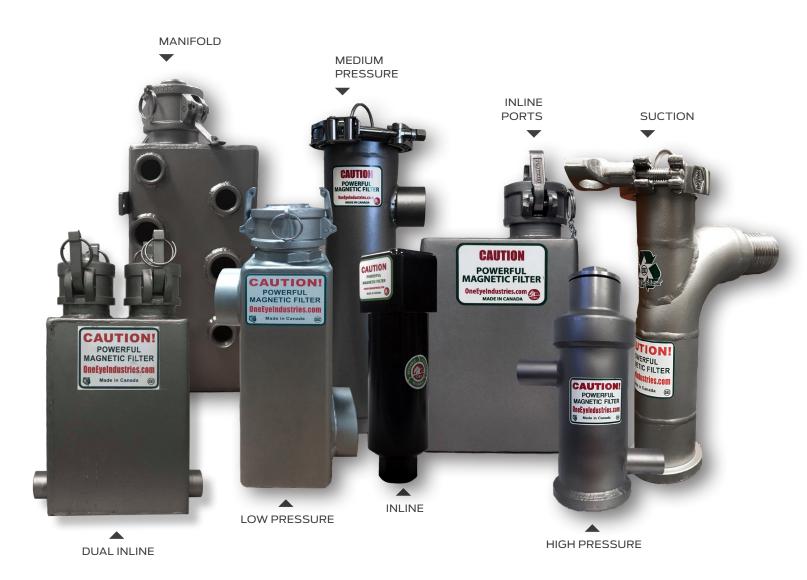
### **FEATURES**

- » 5" OD soak / dry tubes
- » Liquid spray hose
- » Ultrasonic generator
- » Ultrasonic tank
- » Washing reservoir
- » Power outlet

- » Clean element bags
- » Level indicator
- » Air spray gun & nozzles
- » Tube spray caps
- » 5" tube storage
- » Wheels



# ONE EYE INDUSTRIES SCRUBBER SERIES



### **SCRUBBER SERIES**

### DESCRIPTION

Magnetic filter scrubbers employ a magnetic filter element in a specialty housing designed to operate with minimal flow restriction and maximum fluid exposure for high-efficiency filtration. Flow is regulated by the diameter of the inlet-outlet supply pipe as well as fluid velocity. These systems install on suction and return lines of high-pressure and low-pressure applications.

### **BENEFITS**

- » Minimal flow restriction allows for suction line installation and pump protection.
- » High holding capacity allows for extended planned maintenance periods.
- » Acts as an effective predictive maintenance tool if contamination is collected and analyzed to determine sources of equipment component wear.

### **EFFICIENCY**

	Ferrous Contamination	Captures ferrous wear particles down to 4 µ and below with up to 95+% efficiency.
Magnetic Filter Element	Non-ferrous Contamination	Non-ferrous particles are magnetically captured because of cross-contamination from static charge or embedded ferrous particles.

### OPERATING PARAMETERS

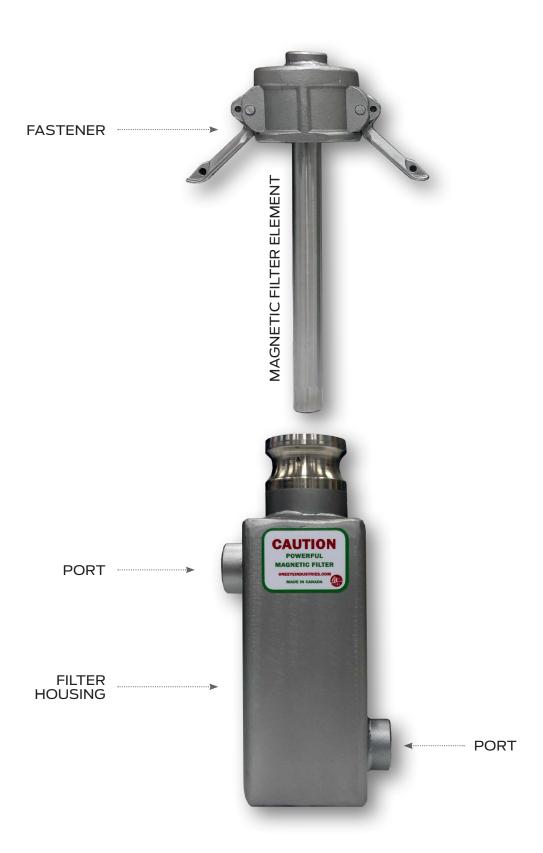
Drossuro / Tomporaturo Dating	Standard	< 10.3 bar (150 psi) @ < 105° C (221° F)		
Pressure / Temperature Rating	High Heat	< 34.4 bar (500 psi) @ < 204.4° C (400° F)		
Vice-sity Dating	Standard	< 680 cSt		
Viscosity Rating	Low Viscosity	< 2,000 cSt		
Bypass Settings	Continuous filtrat	ion with no internal bypassing		

#### **CLEANING**

Magnetic Filter Element: Remove the contamination by wiping downward with a lab cloth or rubber glove.

Use the magnetic filter element as a predictive maintenance tool by removing contamination with a lab cloth or rubber glove and depositing it into a sample jar. Send the contamination for analysis to determine the source of equipment component wear and prevent system failure.





Standard design with 180° offset ports

### STANDARD SCRUBBER SPECIFICATIONS

### **MATERIALS**

Magnetic Filter Element	Rare-earth magnets configured in a patented radial field design				
Filter Housing, Drain Plugs, End Caps, Mounts	Standard	Stainless Steel			
	Specialty Materials	<ul><li>» Monel</li><li>» Other alloys available</li></ul>			
	Standard Heat	Buna			
Seals	HIgh Heat	Viton			
	Sub-zero	EDPM			

### **CONFIGURATIONS**

Magnetic Filter Element	Quantities	» Single » Dual Inli » Dual » Triple			Dual Inlir Triple	ne » Quadruple			
	Lengths	<b>»</b>	9"	<b>»</b>	12"	» 24" » 36"			
Housings			Square			< 10.3 bar (150 psi)			
			Round			< 34.4 bar (500 psi)			
Factorors		Cam-lock				< 10.3 bar (150 psi)			
Fasteners			ORB, Flange			< 34.4 bar (500 psi)			
			Inline	<b>»</b>	Parallel Po	orts			
Ports		<b>»</b>	Offset	» »	0° Offset 90° Offse				
		» Multi-port		<b>»</b>	Manifold				

### **INSTALLATION**

Port Size Custom sizes available		' - 2 ½"						
Port Type	» »	NPT ORB	» »	CD61 CD62	» »	BSPT BSPP	<b>»</b>	Flange
Mount Type	» »	Inline Vertical	<b>»</b>	Horizontal	***************************************			
Element Clearance	Но	using length	+ 4"					

### LIMITED WARRANTY

Magnetic Filter Element	3 years
Housing and Components	1 year

### SERVICE LIFE

Magnetic Filter Element	18+ years



### SCRUBBER SERIES SPECIFICATIONS

		DESCRIPTION	PART NUMBER	PRESSURE RATING	TEMP. RATING	HOUSING SIZE	MAGNETIC FILTER ELEMENT
		OEI standard magnetic filter scrubber is designed with a square housing, typically with a camlock fastener. These units install with multiple port size, location, and fitting options.	5SC349S	< <b>10.3 bar</b> (150 psi)	105° C (221° F)	3" L x 3" W x 9" H	³¼" OD
-	LOW ESSURE		5SC12S	< <b>10.3 bar</b> (150 psi)	105° C (221° F)	4" L x 4" W x 12" H	1" OD
			5SC24S	< <b>10.3 bar</b> (150 psi)	105° C (221° F)	4" L x 4" W x 24" H	1" OD
MEDIUM PRESSURE		Fluid applications	5SC349RORB	< <b>34.4 bar</b> (500 psi)	105° C (221° F)	3" OD x 9" H	³¼" OD
		requiring pressures over 150 psi are designed with a round housing and ORB, or flange fastener.	5SC12RORB	< <b>34.4 bar</b> (500 psi)	105° C (221° F)	4" OD X 12" H	1" OD
			5SC24RORB	< <b>34.4 bar</b> (500 psi)	105° C (221° F)	4" OD x 24" H	1" OD
HIGH PRESSURE		Designed for high pressure applications up to 5000 psi.	5SMP	< <b>206.8 bar</b> (3000 psi)	<b>75° C</b> (167° F)	3 ½" OD x 17" H	1" OD
			5SHP	< 344.7 bar (5000 psi)	<b>75° C</b> (167° F)	3 ½" OD x 17" H	1" OD
	INLINE	With a billet aluminum housing, this scrubber installs inline for low-pressure, light viscosity, low-flow applications.	5IL04	<b>6.9 bar</b> (100 psi)	105° C (221° F)	2 ¼" OD x 6" H	1/2" OD
SPECIALTY			5IL05	<b>6.9 bar</b> (100 psi)	105° C (221° F)	2¼"ODx7¼"H	³¼" OD
			5IL905	<b>6.9 bar</b> (100 psi)	105° C (221° F)	2 ¼" OD x 9 ¼" H	³¼" OD
	FUNNEL	This scrubber installs inline on food and material production lines.	4FS#	<b>24.1 bar</b> (350 psi)	<b>121.1° C</b> (250° F)	4" OD x 27" H	1" OD

PART	Flow Rate (gpm)								
NUMBER		30 cSt	110 cSt	220 cSt	460 cSt	680 cSt	1,000 cSt		
5SC349S	Single-Pass	<b>8 gpm</b> (30.3 L/min)	<b>7 gpm</b> (26.9 L/min)	<b>б gpm</b> (22.7 L/min)	<b>5 gpm</b> (18.9 L/min)	<b>3 gpm</b> (11.4 L/min)	NA		
J3C3493	Multi-Pass	<b>30 gpm</b> (113.6 L/min)	<b>30 gpm</b> (113.6 L/min)	<b>15 gpm</b> (56.8 L/min)	<b>10 gpm</b> (37.9 L/min)	<b>5 gpm</b> (18.9 L/min)	NA		
5SC12S	Single-Pass	<b>21 gpm</b> (79.5 L/min)	<b>20 gpm</b> (75.7 L/min)	<b>15 gpm</b> (56.8 L/min)	<b>12 gpm</b> (45.4 L/min)	<b>6 gpm</b> (22.7 L/min)	<b>3 gpm</b> (11.4 L/min)		
J3C123	Multi-Pass	<b>81 gpm</b> (306.6 L/min)	<b>65 gpm</b> (246.1 L/min)	<b>41 gpm</b> (155.2 L/min)	<b>25 gpm</b> (94.6 L/min)	<b>13 gpm</b> (49,2 L/min)	<b>5 gpm</b> (18.9 L/min)		
5SC24S	Single-Pass	<b>40 gpm</b> (151.4 L/min)	<b>38 gpm</b> (143.9 L/min)	<b>30 gpm</b> (113.6 L/min)	<b>20 gpm</b> (75.7 L/min)	<b>10 gpm</b> (37.9 L/min)	<b>10 gpm</b> (37.9 L/min)		
J3C243	Multi-Pass	<b>95 gpm</b> (359.6 L/min)	<b>80 gpm</b> (302.8 L/min)	<b>76 gpm</b> (287.7 L/min)	<b>30 gpm</b> (113.6 L/min)	<b>16 gpm</b> (60.6 L/min)	<b>8 gpm</b> (30.3 L/min)		
5SC349RORB	Single-Pass	<b>8 gpm</b> (30.3 L/min)	<b>7 gpm</b> (26.9 L/min)	<b>6 gpm</b> (22.7 L/min)	<b>5 gpm</b> (18.9 L/min)	<b>3 gpm</b> (11.4 L/min)	NA		
33C349RORB	Multi-Pass	<b>30 gpm</b> (113.6 L/min)	<b>30 gpm</b> (113.6 L/min)	<b>15 gpm</b> (56.8 L/min)	<b>10 gpm</b> (37.9 L/min)	<b>5 gpm</b> (18.9 L/min)	NA		
5SC12RORB	Single-Pass	<b>21 gpm</b> (79.5 L/min)	<b>20 gpm</b> (75.7 L/min)	<b>15 gpm</b> (56.8 L/min)	<b>12 gpm</b> (45.4 L/min)	<b>6 gpm</b> (22.7 L/min)	<b>3 gpm</b> (11.4 L/min)		
SSCIZRORB	Multi-Pass	<b>81 gpm</b> (306.6 L/min)	<b>65 gpm</b> (246.1 L/min)	<b>41 gpm</b> (155.2 L/min)	<b>25 gpm</b> (94.6 L/min)	<b>13 gpm</b> (49.2 L/min)	<b>5 gpm</b> (18.9 L/min)		
5SC24RORB	Single-Pass	<b>40 gpm</b> (151.4 L/min)	<b>38 gpm</b> (143.9 L/min)	<b>30 gpm</b> (113.6 L/min)	<b>20 gpm</b> (75.7 L/min)	<b>10 gpm</b> (37.9 L/min)	<b>10 gpm</b> (37.9 L/min)		
J3C24RORB	Multi-Pass	<b>95 gpm</b> (359.6 L/min)	<b>80 gpm</b> (302.8 L/min)	<b>76 gpm</b> (287.7 L/min)	<b>30 gpm</b> (113.6 L/min)	<b>16 gpm</b> (60.6 L/min)	<b>8 gpm</b> (30.3 L/min)		
5SMP	Single-Pass	<b>7 gpm</b> (26.9 L/min)	<b>7 gpm</b> (26.9 L/min)	<b>6 gpm</b> (22.7 L/min)	<b>5 gpm</b> (18.9 L/min)	<b>3 gpm</b> (11.4 L/min)	NA		
JSIVIE	Multi-Pass	<b>30 gpm</b> (113.6 L/min)	<b>30 gpm</b> (113.6 L/min)	<b>15 gpm</b> (56.8 L/min)	<b>10 gpm</b> (37.9 L/min)	<b>5 gpm</b> (18.9 L/min)	NA		
5SHP	Single-Pass	<b>7 gpm</b> (26.9 L/min)	<b>7 gpm</b> (26.9 L/min)	<b>6 gpm</b> (22.7 L/min)	<b>5 gpm</b> (18.9 L/min)	<b>3 gpm</b> (11.4 L/min)	NA		
33i ii	Multi-Pass	<b>30 gpm</b> (113.6 L/min)	<b>30 gpm</b> (113.6 L/min)	<b>15 gpm</b> (56.8 L/min)	<b>10 gpm</b> (37.9 L/min)	<b>5 gpm</b> (18.9 L/min)	NA		
5IL04	Single-Pass	<b>2 gpm</b> (7.6 L/min)	NA	NA	NA	NA	NA		
SILO4	Multi-Pass	<b>4 gpm</b> (15.1 L/min)	NA	NA	NA	NA	NA		
5IL05	Single-Pass	<b>3 gpm</b> (11.4 L/min)	NA	NA	NA	NA	NA		
JILUJ	Multi-Pass	<b>6 gpm</b> (22.7 L/min)	NA	NA	NA	NA	NA		
5IL905	Single-Pass	<b>3 gpm</b> (11.4 L/min)	NA	NA	NA	NA	NA		
JILJUJ	Multi-Pass	<b>6 gpm</b> (22.7 L/min)	NA	NA	NA	NA	NA		
4FS4200	Single-Pass	<b>20 gpm</b> (75.7 L/min)	NA	NA	NA	NA	NA		
41 34200	Multi-Pass	NA	NA	NA	NA	NA	NA		

# MAGNETIC FILTER SCRUBBER - IL

#### DESCRIPTION

Magnetic filter scrubbers employ a magnetic filter element in a specialty housing designed to operate with minimal flow restriction and maximum fluid exposure for high-efficiency filtration. Flow is regulated by the diameter of the inlet-outlet supply pipe as well as fluid velocity. With a billet aluminum housing, this scrubber installs inline for low-pressure, light viscosity, low-flow applications.

#### **BENEFITS**

- » Minimal flow restriction allows for suction line installation and pump protection.
- » High holding capacity allows for extended planned maintenance periods.
- » Acts as an effective predictive maintenance tool if contamination is collected and analyzed to determine sources of equipment component wear.

FUEL COOLANT

ENGINE OIL CHEMICALS

HYDRAULIC FLUID WATER

#### **CLEANING**

Magnetic Filter Element: Remove the contamination with a lab cloth/non-fiber cloth that absorbs the contamination. Save the cloth in a sample bag to send for analysis.

Use the magnetic filter element as a predictive maintenance tool by removing contamination with a lab cloth or rubber glove and depositing it into a sample jar. Send the contamination for analysis to determine the source of equipment component wear and prevent system failure.



# **EFFICIENCY**

	Ferrous Contamination	Captures ferrous wear particles down to 4 µ and below with up to 95+% efficiency.
Magnetic Filter Element	Non-ferrous Contamination	Non-ferrous particles are magnetically captured because of cross-contamination from static charge or embedded ferrous particles.

# **OPERATING PARAMETERS**

Part Number	Port Size	Housing Size	Flow Rate		Pressure Rating	Temp. rating	Magnetic filter element
EII O /	3 <u>/,</u> "	21/"OD v 6"II	Single-pass	<b>2 gpm</b> (7.6 L/min)	6.9 bar	105° C	½" OD
5IL04	3/4"	2 ¼" OD x 6" H	Multi-pass	<b>4 gpm</b> (15.1 L/min)	(100 psi)	(221° F)	72 OD
EII OE	1"	2 4" OD v 71/ " I I	Single-pass	<b>3 gpm</b> (11.4 L/min)	6.9 bar	<b>105° C</b> (221° F)	³¼" OD
5IL05	I	2.4" OD x 71/4" H	Multi-pass	<b>6 gpm</b> (22.7 L/min)	(100 psi)		
5IL905	3 <u>/,</u> "	2.4 OD x 9 1/4" H	Single-pass	<b>3 gpm</b> (11.4 L/min)	6.9 bar	105° C	³¼" OD
סונאטט	<del>-</del> 7/4"	2.4 OD X 9 74 H	Multi-pass	<b>6 gpm</b> (22.7 L/min)	(100 psi)	(221° F)	-⁄⁄4 OD

# **MATERIALS**

Magnetic Filter Element	Rare-earth magnets configured in a patented radial field design.			
Filter Housing Drain Dlugs	Standard	Billet Aluminum		
Filter Housing, Drain Plugs, End Caps, Mounts	Specialty Materials	<ul><li>» Stainless Steel</li><li>» Other alloys available</li></ul>		
	Standard Heat	Buna		
Seals	HIgh Heat	Viton		
	Sub-zero	EDPM		

## **INSTALLATION**

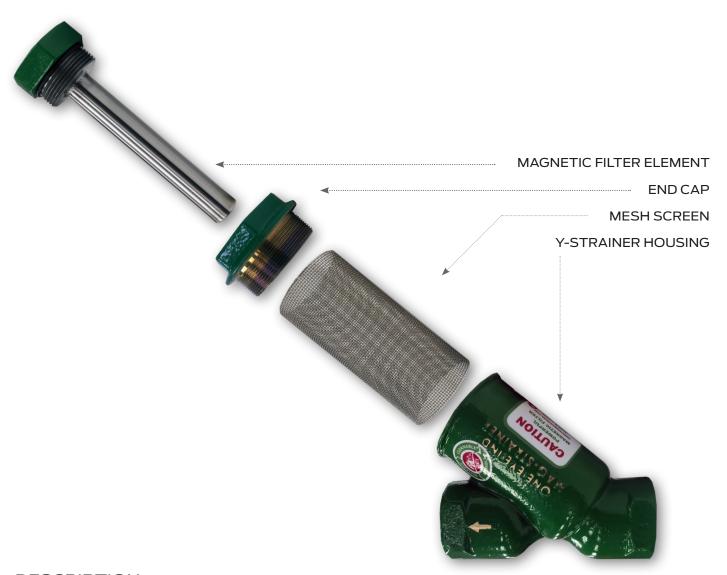
Port Type	ORB
Element Clearance	Housing length + 4"

## LIMITED WARRANTY

# SERVICE LIFE

Magnetic Filter Element	3 years		Magnetic Filter Element	18+ years
Housing and Components	1 year	•	•	•

# ONE EYE INDUSTRIES Y-STRAINER SERIES



#### **DESCRIPTION**

OEI Magnetic Y-Strainers are recommended for low-flow applications with space restrictions. This filter employs a magnetic filter element and mesh screen. Systems are designed for the application's fluid, flow volume, viscosity, mobility, and mounting requirements. Y-strainer designs are offered for cryogenic, high-pressure, and high-temperature applications.

#### **BENEFITS**

- » Requires minimal consumables.
- » High holding capacity allows for extended planned maintenance periods.

#### **EFFICIENCY**

	Ferrous Contamination	Captures ferrous wear particles down to 4 µ and below with up to 95+% efficiency.	
Magnetic Filter Element	Non-ferrous Contamination	Non-ferrous particles are magnetically captured because of cross contamination from static charge or embedded ferrous particles.	

#### **OPERATING**

Install the magnetic Y-strainer inline with the magnetic filter element on top for easy access when cleaning. For any installations on suction applications, the mesh screen must be removed to prevent cavitation.

#### Magnetic Filter Element:

» Remove the contamination with a lab cloth/non-fiber cloth that absorbs the contamination. Save the cloth in a sample bag to send for analysis.

#### Mesh Screen:

Clean with solvent, soap and water, a parts washer, or ultrasonically, then air dry.

Use the magnetic filter element as a predictive maintenance tool by removing contamination with a lab cloth or rubber glove and depositing it into a sample jar. Send the contamination for analysis to determine the source of equipment component wear and prevent system failure.

#### **MATERIALS**

Magnetic Filter Element		Rare-earth magnets configured in a patented radial field design.
Filter Housing, End Caps,	Standard	Bronze (end caps: carbon steel)
Mounts	Non-Corrosive	Stainless Steel
Mesh Screen 20, 30, 40, 60, 100 or X		
	Standard	Buna
Seals	High Heat	Viton
	Sub Zero	EDPM

#### **INSTALLATION**

Port Size	/ 2	- 4"	Element Clearance	Housing length + 4"
Ports	» »	NPT Flange	Mount Type	Inline

#### LIMITED WARRANTY

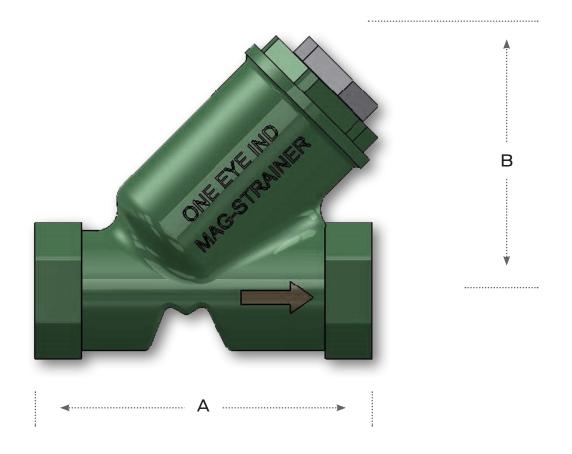
Magnetic Filter Element	3 years
Housing and components	1 year

#### **SERVICE LIFE**

Magnetic Filter Element	18+ years
Mesh Screen	5 years



# **BRONZE Y-STRAINERS**



# THREADED NPT

Pressure/Temperature Rating

NON SHOCK	20.7 bar (300 psi) @ 37.8° C (100° F)
STEAM RATED (WOG)	27.5 bar (400 psi) @ 65.6° C (150° F)
CRYOGENIC	20.7 bar (300 psi) @ -195.6° C (-320° F)

PORT	PART NUMBER		HOUSING S	SIZE	MAGNETIC FILTER ELEMENT
SIZE	STANDARD	CRYOGENIC	А	В	MAGNETIC FILTER ELEMENT
1"	5YB1T#	5YBC1T#	4 <sup>3</sup> / <sub>4</sub> "	4"	½" OD
1 1/2"	5YB112T#	5YBC112T#	5 ³/4"	5"	³/4 " OD
2"	5YB2T#	5YBC2T#	6 ³/4"	6"	1" OD
2 1/2"	5YB212T#	5YBC212T#	8"	6"	1" OD
3"	5YB3T#	5YBC3T#	9 1/2"	7"	1" OD
4"	5YB4T#	5YBC4T#	12"	10"	1 1⁄2" OD

# STAINLESS STEEL Y-STRAINERS



#### 150# ANSI RAISED FACE FLANGE

19 bar (275 psi) @ 37.8° C (100° F)

PORT	PART NUMBER	HOUSING	SIZE	MAGNETIC FILTER
SIZE	PART NOWIDER	А	В	ELEMENT
1"	5YS1F1#	6 %"	5"	1/2" OD
1 1/2"	5YS112F1#	7 <sup>3</sup> /4"	5 1/4"	1/2" OD
2"	5YS2F1#	7 <sup>7</sup> / <sub>8</sub> "	6"	1" OD

## 300# ANSI RAISED FACE FLANGE

49.6 bar (720 psi) @ 37.8° C (100° F)

PORT	PART NUMBER	HOUSING		MAGNETIC FILTER ELEMENT	
SIZE	PART NOWIDER	А	В		
2"	5YS2F3#	8 3/8"	6 1/4"	1" OD	

## 600# ANSI RAISED FACE FLANGE

99.3 bar (1440 psi) @ 37.8° C (100° F)

PORT	PART NUMBER	HOUSING		MAGNETIC FILTER	
SIZE	A A		В	ELEMENT	
1"	5YS1F6#	8 5/8"	5"	1/2" OD	
1 1/2"	5YS112F6#	9 <sup>7</sup> / <sub>8</sub> "	6"	1/2" OD	
2"	5YS2F6#	11 3/8"	6 <sup>3</sup> /4"	1" OD	

# 600# ANSI NPT

99.3 bar (1440 psi) @ 37.8° C (100° F)

PORT	PART NUMBER	HOUSING	O.——	MAGNETIC FILTER	
SIZE	PART NUMBER A		В	ELEMENT	
1"	5YS1T6#	6 %"	5"	1/2" OD	
2"	5YS2T6#	7 1/2"	6 1/2"	1" OD	



# MAGNETIC FILTER PLUGS

#### DESCRIPTION

OEI Magnetic Filter Plugs are the high quality replacement for OEM ceramic magnet drain plugs. Designed with the highest quality rare-earth magnets fastened to the plug body, the magnetic filter plug captures abrasive wear particles and prevents them from circulating throughout the system. OEI Magnetic Filter Plugs have a high holding capacity and they resist vibration and high-temperatures that typically reduce conventional strength over time.

OEI Magnetic Filter Plugs are effective predictive maintenance tools when integrated into maintenance programs.

#### **BENEFITS**

- » Extend the life of critical systems such as differentials, wheel motors, and final drives by indicating component wear and preventing system failures.
- » Do not degrade from heat and vibration.
- » Capture ferrous and non-ferrous contamination.

#### **APPLICATIONS**

**DRAIN PLUGS** 

**DIFFERENTIALS** 

TRANSFER CASE

WHEEL HUBS

WHEEL MOTORS

**TRANSMISSIONS** 







#### **EFFICIENCY**

	Ferrous Contamination	Captures ferrous wear particles down to 4 µ and below with up to 95+% efficiency.
Magnetic Filter Plug	Non-ferrous Contamination	Non-ferrous particles are magnetically captured because of cross-contamination from embedded ferrous particles.

# **OPERATING PARAMETERS**

Drossuro Pating	Standard	< 20.7 bar (300 psi)
Pressure Rating	High Pressure	< 413.7 bar (6000 psi)
	Standard	< 150° C (300° F)
Temperature Rating	High Heat	< 300° C (600° C)

#### **CLEANING**

Remove the contamination with a lab cloth/non-fiber cloth that absorbs the contamination. Save the cloth in a sample bag to send for analysis.

Best Practice: Place the entire magnetic filter plug into a sample bag and send it for analysis. Replace it with a new magnetic filter plug and recycle the old one after analysis.

## MATERIAL CONSTRUCTION

Magnetic Filter Plug	Standard	Rare-earth magnets		
Body	Ctandond	Carbon Steel		
Body		Stainless Steel		
	Standard	Buna		
Seals	High Heat	Viton		
	Sub-zero	EDPM		

# **INSTALLATION**

Seals		Stand	ard O-	ring		Reces	sed	O-ring	3	Bon	ded Se	al	
	NPT, BSP (in)	1/8	1/4	3/8	1/2	3/4		1	1 1/4	1 1/2	2	2 1/2	3+
Thread Sizes	Metric (mm)	10	12	14	16	18		20	22	26	27	30	33+
0.200	ORB	04	05	06	08	10		12	14	16	20	24	32+
Fasteners		NPT		BSPT		BSPP		OF	≀B	Met	ric	SAE	
Fastener <sup>-</sup>	Гуреѕ	Interna Squar			Exterr Squar			Int He	ernal x		Exte Hex	ernal	

#### LIMITED WARRANTY

#### **SERVICE LIFE**

ı	Magnetic Filter Plug	1 year	Magnetic Filter Plug	18+ years	



# THE BEAR TRAP MAGNETIC FILTER PADS

#### **DESCRIPTION**

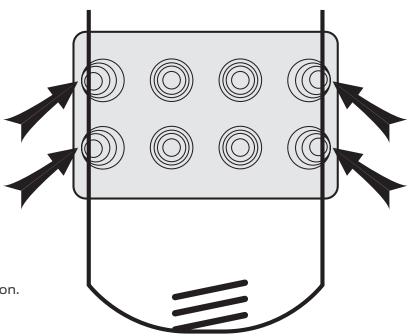
The Bear Trap Magnetic Filter Pads attach to existing disposable spinon filters to trap the contamination (sludge) that wears on system components and causes equipment failure. Capturing the wear contamination under 4 microns will extend fluid life (extending fluid changeout intervals) and equipment life (extending maintenance intervals)

#### **BENEFITS**

- » Extend the life of fluids and system components.
- » Extend maintenance intervals.
- » Reduce oil and fluid changes.
- » Does not degrade from heat and vibration.

#### **HOW IT WORKS**

Multiple high-strength magnetic fields trap damaging microscopic wear contaminants that a standard spin-on filter cannot.



#### **APPLICATIONS**

**TRANSMISSIONS** 

REAR END SPIN-ON FILTERS HYDRAULIC FLUID

**ENGINE OIL** 

COOLANT

FUEL

#### **EFFICIENCY**

Magnetic Filter Dad	Ferrous Contamination	Captures ferrous wear particles down to 4 $\mu$ and below with up to 95+% efficiency.		
Magnetic Filter Pad	Non-ferrous Contamination	Non-ferrous particles are magnetically captured because of cross-contamination from static charge or embedded ferrous particles.		



PART NUMBER	DIMENSIONS Length x Width x Thickness
BT500 Spin-on filters up to 3" OD	2 3/8" L x 2 3/8" W x 3/16" T
BT800 Spin-on filters 3" - 4" OD	3" L x 6" W x ³/₁₅" T
BT900 Spin-on filters 4" - 5" OD	4" L x 6" W x ⅔" T

## **OPERATING PARAMETERS**

Pressure Rating	Standard	bar (300 psi)	
Temperature Rating	Standard	< 150° C (300° F)	

# LIMITED WARRANTY

# SERVICE LIFE

Magnetic Filter Pad	1 year	Magnetic Filter Pad	18+ years
	:		:

# **MAGNETIC PATCH**

#### **DESCRIPTION**

OEI Magnetic Patches provide an immediate solution to pipe wear or rupture by magnetically adhering to surfaces and preventing leakage. This patch is a temporary solution to prevent unscheduled downtime during production.

# **BENEFITS**

- » Temporary solution that gives time to source parts and schedule repair.
- » Reduces material loss.
- » Reduces clean-up costs.
- » Reduces downtime.

# **APPLICATIONS**

STEEL PIPES

**SILOS** 

GRAVITY FEED SYSTEMS

**SLURRY PIPING** 

**DROP CHUTES** 

**CONVEYORS** 

**CHUTES** 

**TANKS** 





PART NUMBER	DIMENSIONS Length x Width x Thickness
1MP813	13" L x 8" W x ¾" T
1MP1713	17" L x 13" W x ¾" T

## **OPERATING PARAMETERS**

ı	Temperature Rating	Standard	< 150° C (300° F)	
---	--------------------	----------	-------------------	--

# LIMITED WARRANTY SERVICE LIFE

agnetic Filter Patch 18+ years	Magnetic Filter Patch	1 year	Magnetic Filter Patch
--------------------------------	-----------------------	--------	-----------------------

# ONE EYE INDUSTRIES KIDNEY LOOP SYSTEMS



# KIDNEY LOOP SYSTEMS

#### **DESCRIPTION**

OEI Kidney Loop Systems are self-contained filtration units for off-line filtration, fluid transfer of mobile or stationary equipment, and flushing of storage reservoirs. Systems are designed for fluid viscosity, temperature, mobility, and installation requirements.

#### Key parameters to identify when ordering;

- » Stationary/Mobile
- » Operating Temperature
- » Ambient Air Temperature

- » Power Source (AC/DC)
- » Fluid Viscosity
- » Required Heat Rejection

- » Voltage/Phase
- » Reservoir Size

#### 2-STAGE MAGNETIC FILTRATION

Magnetic Filter Scrubber (primary filter, pump and motor protection)

Magnetic Filter Scrubbers employ a magnetic filter element in a specialty housing designed to operate

with minimal flow restriction and maximum fluid dwell time (exposure of ferrous contamination to the magnetic filter element) for high-efficiency filtration.

ADD-Vantage 9000 (stainless-steel cloth element to capture uncharged non-ferrous particles) Employs OEI's patented magnetic filter element as the initial filter and a stainless steel cloth element as a secondary filter. The magnetic filter element high holding capacity allows for extended operating life of the stainless steel cloth element which minimizes bypassing and extends service/cleaning intervals.

#### **EFFICIENCY**

Magnetic Filter Element	Ferrous Contamination	Captures ferrous wear particles down to 4 $\mu$ and below with up to 95+% efficiency.	
	Non-ferrous Contamination	Non-ferrous particles are magnetically captured because of cross-contamination from static charge or embedded ferrous particles.	
Stainless Steel Cloth Element Absolute Rating Pleated, Flat Screen, Perforated	10 µ, 25 µ, 40 µ, 150 µ	BETA 200 Exceeds ISO 16889 Standards	
Temperature/Pressure	Standard Heat	< 105° C (221° F)	
Rating	High Heat	< 226.7° C (440° F)	
Flow Rate	< 100 gpm (379 L/min)		
Viscosity Rating	< 1,000 cSt		



# KIDNEY LOOP SYSTEM





## STANDARD FEATURES

- » Pressure gauge
- » Drip tray
- » Positive displacement gear pump
- » Electrical system
- » OEI Magnetic Filter Scrubber
- » OEI Add-Vantage 9000 with replacement stainless steel cloth element
- » Electric motor
- » Bleed valve
- » Sample port
- » Kill switch
- » Isolation ball valve
- » Sight glass

## **OPTIONAL FEATURES**

- » Particle counter
- » Additional stainless steel cloth elements
- » Cover
- » Lifting lugs
- » Div 1, Class 1 electrical requirements
- » Water absorbent filter elements
- » Pneumatic pump
- » Wheels

## MATERIAL CONSTRUCTION

Magnetic Filter Element	Rare-earth magnets configured in a patented radial field design		
Filter Housing, End Caps, Mounts	Standard	Carbon Steel	
Fitter Housing, End Caps, Mounts	Non-Corrosive	Stainless Steel	
Pleated, Flat Screen, or Perforated Cloth-Media Element	Stainless Steel		
Seals	Standard Temperature	Buna	
	High Temperature	Viton	
	Low Temperature	EDPM	
Frame	» Carbon Steel » Aluminum		
Hoses	Application dependent		

# **INSTALLATION**

Transport	» Dolly	» Mobile	» Fixed
Port Size	1/2" - 2"		
Fittings	» NPT » ORB » BSPP	» » »	BSPT JIC Quick Coupler
Element Clearance	Housing length + 4"		
Mount Type	Inline		

# SERVICE LIFE

Magnetic Filter Element	18+ years	
Stainless-steel Cloth Element	5 years	

# LIMITED WARRANTY

- » Other components are rated for their manufacturer's warranty and are the responsibility of the Purchaser to obtain.
- » Consumables are not under warranty.

Kidney Loop System	1 year
Filter Housings and Components	1 year
Magnetic Filter Elements	3 years



# HYDRAULIC POWER UNIT (HPU)

#### **DESCRIPTION**

3-Stage magnetic filtration for hydraulic power units (HPUs) ensures heavy-duty hydraulic equipment protection with minimal maintenance requirements. Cleaner fluids enhance the reliability of the HPU, optimizing it for remote, inaccessible worksites. The core technology found in all One Eye Industries products, is a magnetic filter element with a patented radial field magnetic configuration that captures wear particles down to 4 microns and below, with up to 95+% efficiency.

#### **BENEFITS**

- » Optimal hydraulic system reliability
- » Increased hydraulic equipment operating capability
- » Extended service intervals
- » Minimal storage, replacement, and disposal of filter elements
- » Reduced parts replacement
- » Minimal maintenance requirements
- » Designed for all HPU size requirements



# 3-STAGE MAGNETIC FILTRATION

#### STAGE 1:

#### PUMP AND MOTOR PROTECTION

Magnetic Scrubber (suction side)

Captures wear particles under 4 microns that easily damage pump and motor components. Contamination builds up in reservoirs as a sludge. If left unfiltered, it will wear on components causing failures. The suction scrubber is screenless and operates with minimal differential pressure. It is low profile in comparison to a magnetic Y-strainer making it ideal for installation after the reservoir to protect the pump and motor components.

# STAGE 3: RETURNING FLUID CONDITIONING

ADD-Vantage 9000 MIT

As fluids return to the reservoir, they require filtration and conditioning to remove the wear contamination produced during hydraulic system operation. The magnetic in-tank filter employs a stainless steel cloth element to capture large dirt particles, and a magnetic filter element that protects against wear particles down to 4 microns and below.

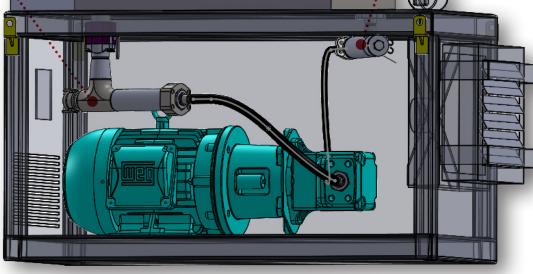
# STAGE 2: OUTGOING FLUID PROTECTION

Magnetic Scrubber (pressure side)

Once circulated through the HPU, fluids should proceed through a final filtration to protect valves and actuators from wear debris produced during operation. The magnetic pressure scrubber handles pressures up to 5000 psi and captures wear particles down

below before they continue downstream.

to 4 microns and



# SPECIALTY MOBILE APPLICATIONS

OEI offers customers sustainable, higher-efficiency alternatives to OEM magnetic filters, as well as specialty designs that enhances filtration of critical fluids on OEM mobile equipment. OEI designs replacements for all major filter manufacturers like PALL, Parker, CAT, Komatsu, and Schroeder.

OEI patented radial magnetic field design captures wear contamination down to 4 microns and below with up to 95+% efficiency. OEI magnetics are encased in stainless steel and do not fracture and chip, or degrade under temperature and vibration. OEI Magnetic Filter Elements are effective predictive maintenance tools when contamination is collected and sent for analysis to determine component wear and prevent failures.

#### **EXAMPLES OF CUSTOM PROJECTS:**



Low grade magnets lose strength under most equipment operating temperatures and vibrations. Often, OEM magnetic filters are manufactured with poor-quality magnets that cannot be encased without losing filtration capability. These magnets often fracture and become more severe wear contamination than the particulates they are intended to remove.

# WHEEL MOTOR LEVEL SAMPLE PORT MONITOR

This motor is optimized with a sample port to allow operators to extract oil samples without removing the filler cap. This system reduces the opportunity for foreign materials to further contaminate and degrade fluids during sampling.





#### ADD-VANTAGE 9000 MOUNTS

For ease of installation on various OEM equipment, OEI offers various ADD-Vantage 9000 remote mounts to replace OEM spin-on cartridge filters.

OEI manufactures direct replacement magnetic filter plugs for all major OEM ceramic plugs such as CAT, Komatsu, Lieberre, and LeTurneau. These plugs have application on hydraulic tanks and reservoirs, chain cases, differentials, wheel hubs, wheel motors, final drives, transmissions, and rear axles.

MAGNETIC FILTER PLUG &

**ELEMENT REPLACEMENTS** 



# SPECIALTY PRODUCTION APPLICATIONS

#### MAGNETIC SWEEPER

The Magnetic Sweeper is a manually operated filter used to remove the builtup contamination (sludge) in existing reservoirs such as hydraulic, fuel, and oil tanks. The flexible fiberglass handle allows for ease of maneuvering and reaching materials in the hardest to reach locations.

#### DRAW FILTER >

Draw filters offer a unique solution for production facilities. The system installs on product lines as a drop chute for product to fall past the magnetic filter elements. The magnetic filter elements capture contamination while product continues downstream. These systems are ideal for processed and fresh foods, minerals, powders, glass, and plastics.







# FUNNEL SCRUBBER

OEI offers both industrial-grade and food-grade funnel scrubbers for inline installation on sanitary and process product lines. These filters protect product from loose production materials and contamination that damages system components downstream and degrade final product quality. A variety of sanitary connections are available for ease of installation and service.

# MAGNETIC WAND ▶

This magnetic filter element acts as a wand for operators to use the force and manually check food quality and product for contamination and loose production materials.



# ONE EYE INDUSTRIES DISTRIBUTOR SALES KIT

One Eye Industries Product Demonstration Kits are a valuable tool to customers and distributors wishing to demonstrate the capabilities of OEI technology. Each kit is compact, portable, and equipped with a sample of OEI's core product lines. Kits include tools to showcase the comparison between OEM magnetic filtration and OEI's patented magnetic technology.



# SALES DEMONSTRATIONS

# **HOLDING STRENGTH TEST**

Fill the shaker jar with cooking oil to simulate rotating equipment fluid. Use the shaker jar in conjunction with the magnetic filter pads and plugs to compare OEM vs OEI magnetic technology. Shake the jar and hold the various magnetic filter products to the side to visually compare magnetic efficiencies.

#### RADIAL FIELD TEST

Test the radial magnetic fields by attaching the angle iron to the magnetic filter element, then attempt to remove it. To succeed, the angle iron must slide down the magnetic filter element and break each individual field. Because there are several fields of capture and dead space at the end of the magnetic filter element, the design allows for ease of cleaning.

# **DEMONSTRATION KIT: CONTENTS**

#### MAGNETIC FILTER PLUGS OEI 7NPT34ES, 7PKOM-0086 / OEM 3/4" PLUG

OEI Magnetic Filter Plugs employ rare-earth magnets and are the high quality replacement for OEM ceramic magnetic drain plugs. These filters are effective predictive maintenance tools when contamination is analyzed to determine component wear.

#### MAGNETIC FILTER ELEMENT 3RNC5812

OEI Magnetic Filter Elements are designed with a patented radial magnetic field configuration that offers high-efficiency filtration of particles down to 4 microns and below.

#### MAGNETIC FILTER PADS 1MPBT500/1MPBT800/1MPBT900

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 times that of a stand-alone disposable filter.

## MAGNETIC FILTER SCRUBBER 5SC347SCLNPT1

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.

#### ADD-VANTAGE 9000 9ADV9-1000

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.

#### MAGNETIC Y-STRAINER 5YBITA

OEI Magnetic Y-Strainers employ a magnetic filter element as a replacement of conventional Y-strainers. Designs with and without a screen are available.

#### RARE-EARTH MAGNET TEST

Place both the OEM and OEI magnetic filter plugs on the angle iron. Remove them individually and feel the difference in magnetic strength. Most OEM magnetic plugs employ ceramic magnets which degrade easily and lose strength under influence of temperature and vibration.

#### NON-FERROUS CONTAMINATION TEST

Take an OEI Magnetic Filter Element outside to the parking lot and rub it around in the dirt. Nano-sized carbon contamination from vehicle exhaust embeds into debris, enabling the capture of dirt, rocks, glass, and dust.



# **TERMS AND CONDITIONS**

#### ORDER FULFILLMENT

OEI will make every reasonable effort to fill orders promptly, but it is agreed that OEI will not be responsible for late delivery resulting from any cause beyond its control. OEI reserves the right to allocate its production and/or inventory in a manner it deems best. All standard Product(s) have a lead time of four (4) to six (6) weeks, while Kidney Loops have a lead time of eight (8) to ten (10) weeks. The lead time of custom Product(s) will be provided at the time of quote or purchase order confirmation. OEI will endeavor to deliver all Product(s) to the specified address before the due date but is not liable to force majeure. Unless specified by the purchaser at time of purchase order to hold Product(s) until the due date, OEI will organize the shipment of Product(s) EXW-Calgary as soon as the order is complete.

#### **SHIPMENT**

Product(s) are shipped Incoterms – Ex Works (EXW) from OEI's facility located in Calgary, Alberta, Canada. Purchase orders shall include the shipping address, shipping instructions, including if purchaser would like to add insurance, and all necessary shipping account numbers. OEI quotes will include estimated weights and dimensions when possible; however, confirmed weights and dimensions of packaged items will available at time of purchase order or invoice.

#### WARRANTY

Three (3) year limited warranty for OEI patented magnetic filter elements.

One (1) year limited warranty for all standard OEI housings and components (excluding consumables such as gaskets and o-rings).

Other components are rated for their manufacturer's warranty and are the responsibility of the Purchaser to obtain.

The exclusive remedy for breach of this warranty is replacement of any Product(s) which the Purchaser, within the warranty period, has notified the Seller in writing to be defective, and which the Seller has determined to be defective. The notice of the defect must include a proof of purchase. The Purchaser will be responsible for all costs of shipment of replacement parts.

In no event will the Seller's liability for any damage exceed the purchase price of the Product(s). SELLER WILL NOT BE LIABLE TO THE PURCHASER FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES INCLUDING, WITHOUT LIMITATION, LOST REVENUES OR PROFITS, EXPENSES RELATED TO TRAVEL, AND LOSS DUE TO PERSONAL INJURY. The sole purpose of the stipulated remedy shall be to provide the Purchaser with free replacement of defective parts in the manner provided herein. This exclusive remedy shall not be deemed to have failed of its essential purpose so long as the Seller is willing and able to replace defective parts in the prescribed manner.

SUCH WARRANTY IS EXTENDED ONLY TO THE ORIGINAL PURCHASER OF THE ONE EYE INDUSTRIES PRODUCT AND DOES NOT EXTEND TO A REPURCHASER OF THE LIMITATION, ANY WARRANTIES IN THIS AGREEMENT ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A SPECIFIC PURPOSE, AND SUCH OTHER WARRANTIES ARE EXPRESSLY DISCLAIMED. THE SELLER HAS NOT MADE AND DOES NOT HEREBY MAKE ANY REPRESENTATION, WARRANTY OR COVENANT WITH RESPECT TO THE CONDITION, QUALITY, DURABILITY, DESIGN, OPERATION, CAPACITY, FITNESS OR USE, OR SUITABILITY OF THE EQUIPMENT. THE WARRANTY DOES NOT COVER PARTS THAT ARE SUBJECT TO NORMAL WEAR AND/OR DETRIMENTAL EFFECTS OF EROSION. CORROSION. OR TEMPERATURE.

All shipments must be inspected within three (3) working days. All issues must be documented, and OEI notified by electronic mail.

Custom Product(s) may require a custom warranty.

#### **PAYMENT**

Standard Products(s) purchased will be paid for within thirty (30) days of OEI's invoice, unless otherwise stated on the sales order and/or invoice, which OEI shall be entitled to issue upon or following delivery of the Product(s). Notwithstanding that, all custom Product(s) require an upfront payment of fifty-percent (50%) by the purchaser upon issuing the purchase order with the remaining fifty-percent (50%) to be paid thirty (30) days after invoiced (upon or following delivery), unless otherwise stated on the sales order or invoice.

Late payment interest terms are two-percent (2%) per month.

Credit Card payments are subject to four-percent (4%) processing fee.

#### RETURNS

Without prejudice to its obligations under the relevant contract of sale with respect to warranty claims, OEI may voluntarily accept the return of OEI Product(s) from a customer, for a refund or partial refund, in its sole discretion. Refunds will be governed by the existing OEI policies at that time, including being subject to a thirty-percent (30%) restocking fee. The purchaser agrees to take on the full responsibilities of such a return and will ensure that the transaction is completed to both OEI's and the customer's satisfaction. OEI will be responsible for the quality of the Product(s), and replace, repair, return the defect, failure, or other kind of quality product issue, the return and replace, and repair cost will be borne by OEI. All custom Product(s) are not returnable.

#### **FOLLOW-UP**

Should the customer require any additional services from OEI, including training and installation, the timing shall be agreed to by all parties and the cost of such service may be subject to a daily rate for an OEI specialist plus expenses, including but not limited to, travel, accommodation and sustenance. Should the customer request to inspect the Product(s) prior to completion, the site visit must be approved by OEI and the timing be prearranged; all site security and safety rules and procedures must be complied to.

#### LIABILITY

Nothing in this section shall limit or reduce either party's liability for death, personal injury, fraud, or any other liability that cannot be lawfully limited or excluded.

Neither party shall be liable to the other for any of the foregoing losses (however classified at law): loss of reputation or goodwill; loss of anticipated savings; loss of use; loss of production; or loss of management time.

#### DISPUTE RESOLUTION

This Agreement shall be construed in accordance with the laws of the Province of Alberta, Canada; and the Parties n to the jurisdiction of the courts in Alberta for the purpose of this Agreement.

All disputes arising out of or in connection with the present contract shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce Canada by one or more arbitrators appointed in Accordance with the said Rules. Arbitral proceedings will take place in Canada and conducted in the English language. If for any reason the present contract is terminated, this arbitration agreement remains binding and valid on both Parties.

If any provision of this Agreement is declared invalid, illegal, or unenforceable by a court of competent jurisdiction, such provision shall be severed from the Agreement and all other provisions of the Agreement shall remain in full force and effect.





## SOLVING TOMORROW'S CHALLENGES, TODAY.

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