INDUSTRIAL REVERSE OSMOSIS

Engineered. Procured. Fabricated. Delivered.



SINGLE-SOURCE EPF DELIVERY Custom packaged systems developed around feed-water chemistry, capacity, product-water quality, recovery, utilities and site constraints.

TARGET MARKETS

Oil & gas and petrochemical
Power and energy
Data centers
Food and beverage
Manufacturing and utilities

TREATMENT TRAIN

Feed pumping and filtration
Softening and chemical dosing
UF / RO / EDI integration
CIP and concentrate handling
Storage and distribution

DELIVERY FORMATS

Skid-mounted packages
Modular treatment systems
Containerized installations
Brownfield upgrades
Field-assembled systems

WHY MISF ENGINEERING

A multidisciplinary engineering team supporting process, mechanical, piping, structural, electrical, instrumentation, controls, procurement and fabrication coordination—complemented by EcoPak Services' published environmental, wastewater-treatment and compliance experience for project-specific teaming opportunities.

REQUEST A PRELIMINARY TREATMENT CONCEPT

Send your feed-water analysis, design flow, product-water specification and project location.

info@misfengineering.com

A FIT-FOR-PURPOSE SYSTEM, NOT A CATALOG PACKAGE

MISF evaluates the full water balance and operating philosophy before selecting pretreatment, membrane configuration, polishing and delivery format. The result is a practical treatment train aligned with performance, maintainability and lifecycle cost.



DESIGN BASIS

WATER CHEMISTRY

TDS, hardness, silica, chlorides, suspended solids, organics and hydrocarbons.

PERFORMANCE

Design flow, recovery, rejection, turndown, redundancy and product-water specification.

SITE INTEGRATION

Available plot space, utilities, hazardous area requirements, tie-ins and installation strategy.

OPERABILITY

Membrane flux, cleaning frequency, chemical consumption, controls and maintenance access.

MATERIALS

Corrosion resistance, piping class, wetted components, skid structure and environmental exposure.

DELIVERABLES

PFDs, P&IDs, datasheets, calculations, 3D model, GAs, I&C documents and fabrication support.

COMPLETE EPF WORKFLOW

01 DEFINE

Water analysis, objectives and basis

02 ENGINEER

Process, multidiscipline design and 3D model

03 DELIVER

Procurement, fabrication and testing

04 SUPPORT

Installation, startup and commissioning

TYPICAL MISF ENGINEERING DELIVERABLES

Process design basis • Heat and material balance • PFDs and P&IDs • Equipment sizing and specifications • Pump hydraulics • Mechanical and piping design • Pipe stress analysis • Skid structural design • Electrical load list and single lines • Instrument index, datasheets and control narrative • 3D model and general arrangement drawings • Vendor technical bid evaluation • Fabrication and FAT support

ECOPAK SERVICES — PUBLISHED EXPERIENCE PROFILE

EcoPak Services' published profile provides complementary environmental, wastewater-treatment and regulatory capability that may support MISF projects under a project-specific teaming arrangement. The experience below is attributed to EcoPak Services and is not represented as work independently executed by MISF Engineering.

WASTEWATER TREATMENT & PLANT DESIGN

EcoPak Services states that its scientists and engineers have designed wastewater-treatment facilities of varying capacities across Pakistan and the region. Published experience includes liquid- and solids-stream treatment, residuals management, odor and air-pollution control, water reuse, feasibility and compliance evaluations, and turnkey delivery through operational startup.

ADVANCED INDUSTRIAL TREATMENT TECHNOLOGIES

Published specialized services include industrial wastewater treatment for textile, pharmaceutical, food-processing and chemical facilities; Zero Liquid Discharge systems reporting recovery of up to 95% for reuse; membrane bioreactor systems; biological nutrient removal; tertiary treatment and disinfection; advanced oxidation; and sludge dewatering and biogas recovery.

MODELING, OPERATIONS & COMMISSIONING

The company profile identifies biological-treatment optimization, chemical-addition systems, wet-weather solutions, odor dispersion, computational fluid dynamics, energy management, resource recovery, carbon inventory, plant optimization, operator training, equipment evaluation, process startup, commissioning and performance monitoring.

ENVIRONMENTAL PROJECT & CLIENT EXPERIENCE

EcoPak's published project portfolio includes World Bank-supported environmental standards and municipal-development work, renewable-energy assessment, forest and wetland programs, and multinational compliance assignments. Its client page names organizations across beverage, consumer goods, food processing, electronics, paint, textile and industrial manufacturing sectors.

HOW THE CAPABILITIES FIT TOGETHER

MISF ENGINEERING	ECOPAK SERVICES PROFILE	CLIENT VALUE
Multidiscipline engineering, packaged-system design, procurement support, skid and module integration, fabrication coordination and PE-led execution in the United States.	Environmental studies, wastewater process design, ZLD and MBR, water reuse, environmental compliance, operations optimization and commissioning experience.	An integrated pathway from water characterization and regulatory basis through treatment selection, detailed engineering, package delivery, startup and performance support.

LET'S DEVELOP YOUR TREATMENT BASIS Share the feed-water analysis and required product-water quality; MISF can prepare a preliminary process concept and budgetary scope.

Published EcoPak Services sources

EcoPak Services — Company profile: https://ecopakservices.com/
EcoPak Services — Design & Treatment Services: https://ecopakservices.com/services/design-treatment
EcoPak Services — Project Portfolio: https://ecopakservices.com/projects
EcoPak Services — Client Portfolio: https://ecopakservices.com/clients