Turbine Solutions

Lube Oil Temperature Control

- Self Contained
- Internally Sensed 3-Way Valves
- Externally Sensed 2-Way Valves Simple, rugged valves with integral temperature sensing elements. These valves are low maintenance and may be installed in a variety of environments.
- Actuated
- Externally Sensed 3-Way Valves Electrically or pneumatically actuated, fast response 3-way temperature control valves. For tighter temperature control, remote temperature sensing and low pressure drop applications, these valves use PID-based controllers for easy system integration and positioning.







Integrated Lube Oil Temperature & **Pressure Control With Filter Connection**

Manifold Valves

Combines temperature control, pressure control, relief valve and filter connections into a single compact manifold valve.

Filterstat Valves

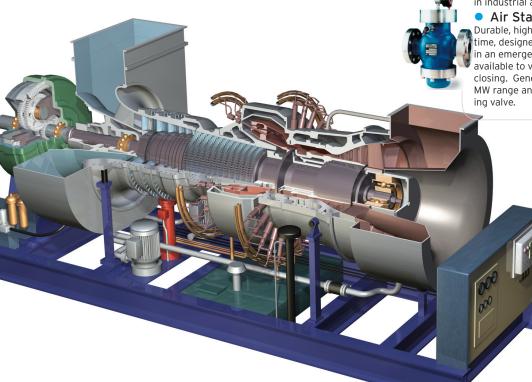
Combines temperature control, filter connection and relief capability into a single compact unit for smaller applications.





Custom Engineered Control & Monitoring Systems

Specialists in creating leading industry, hazardous area control and safety solutions based on industry-standard PLCs, field sensors and instrumentation.



Sensors & Switches

A full range of rugged, field-proven temperature, pressure and vibration sensors and switches that can be used with AMOT or third party control and monitoring systems. Often used as an integral part of hydraulic and pneumatic systems for steam pressure management, over-pressure protection and vibration monitoring to protect an operator's significant investment in turbine technology.

Temperature

- RTD and thermocouples
- pneumatic switches
- hvdromechanical switches
- electric switches
- eutectic switches

Pressure

- pressure and low pressure
- differential pressure
- pneumatic switches
- hydromechanical switches
- electric switches



- pneumatic
- electric
- impact



Fuel Gas Control & **Shut-off Valves**

 Fuel Metering Control Valves Balanced rotary valves with an electric stepper-motor

actuator. Used for accurate gas fuel control and metering in industrial and aeroderivative gas turbines.

Air Start & Fuel Shut-off Valves

Durable, high quality, compact valves with a fast close time, designed to instantly shut off fuel supply to a turbine in an emergency or overspeed situation. A version is also available to vent upstream fuel in the event of the valve closing. Generally used with gas turbines in the 10 to 30 MW range and often combined with the AMOT gas meter-

Pneumatic Panel Components

For use in hydraulic and pneumatic control systems, offering versatility in a wide variety of operating requirements. This includes superior performance in extreme or highly corrosive environ-

- 3 & 4-way Valves
- Indicators
- Indicating Relays



Oil Condition **Monitoring**

Metal Particle Detectors

Detect presence of metal particles in nonconductive lubrication fluids.









Turbine Solutions - Quick Reference Guide

Lube Oil Temperature Control Internally Sensed 3-Way Valves Description Model sizes: 11/2 - 8" rates: 68 - 1200 gpm C sizes: 1/2 - 11/2" rates: 6 - 54 gpm sizes: 11/4 - 11/2" rates: 40 - 75 gpm sizes: 4 - 6" rates: 345 - 1350 gpm sizes: ¾" rates: 2 - 23 gpm R sizes: 3/4 - 21/2" rates: 40 - 75 gpm Externally Sensed 2-Way Valves Model Description 2470 sizes: 1" rates: 10 - 35 gpm **Actuated 3-Way Valves** Model Description electric actuation Sizes: 2 - 18" rates: 37 - 8300 apm pneumatic actuation Sizes: 2 - 18" rates: 37 - 8300 gpm 8060 RTD temperature sensor - NEMA 4 electronic-pneumatic (I/P) Converter 8071 panel mount PID controller 8072 wall mount PID controller solid state relay module 8073 pneumatic controller SG80

Integrated Lube Oil Temperature & Pressure Control w/ Integrated Filter

| ressure control w/ integrated i no | | |
|------------------------------------|--|--|
| | Manifold Valves | |
| Model | Description | |
| 4500 | temperature / pressure / relief | |
| | size: 4" rates: 280 - 500 gpm | |
| 4501 | temperature / pressure / filter / relief | |
| | size: 2" rates: 63 - 120 gpm | |
| 4504 | temperature / pressure / filter / relief | |
| | size: 3" rates: 120 - 250 gpm | |
| • | Filterstat Valves | |
| Model | Description | |
| FJA | w/ filter differential pressure switch | |
| | Sizes: ½ & ¾" rates: 2 - 20 gpm | |
| FET | w/ heat exchanger relief valve | |
| | Sizes: 1¼ & 1½" rates: 40 - 75 gpm | |
| FE | w/ integral filter relief valve | |
| | Sizes: 1¼ & 1½" rates: 40 - 75 gpm | |
| FED | dual filter w/ integral filter relief | |
| | Sizes: 1¼ & 1½" rates: 40 - 75 gpm | |
| FMA | flanged connections | |

Sizes: 11/4 & 11/2" rates: 40 - 75 gpm

Custom Engineered Control & **Monitoring Systems**

AMOT has over 40 years experience and the expertise required in electrical and mechanical engineering to design, manufacture and commission hazardous area control and monitoring systems.

- relay systems
- marshalling cabinets
- pneumatic control and shutdown
- electronic control and shutdown
- advanced PLC and computer applications

Fuel Gas Control & Shut-off Valves Fuel Metering Control Valves

| | ruel Metering Contro |
|-------|------------------------|
| Model | Description |
| 8402 | gas fuel control valve |
| | sizes: 1, 2, & 3" |

| | 31203. 1, 2, 0 3 |
|-------|----------------------------------|
| • | Air Start & Fuel Shut-off valv |
| Model | Description |
| 2180E | diaphragm operated gas valve |
| | 2 & 3" in ductile iron, steel |
| 2410 | 2-way vented valve |
| | ½" in aluminum |
| 4418 | 2-way vented high pressure valve |
| | 1, 1½, & 2" stainless steel |
| 4320 | turbine fuel shutoff valve |
| | 2 & 3" cast steel |
| 4420 | turbine fuel shutoff valve |

2 & 3" stainless steel

| Pneur | matic Panel Components |
|-------|---------------------------------------|
| | 3 & 4 Way Valves |
| Model | Description |
| 4057 | aluminum 3-way manual or pilot valve |
| 4457 | stainless 3-way manual or pilot valve |
| 4058 | aluminum 4-way manual or pilot valve |
| 4458 | stainless 4-way manual or pilot valve |
| | Indicators |
| Model | Description |
| 4054 | trip indicator |
| 4101 | pneumatic indicator |
| 4229 | pneumatic indicator |
| 4429 | stainless pneumatic indicator |
| | Indicating Relays |
| Model | Description |
| 2400D | pneumatic indicating relay |

2400M space saver pneumatic indicating relay 4400M stainless space saver indicating relay

Oil Condition Monitorina Metal Particle Detectors

| _ | metal i al tiole Detectors |
|-------|---|
| Model | Description |
| MPD1C | industrial metal particle detector |
| MPD1P | high pressure metal particle detector |
| MPD1R | stainless steel metal particle detector |
| 8545B | metal particle detector controller |
| | |

Sensors & Switches Temperature

| wouei | Description | 23/200 |
|-------|---|--------|
| 2230 | 2-way temperature sensing valve | 4 |
| 2340 | heavy duty temperature/pressure switch | |
| 4021 | 3-way temperature sensing valve | |
| 4075 | 2-way high temperature sensing valve | |
| 4140 | temperature/pressure switch | |
| 4253 | explosion proof, single point temp switch | |
| 4270 | thermocouple & RTD - 316SS | |
| 4271 | thermocouple & RTD - spring loaded | |
| | | |

4303 eutectic temperature switch 4330 temperature sensing switch 4375 high temperature switch

8060 RTD temperature sensor - NEMA 4 8253 vibration resistant temperature switch 8254 vibration resistant hi temperature switch

Pressure

| Model | Description |
|-------|--|
| 672 | pressure sensing valve |
| 2340 | heavy duty temperature/pressure switch |
| 4023 | 3-way high pressure sensing valve |
| 4047 | low pressure valve |
| 4064 | differential pressure sensing valve |
| 4140 | pressure/temperature switch |

4143 differential pressure valve 4343 differential pressure switch 4364 differential pressure sensing switch

4372 pressure sensing switch 4423 3-way SS high pressure sensing valve

8252 vibration resistant pressure switch 8255 high pressure switch

8256 differential low pressure/vacuum switch

Vibration Model Description

| Model | Description |
|-------|--|
| 4109 | vibration switch - pneumatic or electric |
| 4121 | vibration switch - pneumatic or electric |
| 4294 | vibration switch - hazardous area |
| 8590 | 2-wire vibration transmitter |
| 8591 | 2-wire indicating vibration transmitter |

electronic impact transmitter

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