HYDAC INTERNATIONAL

Stat-X®

Element Technology

For Power Generation, Hydrostatic Drive & Injection Molding Systems and other challenging applications

STAT-X Element Technology

Proven Performance for critical Applications

The extensive use of low conductivity fluids significantly increases the likelihood of electrostatic discharge (ESD) making its prevention imperative. Now more than ever, innovative element technology is required to protect critical systems from catastrophic failure at the hands of ESD.

Proven performance shows that Stat-X is the only filter element technology capable of preventing both electrostatic charging (ESC) and discharging (ESD) phenomena under any and all operating conditions, including:

- Low temperature cold start (T = 30°F/-1°C)
- Extremely low oil conductivities (5 pS/m or less)
- High flow flushing operations
- Hydraulic loads well above 0.02 L/min/cm2 (cf. normal operation)

This results in:

- **Charge mitigation for all applications** (competitor versions are electrical conductive, effective in limited applications)
- **Reduction** of **oil degradation products** (varnish)
- **Increased oil service intervals**
- **Longer service life of bearings** and **prevention** of **bearing corrosion**
- **Safe operation in explosive atmosphere**
- **Reduction** of unplanned **downtimes**
- **Reduction** of **maintenance costs**
- **Longer maintenance intervals**
- **Maximum safety** for employees and machines, due to proven reduction of electrostatic arcing

Our solution eliminates static electricity at the source thereby preventing costly performance reduction, equipment failure, and serious safety hazards to both equipment operators and system components.

Industry

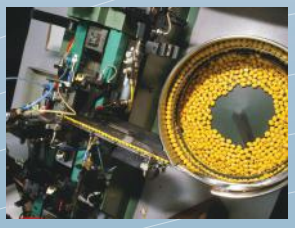
Application Examples

Combined Cycle Power Plants

- Liquid Fuel
- Gas and Steam Turbine Lube Oil
- Jacking Systems/Control Fluids
- Seal Oil

Hydroelectric Power Plants

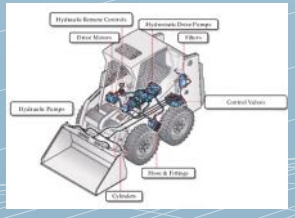
- Jacking Systems/Control Fluids
- Turbine Lubrications



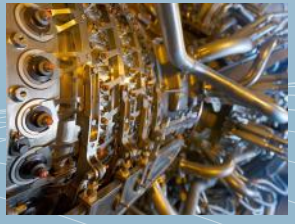
Injection Molding Systems

Material Handling

- Fork lifts in cold storage



Hydrostatic Drive Systems



Industrial Turbines

- Steam Turbine Lube Oil
- Gas Turbine Lube Oil
- Jacking Systems/ Control Fluids

COST SAVINGS ANALYSIS FOR POWER GEN

Filter Input Data

HYDAC Filter Model Code	12.01.18 D 20 XSX /-2.625
Net Price to Plant	$162.00
Competitor Filter Brand	Competitor A
Competitor Filter Model Code	20 µm element
Competitor Filter Cost	$75.00
Varnish Mitigation Unit Cost	$16,000.00
VMU Service Elements	$5,010.00
Element Changes Per Year	1

Application Input Data

Elements Per Lube Skid	6 elements
Current Oil Life	2.0 years
Expected Oil Life W/Stat-X	5.0 years
Lube Skid Oil Volume	3,000 gal
Oil Disposal Cost per Gallon	$1.55
New Oil Cost Per Gallon	$8.00
Production Cost Per Hour	$10,000.00
Production Downtime/Year	12 hours
Flushing Service Charge	$50,000.00
Cost of Servo Valve Failures	$3,500.00
Miscelaneous Downtime	0 hours

HYDAC Filter		**Competitor Filter**
12.01.18 D 20 XSX /-2.625	Model Code	20 µm element
6 elements	Elements Per Filter	6 elements
$972.00	Net Price to MRO for Element	$450.00
$0.00	VMU Service Elements/Year	$5,010.00
$972.00	**Total Element Cost/Year**	**$5,460.00**
Not Required - Stat-X	**Varnish Mitigation Unit**	**Required**
$0.00	VMU Cost	$16,000.00
	Increased Oil & Maintenance Costs (Yearly Average)	
5.00 years	Expected Oil Life	2.00 years
$4,800.00	Yearly Oil Cost	$12,000.00
$930.00	Yearly Cost to Dispose oil	$2,325.00
$10,000.00	Flushing Charges Per Year	$25,000.00
$0.00	Yearly Mechanical (Servo Valve) Failures	$3,500.00
$15,730.00	**Total**	**$42,825.00**
	Losses Due to Downtime and Failure to Start	
	Lost Production Hours Per Year	12 hours
	Lost Production Due to Component Failure	0 hours
$0.00	**Lost Revenue at $10,000 per hour**	**$120,000.00**
$16,702.00	**Yearly Lost Profit**	**$184,285.00**