Orion Fire Engineering is an engineering company based in Sydney, Australia, which specialises in the design and manufacture of fire fighting equipment, predominantly for the oil and gas industry. Established in 1985, the company has developed into a market-leader in the fire industry, and has supplied products to protect major assets all over the world.

The Orion Jetty Monitor System is a highly effective fire monitor system for use on jetties. The system uses Orion’s renowned hazardous area monitors, and combines it with a robust control system to give the user a fire protection system that they can rely on for many years. The standard system consists of a monitor and single controller, however Orion can configure a system to suit almost any user requirements.

Hazardous Area Certified (ATEX and IECEx Exd Class 1 Zone 1)
The system has been specifically designed to be used in hazardous areas.

Flexible Control Options
A number of controllers can be connected to allow a single monitor to be controlled from a variety of locations, as well as being configured to control more than just the monitor.

Long Throw
The most efficient monitors and nozzles on the market give excellent and proven performance characteristics.

Corrosion Resistant
The monitors are designed so that there are no components exposed to the environment which could be subject to corrosion in a seawater environment, improving system reliability and reducing system down time.

Easy Commissioning
The system can easily be configured from a laptop, meaning shorter commissioning times.

Easy Installation
With only power and a TSP cable required to connect each device, installation times are minimised.

Low Cost of Ownership
With exemplary product development, the monitors have very low maintenance requirements, and therefore very high levels of system up time, allowing for years of trouble-free product use.

Visit our channel on YouTube
Our monitor system is designed so that each monitor is a completely self-contained system with a wide variety of optional equipment. Communications within the system can use RS485, fibre-optic, wireless networking or a mixture. A central computer can supervise multiple monitors and display monitor status and position.
The Orion hazardous area fire monitors use computer-controlled, motor-driven swivels for the most flexible remote control. The motor units are Hazardous area certified to IECEx Exd for Class 1, Zone 1 areas.

**System Benefits**

**Wide Movement Limits**

- +250° and -250° of horizontal movement
- +90° and -75° of vertical movement

**Low Long-term Maintenance Costs**
Corrosion resistant materials throughout, combined with very simple maintenance requirements result in many years of trouble free operation.

**Adjustable Limit Setting**
The monitors have a market leading operating range, and can be adjusted to have limit stops anywhere within the +/- 250° rotation range, or within the +90/-75° elevation range.

**Position Feedback**
Each motor on the system gives feedback on its operating status and position. This can be monitored by a computer to give the operator a visual representation of the monitors behaviour.

**Expansion Capability**
The system has been designed to easily accept future expansion requirements. (E.g. Additional control panels)

**Reduced Installation Time**
The system has been designed to provide the simplest installation possible. Each component is pre-wired, and only needs a minimal amount of cabling between them, decreasing material cost and installation time.

**Impressive Fault-finding built-in**
Built into the system is a unique fault-finding capability which identifies specific faults, reducing commissioning time and system downtime, as well as lowering maintenance costs.

**Automated Operation**
The monitors can be programmed to perform a variety of automated movements at the touch of a switch, including automatic oscillation and automatic parking after use.
Why choose an Orion Jetty System?

- Fully remotely adjustable between spray and jet
- Monitor oscillation (optional extra)
- Simple maintenance requirements
- Fully enclosed swivels with ball bearings
- Automatic parking (optional extra)
- System is completely IP66 rated
- Corrosion resistant Exd motor housings
- SS316L or Bronze LG2 waterway (other materials available on request)
- Simple Wiring (only 5 cores + E required)
- All sensors are located internally
Jetty Monitor Options

There are two standard options for use on the Orion Jetty Monitor System, the Warden range of Bronze (LG2 or AB2) monitors, or the Commando range of Stainless Steel (SS316L). Both options are hazardous area certified to IECEx for Class 1, Zone 1 areas.

Warden Exd Monitors
The Warden monitor range are 24VDC remote controlled monitors with brass/bronze enclosures. The monitors are available in the following materials:
- LG2 Bronze (C83600)
- Nickel Aluminium Bronze (C95800)

Commando Exd Monitors
The Commando monitor range are 24VDC remote controlled monitors with brass/bronze enclosures. The monitors are available in the following materials:
- Stainless Steel 316L (standard)
- Super Duplex (optional)
- Titanium (optional)

Performance Data

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Monitor Size</th>
<th>Flow Range</th>
<th>Throw Distance @ 700kPa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warden 3173EX</td>
<td>80mm</td>
<td>0-4500lpm</td>
<td>Up to 75m</td>
</tr>
<tr>
<td>Warden 4173EX</td>
<td>100mm</td>
<td>0-7500lpm</td>
<td>Up to 90m</td>
</tr>
<tr>
<td>Commando 3151EX</td>
<td>80mm</td>
<td>0-4500lpm</td>
<td>Up to 75m</td>
</tr>
<tr>
<td>Commando 4151EX</td>
<td>100mm</td>
<td>0-7500lpm</td>
<td>Up to 90m</td>
</tr>
<tr>
<td>Commando 6151EX</td>
<td>150mm</td>
<td>0-15000lpm</td>
<td>Up to 100m</td>
</tr>
</tbody>
</table>

Note: The throw distance depends on the nozzle selection, flow and operating pressure.
2 - Computer Monitoring System
A computer monitoring system which displays information such as current monitor position, valve output status, system pressures. It can also be used for fault-finding on the system, and for setting the oscillation and movement limits etc.

Extended System Capabilities
At Orion Fire, we have the ability to create custom solutions to meet your sites specialist needs and requirements. Contact Us to discuss your individual requirements. Options which you may consider are:

1 - Custom Control Panel
A customised master control panel which incorporates more than one monitor control, as well as controls for other parts of the system (e.g. deluge valves, foam valves, foam pumps etc)

2 - Computer Monitoring System
A computer monitoring system which displays information such as current monitor position, valve output status, system pressures. It can also be used for fault-finding on the system, and for setting the oscillation and movement limits etc.

3 - Radio Remote Controller
A radio remote which can control the monitors on site from anywhere you like. The remote controller is hazardous area certified.

Related Orion Products
As well as the Monitor Systems, Orion also designs and manufactures a range of related products which may help in your installation. These include:

Deluge Skids
Deluge skids for each monitor. These skids are fabricated and tested on site at Orion and are simply bolted down on site with the pipes/wiring connected, saving a lot of installation and testing time. These can be customised to suit your on-site requirements, including H60 rated.

Foam Proportioning
Orion manufacture a range of foam proportioning products, including bladder tanks, foam tanks, foam proportioners etc. Any of these products can be added to your Jetty system to increase system performance and reduce installation time.

Foam Concentrates
Orion offer a full range of Fire Fighting Foam Concentrates based on the latest C6 technology, including AFFF, ARAFFF and fluorine free foam options.
Where we protect major global assets