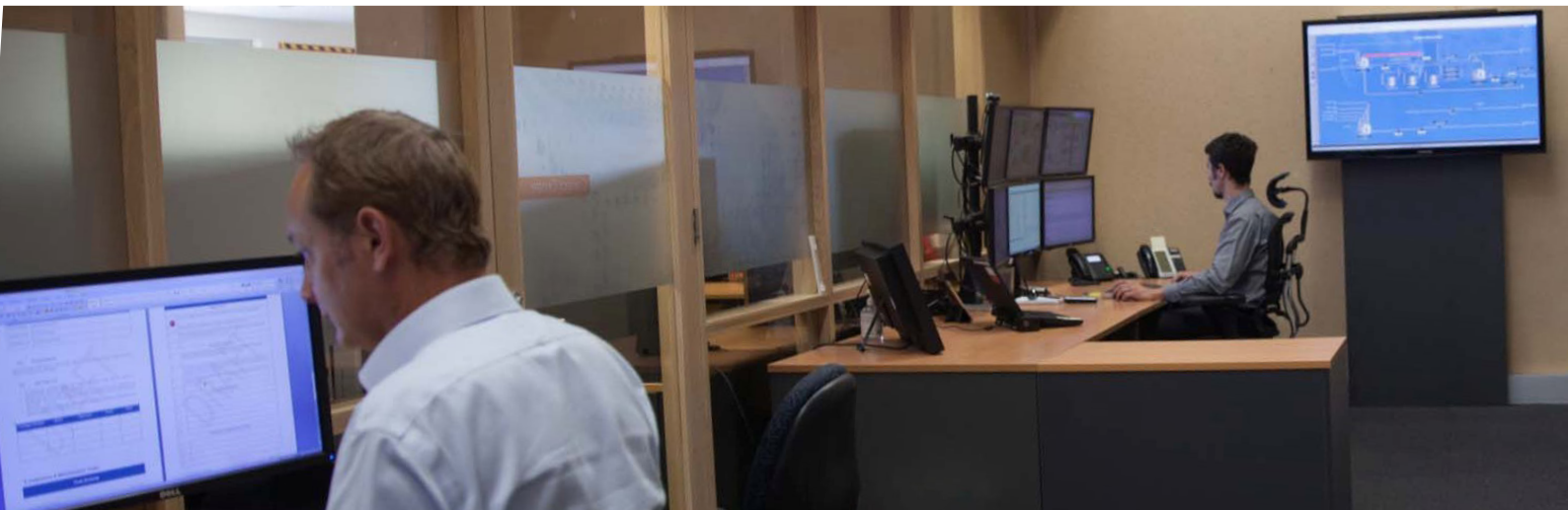


Operations and Maintenance Services

Optimising long term performance and
reliability of your water treatment plant



Our objective is to optimise the long term performance and reliability of your water treatment plant.

Osmoflo provides operations and maintenance services to approximately 100 plants and facilities around the globe. This has provided Osmoflo's customers with the ability to meet their water management requirements and their related business objectives on an ongoing basis.

Osmoflo holds extensive water management experience and has been operating and maintaining water treatment and desalination plants for over 20 years. In addition, we pride ourselves on our impressive safety track record, our safety focussed culture and ISO accredited management systems that have led to that industry leading performance.

The benefits of Osmoflo operating your plant include:

- Customised approach to suit your needs, internal capability and risk profile
- Optimised plant reliability and performance
- Minimised energy and chemical consumption
- Reduced brine discharge
- Optimised asset management with minimum whole of life cost
- Industry leading safety and environmental performance
- In-house process troubleshooting and reporting capability that is second to none

Operations Control Centres, PlantConnect® and OsmoView

Osmoflo offers complete plant monitoring and control solutions via our 24 hour manned Control Centres. These Control Centres utilise our proprietary PlantConnect software, which assists in the monitoring of plants across the globe.

Real time performance data from plants controlled through the Centres is consolidated and used to manage maintenance scheduling and to optimise overall management of the asset. Our team use this data to control product water quality and quantity, operational set points and plant status. This allows action to be taken immediately to alter critical parameters and mitigate the risk of non-compliant plant performance or unnecessary shut down.

Further, real time data can be trended on an ongoing basis and reviewed by specialist process engineers that understand the anomalies of treatment plant and membrane performance. This allows the plant to be operated in a mode that optimises long term cost of ownership.

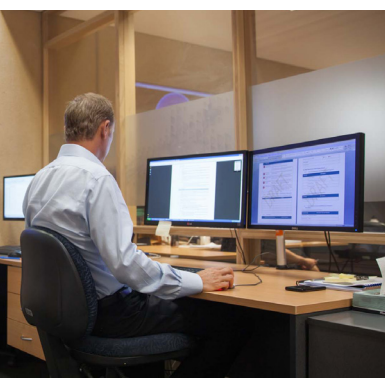
The 'OsmoView' smartphone app has recently been developed by Osmoflo to provide our customers with an innovative, fast and convenient new way to access critical alerts and operational data for their water treatment plants. Designed with a straightforward and user- friendly interface, the app is easy for users to navigate and understand.

Customers can view plant operating status, key performance information indicators, critical alarm status and response, and plant performance reports. Reports can vary in detail from basic production summaries to comprehensive performance analysis and recommendations for optimisation, depending on the level of service with Osmoflo. The app also allows customers to easily communicate directly with Osmoflo's 24x7 Control Centre for support.

Asset Management

Regardless of whether Osmoflo or its client is the ultimate owner of the plant and associated assets, Osmoflo takes a whole of life asset management approach with all of its operational projects. Good asset management commences with having clarity around the goals, objectives and desired service levels for a particular asset/plant.

This is then used to develop a comprehensive asset management approach that incorporates a preventative and corrective maintenance regime with appropriate 'triggers' for asset replacement in the medium to long term.



Osmoflo's primary asset management tool is a Computerised Maintenance Management System (CMMS) which is used for life cycle maintenance planning. This includes preventative maintenance, asset replacement planning and recording of unscheduled repair, breakdowns, inspection and calibration data. It is also used to help prepare the list of critical and operational spares required to ensure that plant availability requirements are met throughout the operational life of the asset.

Osmoflo's operators and service technicians utilise tablet-based devices fully enabled with our CMMS app. This ensures asset and maintenance management requirements are completed, captured and updated in real time.

Osmoflo has a strong commitment to best practice asset management and is currently working towards group-wide certification to the ISO 55000 series of standards for Asset Management Systems.

Spare Parts, Chemicals and Consumables

Osmoflo stocks an extensive range of spare parts, consumables and instruments that support reverse osmosis desalination plants as well as the associated pre and post treatment systems. These include the full range of cleaning, antiscalant, disinfection and pH correction chemicals, cartridge filters, filter housings, membranes, vessels as well as high quality instruments and analysers. Consumables and spare parts are normally retained securely at the plant site, or warehoused in the respective Osmoflo regional office. Osmoflo also enjoys exceptional long term relationships with our key suppliers and equipment vendors, many of whom retain critical inventory stock on our behalf; this allows us to pass on savings and lead time benefits for critical spares and equipment to our clients.

Service and support

Operations and maintenance services are provided by staff located in our global offices to meet the agreed level of support and plant attendance. This may range between periodic attendance all the way through to 24/7 on site attendance as required to meet specific operational requirements.

Osmoflo's service technicians and operators become 'owners' of individual plants in their respective location, and have full accountability and ownership. The service technicians are highly trained and experienced to optimise the operation and maintenance of membrane-based systems. They are further supported by the Technical Services Group which comprises expert process and electrical engineers who take responsibility to review all the performance data, provide specialised technical and process advice and troubleshoot, as required.

The extent of operation and maintenance support provided by Osmoflo is always site and client specific. Upgrades and Modifications to expand plant capacity or improve product water quality are also provided as required.

There are a number of case studies that highlight the value to clients of this service.

For further details visit www.osmoflo.com

Health, Safety, Environment and Quality

Osmoflo takes its commitment to safety, the environment and quality extremely seriously and is proud to maintain one of the industry's best safety and environment records. We have well established quality, environmental and safety management systems accredited to ISO 9001, ISO 14001 and OHSAS 18001 respectively.

At the core of Osmoflo's HSEQ management approach is our internal intranet based continuous improvement system, "OSMOcis". This system allows for the effective lodgment, tracking and close out of Non-Conformances, Near Misses, Incidents and Opportunities for Improvement.

The use of standard Work Instructions/Safe Work Procedures, JSA's, Hazard ID, Risk Assessment (HIRA) and regular safety and tool box meetings are also critical to Osmoflo's strong, ongoing commitment to the safety of its staff, contractors and clients.



Service Agreement Options

Our operations and maintenance service agreements are structured to the individual needs of the client, offering a range of options that reflect the level of risk you choose to carry or divest.

Choice of cover	Basic	Basic +	Moderate	Comprehensive	Comprehensive +
Degree of Client Risk	Highest	High	Moderate	Low	Lowest
Extent of Osmoflo involvement	Lowest	Low	Moderate	High	Highest
Client Tolerance to Unplanned Plant Downtime	Highest	High	Moderate	Low	Lowest
Typical Contract Type	Standard Maintenance/ Servicing Contract	Standard Maintenance/ Servicing Contract	O&M	O&M, DBO, DBOM	DBO, DBOM, BOO or BOOT
Typical Applications	Small/ standardised plants, Low business criticality, Consistent Feedwater	Small to Mid Size Plants, partially customised, consistent feedwater, Low to moderate business criticality	Small - Large Sized Customised Plants, moderate complexity and/or challenging feedwater, and/or moderate - high business criticality	Larger /complex plants and/or challenging feedwaters and/or High Business Criticality	Larger /complex plants and/or challenging feedwaters and/or High Business Criticality
Asset Owner	Client	Client	Client	Client	Osmoflo (or Client)
Asset Replacement & Refurbishment Risk	Client	Client	Client	Client or Osmoflo	Osmoflo
Critical Spares and Inventory Management	Client	Client	Client or Osmoflo	Osmoflo	Osmoflo
Operational Responsibility	Client	Client	Client and/or Osmoflo	Osmoflo	Osmoflo
24-7 Remote Monitoring	No	Yes	Yes	Yes	Yes
Typical Scope	Periodic servicing of core process components	Periodic Servicing of core process plant & Remote monitoring of critical alarms	Weekly - Monthly Servicing and maintenance of core process plant / balance of plant (and operational duties where included)	Full Plant Operations and Maintenance	Full Plant O&M and Asset Replacement and Refurbishment
Typical Frequency of Plant Attendance	3 -6 monthly	Monthly	Weekly- Monthly as required	Daily or Weekly	Fulltime (5- 7 days per week)
Reporting type and frequency	Basic Report Every 3 - 6 months	Basic Report Every 1 - 3 months	Standard Report Monthly. Comprehensive report annually.	Standard Report Monthly or Weekly as required with comprehensive report including full plant trends quarterly.	Fully customised to meet clients needs

O&M: Operate and Maintain, **DBOM:** Design, build, operate, maintain,
BOOT: Build, own, operate, transfer, **DBO:** Design, build, operate,
BOO: Build, own, operate



Locations

Australia ■ Chile ■ India ■ Oman ■ Singapore ■ United Arab Emirates

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