The First Manufacturer

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REACTIONAZ
Field of Activity:
Design & Manufacturing

Fix Equipment
- Reactor
- Tower & Column
- Pressure Vessel
- Shell-Tube Heat Exchanger
- Test Separator
- Deaerator
- Heater
- Furnace

Chemical Packages
- Corrosion Inhibitor
- Methanol Injection
- Antifoam Injection
- Demulsifier Injection
- Glycol Injection

Piping Equipment
- Pig-Launcher / Receiver
- Stone Trap
- Scrubber
- Filter

Tank Farm
- Spherical Tank
- Fix Roof Storage Tank
- Floating Roof Storage Tank

Flare Package

Steel Structure

Services
- Cladding
- Cold Forming
- Engineering
The Company > History & Capability

REACTORSAZ puts nearly half of the centry experience to work for the manufacturing and production of Fix Equipment, Tanks and Chemical Packages established in 1974. This company is specialized exclusively in the design development and fabrication of equipment for Energy & Mineral Industries. Its factory is based in Ahwaz city, the center of Oil and Gas fields of Iran, is well placed to other areas in the Persian Gulf and the Middle East. Also REACTORSAZ set up second Factory in Bandar-Abbas port (Special Economic Zone) with dedicated loading dock in open sea in the south of Iran. REACTORSAZ products can be seen in many On-shore & Off-shore site in Iran. All products manufactured by REACTORSAZ have Two-Years Warranty and Ten-Years after-sale Service.

The Company > The Workshop

<table>
<thead>
<tr>
<th>Workshop</th>
<th>Office Area (m²)</th>
<th>Covered Area (m²)</th>
<th>Total Area (m²)</th>
<th>Crane (h/min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahwaz Factory</td>
<td>1,000</td>
<td>16,000</td>
<td>21,000</td>
<td>2<em>100 2</em>40</td>
</tr>
<tr>
<td>Bandar-Abbas Factory</td>
<td>250</td>
<td>8,000</td>
<td>120,000</td>
<td>2<em>100 8</em>10</td>
</tr>
</tbody>
</table>

The Company > Main Machinery

- **Rolling Machine**
  - Max Rolling Thk: 80mm / 300mm
  - 50mm / 300mm
  - 75mm / 300mm
  - 50mm / 2500mm
  - 30mm / 2000mm

- **Overlay Cladding Machine**
  - Column & Boom Welding Machine 8X 10 m
  - S.A.W Machine
  - Weld overlay Cladding Machine
  - Electrosheg Welding Machine

- **Edge Mill Machine**
  - Length x Max Thk: 18,000 mm x 100 mm

- **CNC Cutting Machine**
  - Length x Wide x Max Thk: 12,000 x 400 x 250 mm
  - 12,000 x 3000 x 250 mm
Types of Welding

Welding to 100% X-ray and ultrasonic standards is carried out using manual metal arc, submerged arc, and Argon arc processes from welding procedures (WPS) drawn up and qualified in the factory (PQR). REACTORSAZ has all the facilities for qualifying welders to class-1 standards (WQR). And Electro slag welding for weld overlay.

Type of Material

Carbon Steel: A516, A285, A283, S7-52, A350, A106
Carbon Manganese steel: A537, A622, A724
Quenched & Tempered steel: A517, A520, A544
Stainless steel: SS 304, SS 316, SS 321, SS347, Duplex
Alloy steel: A203 Gr. D S3-A625
Ni-Alloyed Steel: Monel, Inconel
Cr-Mo steel: A387, A335
Manufacturing Experience

Fix Equipment
- Pressure Vessel
- Reactor
- Tower-Column
- Heat Exchanger
- Heater
- Furnace

Piping Equipment
- Scrubber
- Pig Launcher / Receiver
- Strainer
- Filter

Chemical Package
- Methanol Injection
- Corrosion Inhibitor
- Antifoam Injection

Tank Farm
- Spherical Tank
- Floating Roof Storage Tank
- Floating Roof Storage Tank

Flare Package
- Steel Structure

<table>
<thead>
<tr>
<th>Name of Project</th>
<th>Type</th>
<th>Client</th>
<th>QTY</th>
<th>Material</th>
<th>Dimension (mm)</th>
<th>Max WHK Weight (Project Weight) (ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shiraz Refinery</td>
<td>Reactor</td>
<td>Shiraz Refinery Company</td>
<td>1</td>
<td>SA-365F32+55347</td>
<td>Max THK: 154+7</td>
<td>330</td>
</tr>
<tr>
<td>South AZADegan Oil Field</td>
<td>Storage Tank</td>
<td>ASALT-TOOS</td>
<td>4</td>
<td>SA-283-C</td>
<td>Max ID: 23,000</td>
<td>172</td>
</tr>
<tr>
<td>South Pars Phase 15-16</td>
<td>HP Drum Separator</td>
<td>SAFF Co.</td>
<td>3</td>
<td>SA-516-S667-667-667-667</td>
<td>Max THK: 130+5.5</td>
<td>129</td>
</tr>
<tr>
<td>South Pars Phase 9-10</td>
<td>Fire Stack</td>
<td>OIEC</td>
<td>4</td>
<td>SA-240-304L-S1666+70</td>
<td>Max Length: 106,000</td>
<td>32</td>
</tr>
<tr>
<td>Salman Offshore Facility</td>
<td>Separators Drums</td>
<td>SAQRN</td>
<td>14</td>
<td>A 516-70 + NIKONI81625</td>
<td>Max ID: 3,100</td>
<td>60</td>
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<tr>
<td>South Pars Phase 6-7-8</td>
<td>Stabilizer Separator</td>
<td>PETROPARS STATION SADRA</td>
<td>26</td>
<td>SA240-TP316L-316E-60</td>
<td>Max THK: 7 4</td>
<td>123</td>
</tr>
<tr>
<td>ANIR KABIR PETROCHEMICAL COMPANY (66K OLEFIN PLANT)</td>
<td>Tower Pressure Vessel</td>
<td>EEO</td>
<td>9</td>
<td>SA-537-CL-1-1-156-60</td>
<td>Max Length: 60,000</td>
<td>182</td>
</tr>
<tr>
<td>Biaxion Petrochemical Tank Farm</td>
<td>Storage Tank</td>
<td>SINOPEC</td>
<td>36</td>
<td>SA-283-1-S1666-70</td>
<td>Max ID: 68,000</td>
<td>580</td>
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<tr>
<td>MAPNA Power Plants</td>
<td>Deaerator Drums</td>
<td>MAPNA</td>
<td>22</td>
<td>SA-565G-70N</td>
<td>Max Length: 14,000</td>
<td>76</td>
</tr>
<tr>
<td>South Pars 6-7-8 (Off-shore)</td>
<td>Chemical Injection Package</td>
<td>PETROPARS STATION SADRA</td>
<td>21</td>
<td>Multi-Discipline</td>
<td>Antifoam injection</td>
<td></td>
</tr>
<tr>
<td>South Pars 4-5 (Off-shore)</td>
<td>Chemical Injection Package</td>
<td>SADRA ENI</td>
<td>12</td>
<td>Multi-Discipline</td>
<td>Antifoam injection</td>
<td></td>
</tr>
<tr>
<td>Offshore Platform in ABUZHON Oil Field</td>
<td>Chemical Injection Package</td>
<td>SADRA</td>
<td>6</td>
<td>Multi-Discipline</td>
<td>Antifoam injection</td>
<td></td>
</tr>
</tbody>
</table>
Products

Fix-Equipment > Reactor
- ISO-MAX Reactor
- Hydro-treating Reactor
- HDS Reactor
- Sweetening Reactor
- Dissolution Reactor
- Octanizer Reactor
- DSH Reactor

High Pressure Reactor
Products

Fix - Equipment > Tower / Column

- Scrubber
- Stripper
- Stabilizer
- Depropanizer
- Absorber
- Refiner
- Splitter
- Debutanizer
- Deisohexanizer
- Deethanizer

<table>
<thead>
<tr>
<th>Plant</th>
<th>South Pars Phase 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPC</td>
<td>TUD</td>
</tr>
<tr>
<td>Item</td>
<td>DEETHANISER Column</td>
</tr>
<tr>
<td>Material</td>
<td>SA240-TP316L</td>
</tr>
<tr>
<td>Thickness</td>
<td>52 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>124 MT</td>
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<tr>
<td>Length</td>
<td>30 m</td>
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</table>

<table>
<thead>
<tr>
<th>Plant</th>
<th>Gas Condensate Refinery</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPC</td>
<td>FALAT</td>
</tr>
<tr>
<td>Item</td>
<td>Stabilizer</td>
</tr>
<tr>
<td>Material</td>
<td>SA562-C</td>
</tr>
<tr>
<td>Thickness</td>
<td>43 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>100 MT</td>
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<tr>
<td>Length</td>
<td>45 m</td>
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</table>

<table>
<thead>
<tr>
<th>Plant</th>
<th>Gas Condensate Refinery</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPC</td>
<td>FALAT</td>
</tr>
<tr>
<td>Item</td>
<td>Deisohexanizer</td>
</tr>
<tr>
<td>Material</td>
<td>SA516-Gr 60</td>
</tr>
<tr>
<td>Thickness</td>
<td>48 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>800 MT</td>
</tr>
<tr>
<td>Length</td>
<td>75 m</td>
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</table>
Products

Products > Fix - Equipment

- Refinery
- Petrochemical
- Oil/Gas Offshore Platform
- Gas Compressor Station
- Oil Field Gathering/Seperation
- Mineral Industries
- Power Plant
- NGL Plant

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<table>
<thead>
<tr>
<th>Plant</th>
<th>EPC</th>
<th>Item</th>
<th>Material</th>
<th>QTY</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24</td>
<td>2014</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Plant</th>
<th>EPC</th>
<th>Item</th>
<th>Material</th>
<th>Thickness</th>
<th>Weight</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>South Pars Phase 6-Onshore</td>
<td>TIJO</td>
<td>Suction K.O.Drum</td>
<td>SA240-TP316L</td>
<td>74 mm</td>
<td>51 MT</td>
<td>2004</td>
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<table>
<thead>
<tr>
<th>Plant</th>
<th>Steel Production Plant</th>
<th>EPC</th>
<th>Feeder Khoozevien</th>
<th>Item</th>
<th>Decanter</th>
<th>Material</th>
<th>Thickness</th>
<th>Weight</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 MT</td>
<td>12.5 MT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plant</th>
<th>Sth Oiln Complex</th>
<th>EPC</th>
<th>Saeah-Sanmprogelli</th>
<th>Item</th>
<th>Water Stripper</th>
<th>Material</th>
<th>Thickness</th>
<th>Weight</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>54 MT</td>
<td>10 m</td>
</tr>
</tbody>
</table>
Products

Rotary-Equipment > Chemical Injection Packages

- Corrosion inhibitor Injection Package
- Methanol Injection Package
- Antifoam injection Package
- Demulsifier Injection Package
- Glycol injection Package
- Hypochlorite Injection Package
- Reverse Demo Injection Package
- Amine Injection Package
Products

Tank Farm > Floating Roof Storage Tank
Fix Roof Storage Tank
Spherical Tank

PTA-1 Production Plant
Marwan - 2004
Fiber Production Unit
Mahan
South Azadegan Oil Field
Water Storage Tank - 2016
Fix & Flooing Roof Storage Tank
Razi Petrochemical - 2002
Export Terminal
Amir Kaser Petrochemical - 2004

<table>
<thead>
<tr>
<th>Plant</th>
<th>Bina Petrochemical</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPC</td>
<td>SINOPEC</td>
</tr>
<tr>
<td>Item</td>
<td>Tank Farm</td>
</tr>
<tr>
<td>Total Capacity</td>
<td>180,000 m³</td>
</tr>
<tr>
<td>Total Weight</td>
<td>4500 MT</td>
</tr>
<tr>
<td>QTY Fix Roof</td>
<td>31</td>
</tr>
<tr>
<td>QTY Floating Roof</td>
<td>5</td>
</tr>
<tr>
<td>Max ID</td>
<td>63 m</td>
</tr>
<tr>
<td>Date</td>
<td>2004</td>
</tr>
</tbody>
</table>