



Containerized Water and Wastewater Treatment Tailored Solution

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Containerized
Solution**

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**Benefit of
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Introducing Containerized Solutions

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FK& Partner Co (FKGCCO) is specialized in providing Industrial support services including:

Civil Construction
W&WW Treatment Services

Electro-mechanics
Plants O&M



H₂O Tech Co for Environmental Services is specialized in:
Manufacturing of Containerized Plants for Water & WW Treatment for all types of applications and sizes



IE-CONSULT is an Engineering Office that offers:

Industrial Projects
W&W Treatment

Environmental Studies
Energy Use Improvement

Introducing Containerized Solutions

Containerized Plants:

The containerized package plants are ready-made solutions for:

1. Potable & Process Water Treatment
2. Sanitary & Industrial Wastewater Treatment
3. Sludge Dewatering & treatment
4. Waste Oil Treatment for Recovery

European quality equipment, guarantee high quality, minimum civil works

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Introducing Containerized Solutions

The Basics:

Large-scale WWT operations faces many challenges, that can be overcome by “containerized” approach, because:

1. Housed in pre-assembled shipping containers mounted with skids
2. Environmentally friendly
3. Low cost and can be installed and operational within weeks—
NOT YEARS

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Introducing Containerized Solutions

The Process:

The process begins with an on-site due diligence analysis including:

1. Identify process options to meet water quality goals
2. Identify how treatment options will interact
3. Selection of candidate treatment option
4. Evaluate option by Pilot testing
5. Prelim design
6. Final design



Introducing Containerized Solutions

Types of Mobile Package Plants

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- Surface Water Plant
- Ultra Filtration
- Nanofiltration
- Reverse Osmosis Plant



Potable Water

- MBR Sewage Plant
- Grey Water Plant
- Industrial Effluent Plant



Wastewater

- Oily Sludge Treatment
- Sludge Dewatering



Industrial Waste



Benefits of Containerized Solution

1. Plant are ready mounted in standard ISO containers for:

Easy transport Quick delivery Relocate

2. Plug and play unit

3. Limited civil work (only container foundation)

4. **Turnkey delivery**: piping, cables, air conditioning

5. Small footprint

6. High degree of automation, reliability, and consistency

7. Ideal for remote locations

Success Cases of Containerized Projects in KSA

1. Jazan Economic City Temporary Central 5400M³/day STP

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Client	ARAMCO
Project Name	Centralized JCSTP
Technology & Capacity	MBR- 5400 m ³ /day
Basic Description	STP / Tanker Station
Location	Jazan Economic City, KSA
Year of Completion	2016



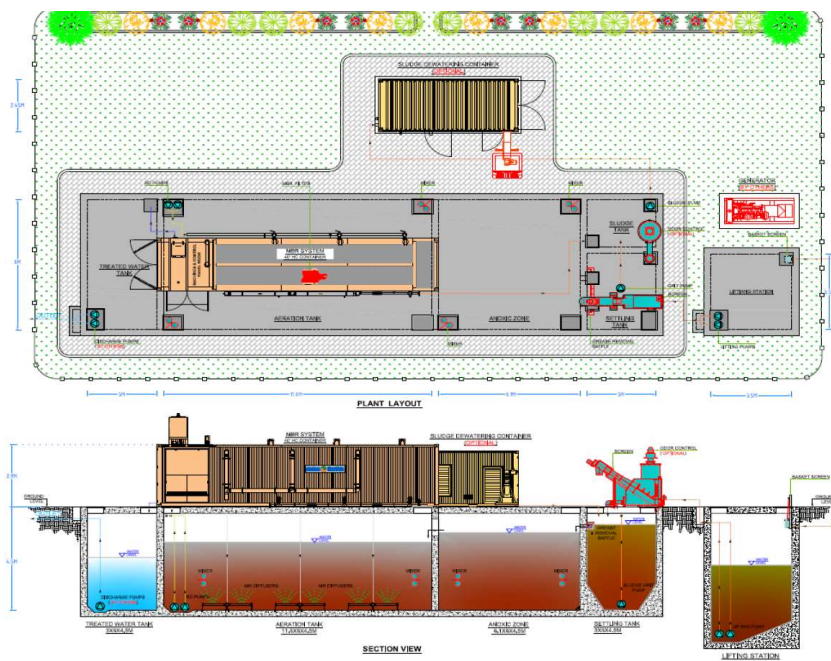
Time Record Project

Site Handed Over to Contractor: Aug 7th 2016
 1st Train (50% Capacity) Onstream: Sept 25th 2016
 2nd Train (50% Capacity) Onstream: Oct 25th 2016

Success Cases of Containerized Projects in KSA

1. Jazan Economic City Temporary Central 5400M³/day STP

Typical Design for 1250CMD Packaged Plant



Tanks Options



GLS Tank



Concrete Tank



Fiberglass Tank

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1. Jazan Economic City Temporary Central 5400M³/day STP

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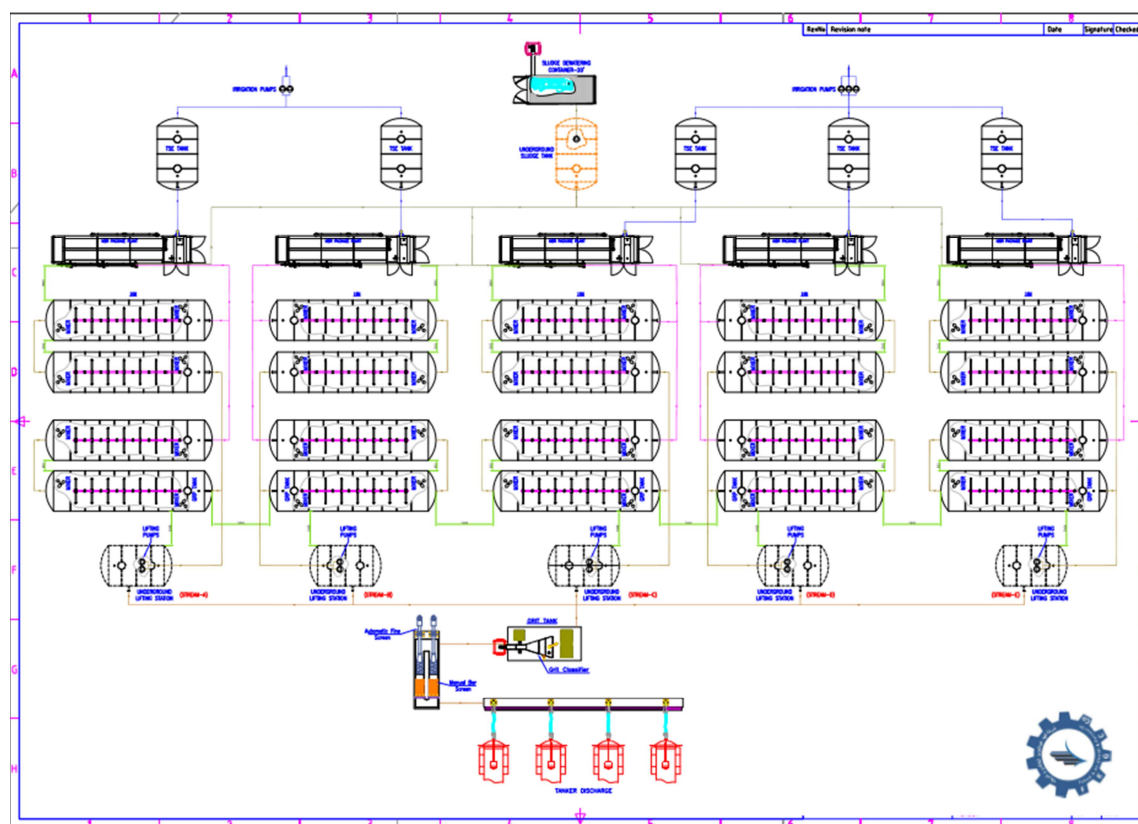
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Success Cases of Containerized Projects in KSA

1. Jazan Economic City Temporary Central 5400M³/day STP



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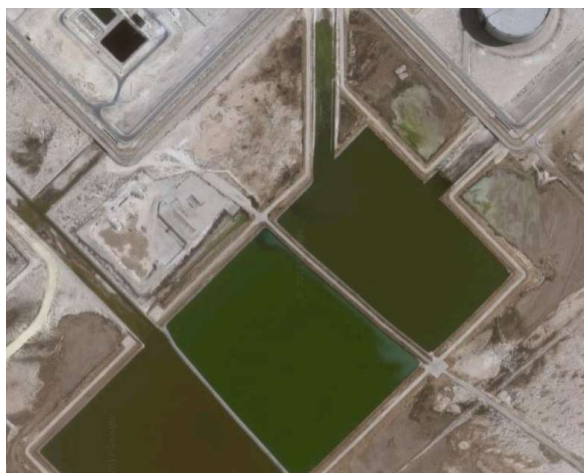
2. Juaymah Industrial Wastewater Treatment 250-500 M³/Day Plant

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Client	Saudi Aramco
Project Name	BOO
Technology & Capacity	IWWTP Skid- 250-500 m ³ /day
Basic Description	Pretreatment & Advanced Treatment
Location	Juaymah, Saudi Arabia
Year of Operation	2018 to Date



Success Cases of Containerized Projects in KSA

3. Khurais Nano-Filtration Plant for low sulfate seawater injection 9000M3/Day



Client	Saudi Aramco
Project Name	BOO
Technology & Capacity	NF Skid- 9000 m ³ /day
Basic Description	Nanofiltration for Sulphate removal
Location	Khurais, Saudi Arabia
Year of Operation	2019 to Date

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4. SWCC Yanbu Containerized STP 160 M3/Day



Client	SWCC
Project Name	BOO
Technology & Capacity	STP- 160 m ³ /day
Basic Description	STP/Lifting Station
Location	Yanbu, Saudi Arabia
Year of Operation	2019 to Date



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5. Ajyal Temporary 150 M³/Day STP for 1st Increment (Proposal)

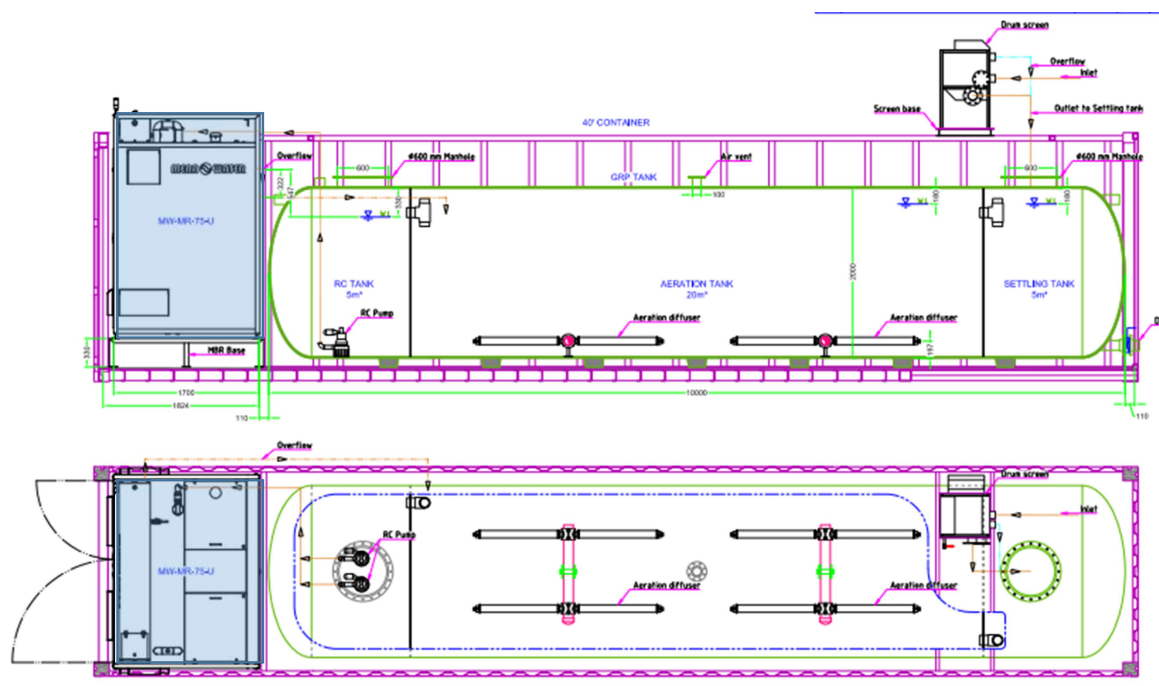
6. Abu-Ali Camp 150 M³/Day STP (Proposal)

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Success Cases from S. Aramco Projects

7. SWRO 1800 M³/Day (proposed to one of S. Aramco Gas Plants)

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- **Technology:** SWRO (45% Recovery)
- **Capacity:** 3 X 600 cuMeter per Day (CMD)
- **Mobility:** Containerized easy to mobilize.
- **Dependency:** Self-dependent
- **Product:** Drinking water quality (TDS<200ppm)





Thank You

