OIL & GAS INDUSTRY PRODUCTS & SYSTEMS

WWW.OMTISMAKINA.COM

SCOPE OF WORKS

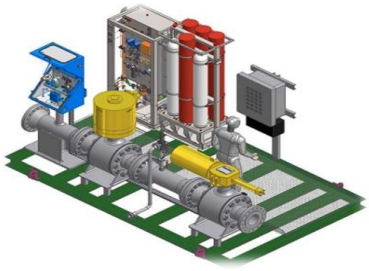
Scope Of Works As EPC & Manufacturing Solutions

OIL & GAS INDUSTRY

1. Pressure Reduction And Metering Skids Stations (liquid and gas)
2. Metering Skid/Stations (liquid and gas)
3. Fuel Gas Supply Skids/Stations
4. Gas separation and Filtration systems
    - Horizontal / Vertical scrubbers
    - Cyclone separators
    - Horizontal /vertical filterseparator
    - Dry gas filter
    - Liquid particle filters
    - Knock out drums
    - Coalesser filter
    - Absorbers
    - Tower
5. 2/3 phase separator skids
6. Gas Production Skid (Heater Separator)
7. Oil Production Skid (Oil Production Seperator, Test separator)
8. Vertical / Horizontal Emulsion Treater
9. Slug Catcher
10. Pig Receiver and Launcher Traps
11. Horizontal and vertical heat Exchangers (Shell & tube, U type, Kettle Type, Reboiler , Spiral Plate etc.)
12. Water Bath Heaters
13. Air Coolers
14. Quick Opening Closures
15. Flow Conditioners
16. LPG Tanks , LPG Trailers
17. LPG Skids
18. LPG Vaporizer
19. Glycol Dehydration Units
20. Gas Conditioning Units
21. Gas Sweating Systems
22. Gas and Petroleum Pipeline Construction
23. Steam Boilers (Water Tube , Fire Tube etc.)
24. Hot Water Boilers
25. Hot Oil Boilers
26. Nitrogen Generation Package
27. Instrument Air Skid Package
28. LACT Skids
29. Site Storage Tanks
30. Underground Storage Tanks
31. Desalination Units
32. Reactors
33. Compressor Stations
34. Loading And Unloading (Jetty) Stations
35. Cryogenic Tanks

Chemical Dosing and Injection Systems

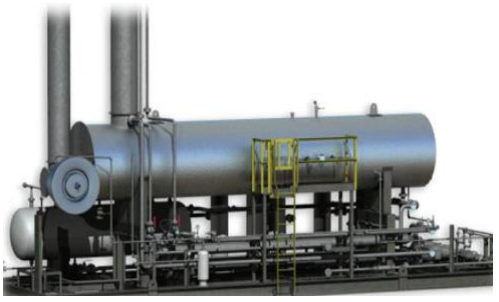
Oil&Gas Custody Transfer and Metering Station & Proving systems

 **Gas Treatment and Conditioning & Regulating Systems**	 **Oil & Gas Refinery Process Skids**
 **Onshore, Offshore and Subsea Valves**	 **MSV (multiport valve skids)**
 **HIPPS**	 **Packaged Analyzer System**
 **Pig Launchers & Receivers**	 **Pressure Vessels, Drums, Columns, Towers , Slug Catcher**
  **Oil /Gas /Water Filtration & Separation Units**	 **Gas Production Skid (Heater Seperator**
 **Oil Production Skid (Oil Production Seperator, Test Seperator)**	 **Direct And Indirect Heat Exchangers**

Shell & Tube Type Heat Exchangers

Air Cooled Heat Exchangers & Condenser

Flare Systems



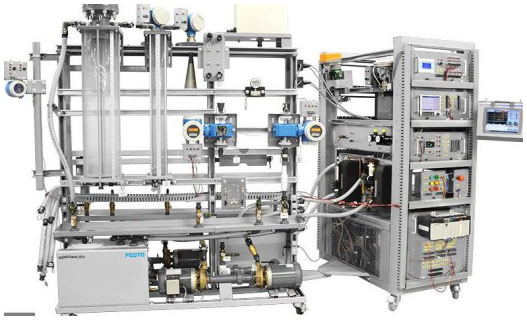
Dehydration Systems

Gas Sweating Systems

Instrument Air Skid Package

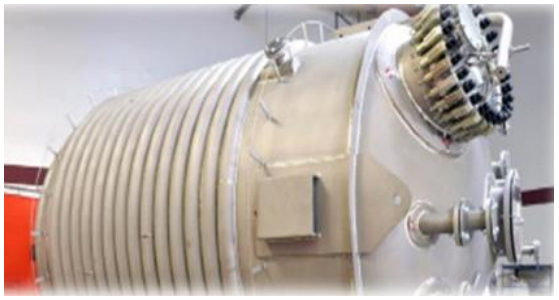
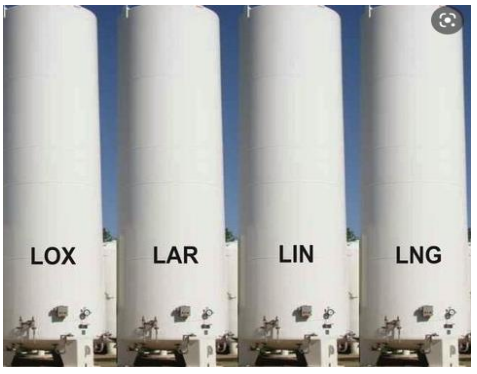
Nitrogen Generation Package

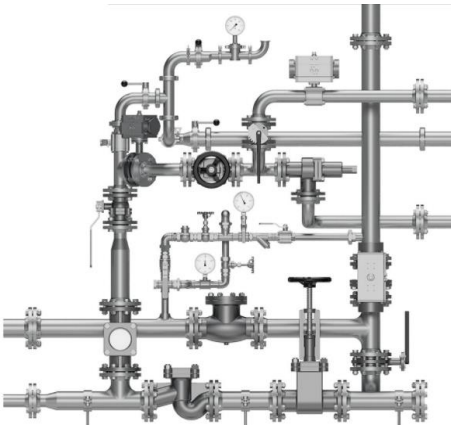
Pressure Control Stations



Process Control Systems

LACT Skids

 **Pump Skids**	 **Dryers**
 **Desalination Units**	 **Site Storage Tanks**
 **Reactors**	 **Compressor Stations**
 **Water And Wastewater Treatment Systems**	 **LPG Tanks /Fixes**
 **LPG Tanks / Trailer or Semi-Trailer**	 **Cryogenic Tanks**

 **Underground Storage Tanks**	 **Loading And Unloading (Jetty) Stations**
 **Electrical Installation, Instrumentation, And Automation Systems**	 **Pipe And Piping Equipment**

TECHNICAL CAPABILITIES

SYSTEM DESIGN

- ASME31.3
- ASME31.8
- DIN 3380
- PED Certificate
- BOTAS Specifications
- S. Aramco Specifications
- GOST Russian Standards
- SHELL Specifications
- PDO/OGC Specifications
- SONELGAZ Specifications
- GASCO Specifications
- Local Gas Distribution Companies Specifications

PIPE WORKS

- ASME 31.1
- ASME 31.3
- ASME 31.8
- ASME B16.5
- ASME B16.9
- API5L
- API6D
- NACE MR-01-75

PRESSURE VESSEL

- ASME SEC VIII Div1
- ASME SEC VIII Div2
- EN-13445
- PD-5500
- AD 200O-Merkblatt
- PED 2014/68/EU
- API 650
- API 620
- TEMA

ENGINEERING & DESIGN

- CFD Analysis: Comsol Mul-tphysics, ANSYS Fluent , Pipeflow
- Process Design: ASPEN HYSYS, Comsol Multphys- ics
- Pressure Vessel Design: PV Elite, VVD
- Tank Design : AME Tank
- Stress Analysis: Ceaser 2 , Bentley Autopipe V8i
- Structural Design: Xsteel, Tekla Structure
- Piping /System Design: Autocad 3D Plant
- Solid Design: Cata, Solid-Works,Auto Desk Inventor
- Thermal Analysis: In House Program
- Process Design Modelling Software-AVEVA PDMS

Note:All calculatons are in accordance with ASME / PED / EN / API standards

APPLICABLE QUALITY CONTROL METHODS

- NDE (PT, MT, RT, UT) (Level III and II staff)
- NDT : RT (subcontracted), UT (in-house), MT (in-hou-se), PT (in-house)
- Impact tests
- Hardness tests
- PMI tests
- Coatng Test (Thickness,
- Holiday etc.)
- Dimensional Control
- Pressure Test
- Leakage Test
- Hydraulic Test
- Load Test • Vacuum Test
- Visual Control
- Required third party/NoBo inspectons (TUV, BV, Llyo- ds Register)

WELDING METHODS

- GMAW (MIG & MAG) FCAW
- SMA W (MMA) • SAW
- GTAW (TIG) • Carbon Steel (SA516 Gr.70, Gr.60, SA285, S235 JR, P355GH, P265GH, St.37, St.44, St.52, Hardox etc)
- Stainless Steel & Alloys (304/304L, 316/316L, 316Ti, 317L, 410/410S, 904L, Monel400 , etc .)
- Duplex and Superduplex Steel (2205, 2304, 2507)
- Inconel (600,601,625) Monel, Hastelloy (C22,C276), Incoloy.
- Clad and/or weld overlay (CS/Cr-Mo + SS), Others (Al, Cu etc.)
- Special HIC (Hydrogen Induced Cracking) Resistant steels for Lethal services, WetH2S, Amine, Toxic, Caustic services)

- Gas Metering
- Liquid Metering
- LNG Metering
- Sampling and Analysis
- Proving, Master Metering and Calibration
- Pressure Reduction and Metering Station
- PRMS for Gas Turbine
- District Regulator Cabinet

PRESSURE REDUCTION AND METERING SOLUTIONS

We have the experience and knowledge to deliver high accuracy gas and liquid metering, proving, master metering and calibration packages whatever the technique required.Different technologies have different benefets and we can help you to make the right choice for your application.

Metering Systems

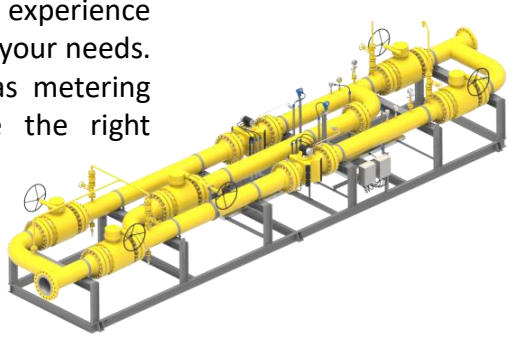
- Fiscal Metering
- Custody Transfer
- Allocation Metering
- Analytical Systems
- Prover Systems

Metering Technologies

- Ultrasonic Meters
- Turbine Meters
- Orifice Meters
- Venturi Meters
- Coriolis Meters
- PD Meters

Gas Metering

Whatever technology you prefer, whatever your budget, whatever the application our engineers have the knowledge and experience to deliver high accuracy gas metering packages to meet your needs. As an independent supplier that has been leading gas metering advances for decades, we can help you to make the right technology choices for your project.



Liquid Metering

We are experienced in delivering high accuracy metering solutions for all types of liquids from high viscosity crude oil to cryogenic liquefied gases.

LNG Metering

Our systems have formed an industry standard for custody transfer metering of LNG (Liquefied Natural Gas) . Mechasol has been manufacturing custody metering stations for Liquefied Gases takcling the challenges that cryogenic temperatures, low fluid lubricity and potential flashing bring.

Proving, Master Metering and Calibration

To maintain system accuracy, a proving system must provide a reliable means to verify meter readings and establish and certify meter factors.

- Bi-directional ball provers

Sampling and Analysis

Carefully integrated to maximize accuracy and reliability

Pressure Reduction and Metering Station

The skid-mounted pressure reduction metering station (industrial gas) is a regulator station specially designed for industrial users, including gas power plant (gas turbine, gas boiler and other gas supply facilities), fertilizer plant, ceramic plant, carbon plant, glass factory and other enterprises. It is a gas supply equipment to industrial users after gas filtering, regulating and metering.

Fuel Gas Systems For Power Stations

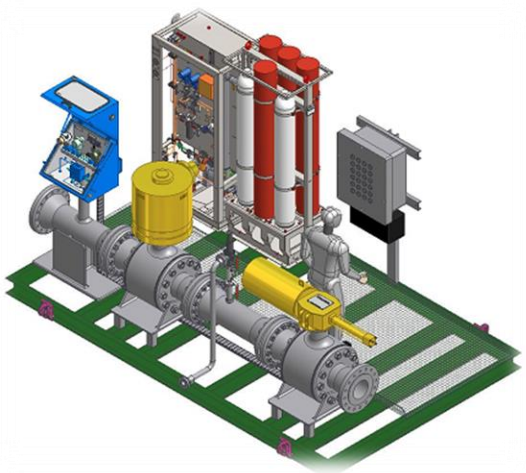
- **Inlet Section**
- **Filtration**
- **Metering Skid**
- **Heating Section**
- **Pressure Control Skid**
- **Final fltration**
- **Performance heater**

District Regulator Cabinet

District regulator cabinet is a gas pressure reduction metering device specially designed for urban resident sub-district. It is a gas supply equipment to domestic users after gas filtering, regulating and metering.

HIPPS

The High Integrity Pressure Protection Systems (HIPPS) is a mechanical and electrical system designed in order to reduce the chance that the system pressure will exceed the tolerable allowable pressure. The protection against over-pressure is obtained by quickly isolating the source causing the overpressure.



- Gas Separation Skid
- Slug Catcher
- Gas Production Unit (Heater Seperator)
- Glycol Dehydration Unit
- Gas Conditioning Skid
- Condensate Stabilizer Unit
- Emulsion Treater (Horizontal /Vertical)
- Chemical Injection
- Wellstream Seperation
  - Production Seperators (High & Low Pressure)
  - Test Seperator
  - Water Oil Seperator (WOSEP)
  - Degasser & Knock-Out
- Crude Desalter
- Crude Degasser
- Crude Dehydration

OIL & GAS PROCESS SOLUTIONS

Slug Catcher

- **Finger Type Slug Catcher**
- **Pipe Fitting Type Slug Catcher**
- **Harp Type Separator/Slug Catcher**

Gas Separation Skid

Mechasol has the capability to design and supply gas filtering equipment with different process technologies:

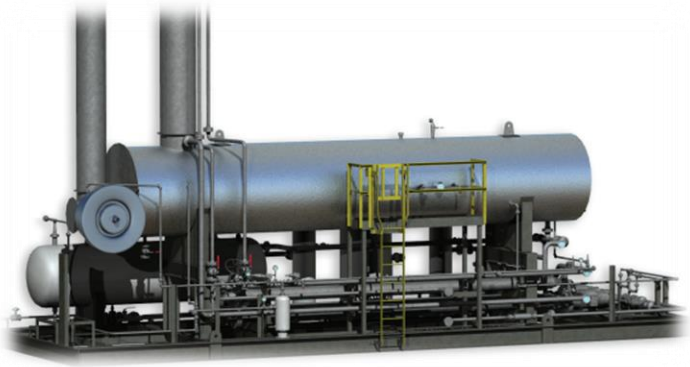
- KO drums (Gravity separation
- Gas / liquid separators
- Separators (Centrifugation separation)
- Process liquid filters (Coalescing separation

Gas Production Unit (Heater Seperator)

Mechasol gas production unit is an in-stock, pre-engineered, preassembled and integrated package. It is designed to regulate well-stream flow, pressure and temperature, and to separate gas and liquids in cold weather environments. The production units includes a gas-fired heater and a horizontal three-phase separator mounted on an enclosed oilfield skid.

Glycol Dehydration Unit

Mechasol Glycol Dehydration Unit is a complete water vapor removal system used on natural gas well streams to meet typical pipeline and process specifications. Mechasol's unit provides you with reliability, efficiency and flexibility in a single package and a wide range of options to meet your needs.

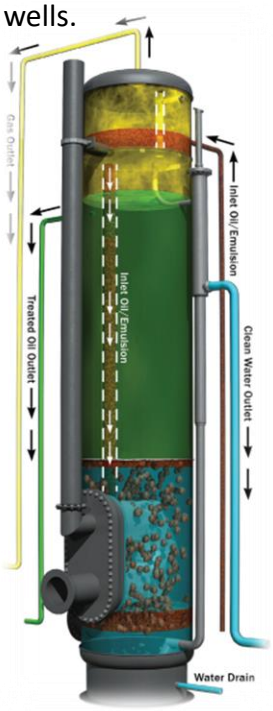


Chemical Injection

Chemical injection systems are commonly used in production facilities in the oil & gas industry. They prevent or mitigate a wide range of problems that might negatively affect the production flow and/or process completion. Mechasol designs, manufactures and supplies custom-built injection systems for a broad range of process applications, including production processes, (produced) water treatment and hydrate control in pipelines and wells.

Emulsion Treater

Mechasol Vertical Treater is designed to efficiently treat crude oil by removing water and emulsion from the wellstream so the oil can be further processed or delivered. For optimal safety and minimal risk, construction adheres to the latest ASME standards.



Crude Desalter

Removing salts and solids from crude oil is critical to refinery production efficiency. This put high demands on the heat exchangers. Proper cooling of effluent water is also required for further treatment in waste water plants.

Crude Dehydration

Crude oil contains water that must be removed to levels that meet pipeline specifications before refining into upgraded petroleum products. This process is known as crude oil dehydration.

The aim of crude oil dehydration is to remove free water from the oil and then to break the oil emulsions to reduce the remaining emulsified water in the oil.

Crude oil dehydration is the removal of water or water vapor from crude oil, by separating the oil from the water, often in a rotating centrifuge.

Wellstream Multiphase Seperation
2-3 Phase Seperator

Crude oil wells contain oil, gas, water and various contaminants. To optimize field production, Mechasol Multiphase Separators perform the primary separation of other phases from crude. Multiphase separators are usually the first and most comprehensive set of equipment in the upstream oil production field, with downstream equipment completely dependent on the proper functioning of the multiphase separators

- FILTER SEPERATORS
- HORIZONTAL COALESCING SEPARATOR
- VERTICAL COALESCING SEPARATOR
- DRY GAS FILTER
- MULTI CYCLONE SEPERATORS
- DOUBLE BARREL SEPARATOR
- VANE SEPARATORS
- KNOCK-OUT DRUMS /SCRUBBERS
- FREE WATER KNOCKOUT VESSELS
- 2/3 PHASE SEPARATOR
- ABSOLUTE MIST ELİMİNATOR
- AIR ELIMINATOR / DEASER
- SLUG CATCHERS
- HEATERS
- WATERBATH HEATER
- SKİD MOUNTED GAS FİRED WATHER HEATERS
- PIG LAUNCHER &RECEIVERS
- SHELL & TUBE TYPE HEAT EXCHANGERS
- PETROCHEMICAL VESSELS
- OTHER PRESSURE VESSELS

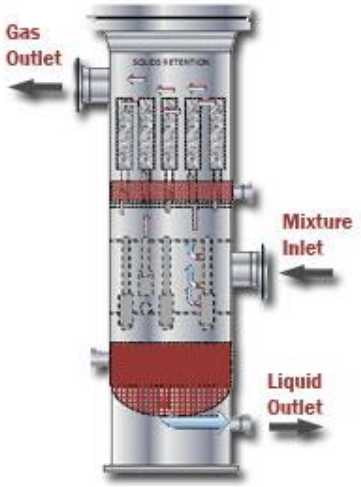
PRESSURE VESSELS

Filter Seperator

Gas filtrating separator is an important equipment in gas transmission and distribution system. During the gas transmission and distribution, flowmeter, regulator and valves require protection against the damage potential of solid impurities and liquid impurities. That is, high-precision filtration separator must be installed in front of the critical equipment's.

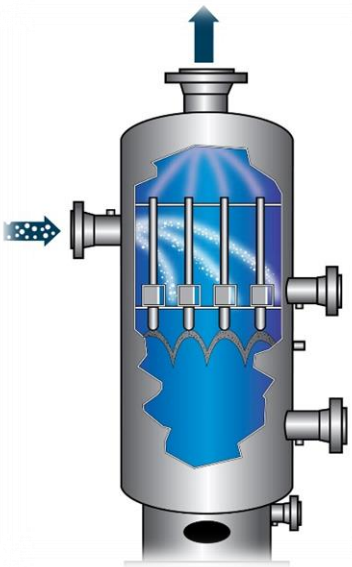
Horizontal Filter Separator

Mechasol Horizontal double barrel filter separators are designed to provide efficient liquid/solid removal and high gas capacities. The coalescer filter section removes bulk liquid and solid particles and also coalesces fine liquid droplets into larger ones. These larger droplets are then removed in the second Double Pocket (DP) Vane] section.



Vertical Filter Separator

The removal of entrained liquid aerosols, such as compressor lube oils, trace hydrocarbons and water mist, from natural gas streams is necessary for the protection of downstream equipment. Efficient removal of these contaminants, by use of an effective coalescing separator and media combination can prevent costly problems and downtime with downstream equipment, such as compressors, membranes, instrument , valves, piping, etc.



Multi Cyclone Seperators / Scrubbers

The multi-cyclone separator is a simplistic separator for de-dusting and demisting services targeting applications with slight fouling characteristics at high gas densities. It has the ability to eliminate sand particles and to remove liquid droplets. The parallel cyclone tubes are arranged between a top and a bottom plate and this inlet compartment is completely separated from the top and bottom compartment of the vessel.

Dry Gas Filters

These filters have been proved to be the best solution in those applications where the size of particles to be removed is too small to allow the use of common separators. For Removal of Liquid / Solid Particles down to 1 Micron with 99.9% efficiency / %99.5 for 0.5 Micron

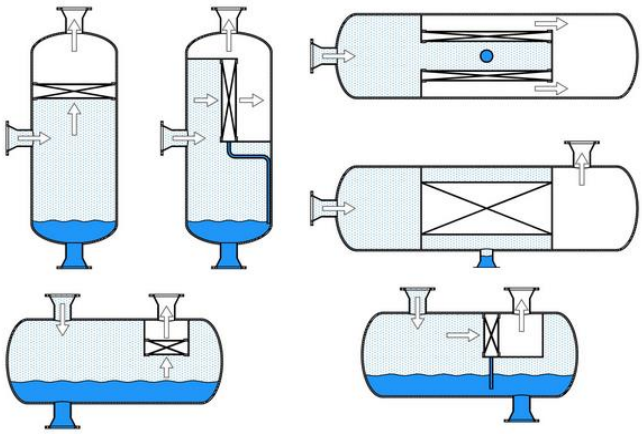
- High Performance, Proven Make, Coalescing Type Glass Fiber Elements used in Primary Section
- Secondary Section provided with efficient Impingement Separators or Mist Eliminators to remove Coalesced Liquid

Absolute Coalescing Separators

Absolute Coalescing Separator is a single-or-multi-stage device that is designed for maximum separation efficiency of sub-micron liquid droplets in critical services. Small diameter cyclones or vanes remove liquid and solid particles by utilizing the dynamics of centrifugal force and gravity. By removing the bulk of the entrained liquid in this stage, we increase the time between changing the elements, thereby reducing operating costs and downtime.

Vane separator

Vane separator uses the principles of momentum, gravity and coalescing to deliver high-efficiency, high-capacity, and low-cost gas and liquid separation with low pressure drop and high turndown. Vane separators provide liquid removal with smaller vessels, which results in lower initial cost, space savings, and minimal maintenance requirements.



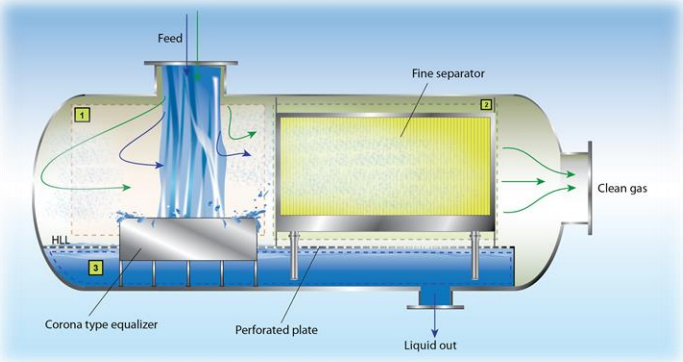
Basket Filters

These filters can be used in various fields: from the protection of equipment such as pumps and compressors, in the fine chemical, petrochemical and food & beverage sector, to general and steel industry.

Pig Launchers & Receivers

Mechasol is capable of manufacturing most advanced skid mounted pigging systems, Mechasol pipeline pig launching and receiving vessels are available for the gas and oil industries. Launching and receiving vessels can be supplied with quick opening enclosures and in almost any size and pressure rating.

Knock-out Drum



Knock-out drum targets at applications with high liquid loads and fine removal efficiencies between 5 and 20µm. The length is dictated by the internal diameter (ID), the gas volume flow and the required efficiency. The horizontal KO-drum accommodates internals such as inlet gas distributors,

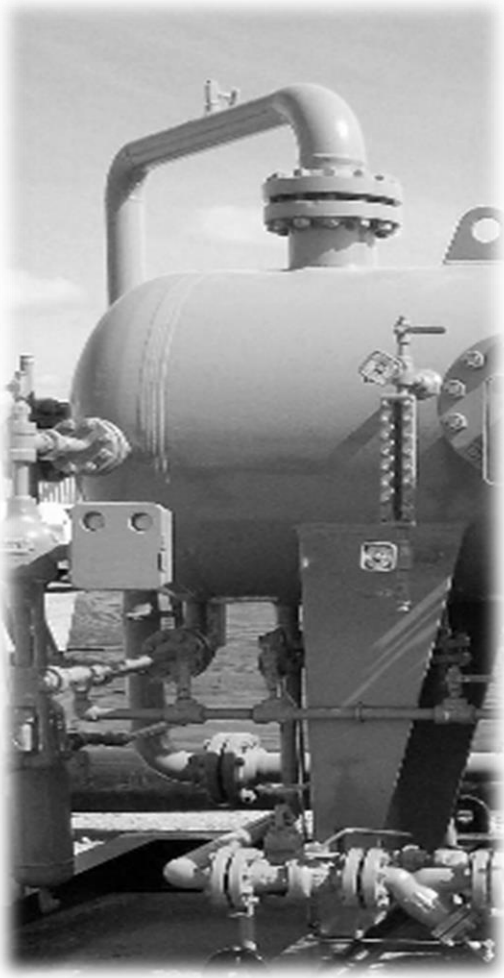
Free Water Knock-out Vessels

is a pressure vessel that uses residence time to separate water from the production process. It is usually the first part of an oil dehydration facility. Removing unwanted water in the process stream can reduce processing steps by reducing the size of downstream equipment and lowers energy requirements.

2/3 Phase sSparator

Mechasol provides the engineering and design of2/3-phase separator internals that target high gas volumes and primary L/L dispersions. To achieve separation, separators use one or more of the following principles: Momentum, Gravity Settling, Coalescing.

- Primary equipment for Separation of Liquid & Gas (Two Phase) or Oil, Water & Gas (Three Phase) from Oil Well Stream
- Designed & Manufacture as per API 12J / ASME 8 Div 1
- Internal Inlet Impingement Baffles, Wave Baffles, Flow Straightening Baffles, Weirs, Mist Eliminators & Vortex Breakers provided for effective Separations
- Equipment adequately designed to allow sufficient retention period
- Controls & Instrumentation provided to accurately measure the Gas, Oil & Water Flow rates, Regulate the Pressure and Monitor the levels of Oil, Water in the Separator
- Automated Liquid (Oil & Water) removal system provided
- Large Size / Pressure Range



HEATERS & COOLERS

Types of vessels being manufactured

- Shell and tube heat exchangers with stationary tubesheet
- Floating head heat exchangers
- Spiral heat exchangers
- Helix type heat exchangers
- Reboilers
- Boilers
- Refrigerant condensers
- Vacuum condensers
- Evaporators with steam space and tube bundles
- Pipe-in-pipe heat exchangers

Evaporator

Reboiler

Air Coolers

Shell & Tube Heat Exchangers

Shell & Tube heat exchangers are the most common design for many applications. We provide a wide variety of applications based on the most suitable design and materials to ensure a cost efficient and reliable solution. The full range provides standardized product lines for an optimal price/quality ratio as well as customized designs for the most demanding duties in oil & gas, power generation, marine, refrigeration and many other industries.

Indirect Gas Heaters (Waterbath Heater)

Fired Type Heaters usually designed to API 12K, these devices are traditionally used to heat natural gas and oil. The main application for Indirect Fired Water Bath Heaters is to heat high pressure gas prior to pressure reduction. Type of the burners ;

- Natural Draft
- Forced Draft

Petrochemical Pressure Vessels

Towers & Columns

Towers are designed for oil processing. Diameter of assembled vessels is limited only by possibility of railway transportation. Large diameter vessels are transported dismantled and are mounted on site. Vessels are fitted with trays of various design.

Types of tower vessels

- Rectifi cation columns
- Packed columns
- Towers for condensate refi ning
- Hydrogen peroxide production vessels
- Absorbers• Adsorbers
- Stabilizers
- Evaporators

Process Separator

Drums

Reactor

Oxidizers

Chemical Storage Tanks

Evaporators

Other Pressure & Non-Pressure Vessels

Odorant Tank

Silos

Storage Tank

Condensate / Drain Tanks

Degasser

Aboveground Storage Tanks

- API 650 Field Erected Storage Tanks
- AWWA D100 Field Erected Water Storage Tanks
- Acids & Alkalis
- Asphalt Tanks
- Asphalt Oxidizers
- Biodiesel & Ethanol
- Brine Water
- Clarifiers & Digesters
- Crude Oil & Petroleum Fuels
- Drilling Fluids & Muds
- Fertilizers UAN Solutions
- Fire Water FM Tanks
- Vapor Recovery Tanks
- Vegetable Oils
- Waste Water

Turnkey projects

OMTİS can satisfy a customer's needs from the "beginning to the end" of the contract by the turnkey concept. The Companywill act as the Project Manager and General contractor, performing much of the project with our own personnel, and sub-contracting other parts as needed to specialty contractors. In this way,we eliminate multiple contractors and sub-contractors and place controlof the project at a single source.

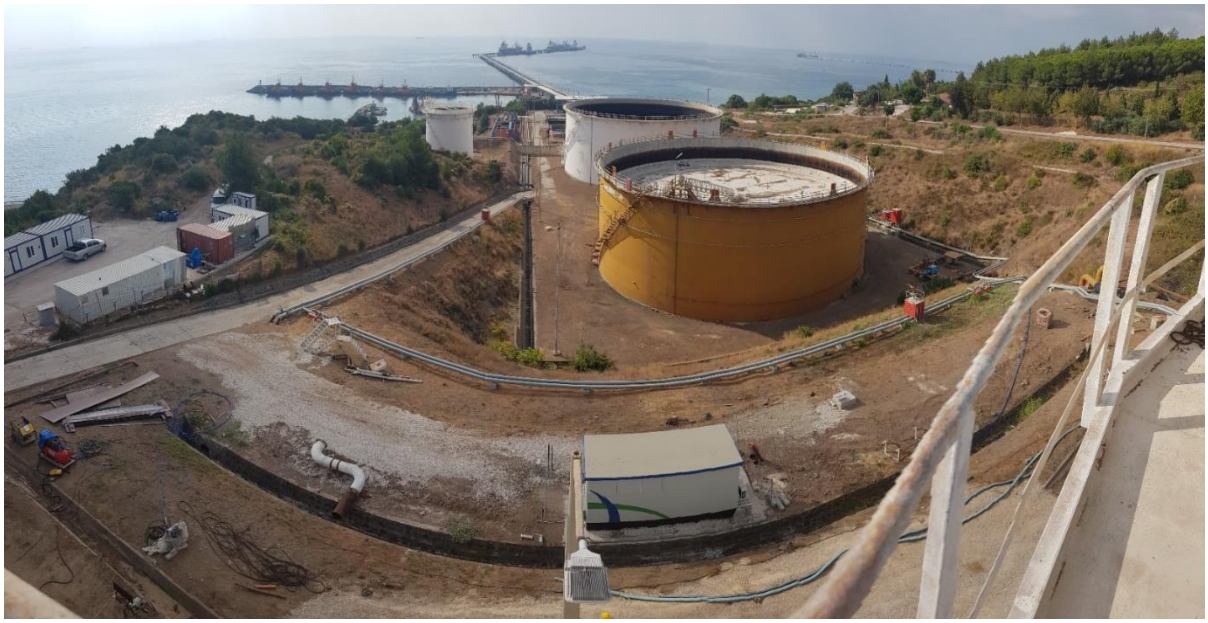
New Tanks

OMTİS can provide new tank construction for all types of Above Ground Storage Tanks. Our feld erection crews utilize the latest construction techniques to provide a safe, dependable new tank atcompetitive prices. Mechasol constructed tanks adhere to strict compliance guidelines in accordance with API, AWWA and FM. New tank construction services includes: Tank Erection, Foundations, Protective Coating & Linings, Insulation, Cathodic Protection.

Our field erection crews utilize the latest construction techniques to provide safe, dependable new tank.

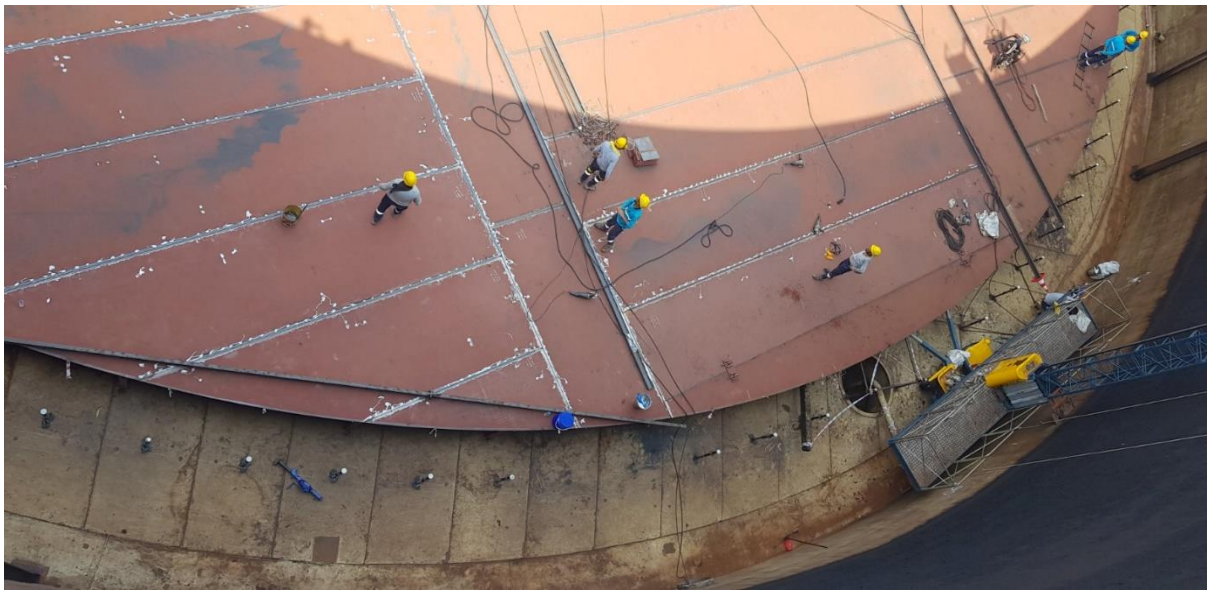
CRUDE OIL AND WATER TANK REFERENCES

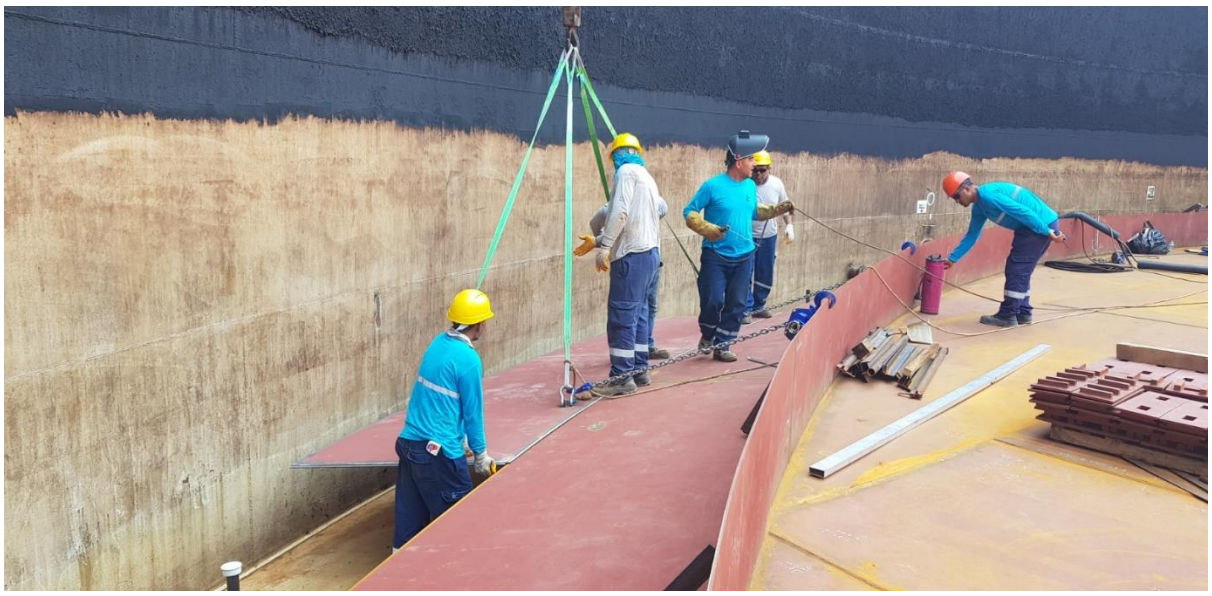
50.000 MT Capacity Crude Oil Tank Renovation
BOTAŞ TÜRKİYE 2022

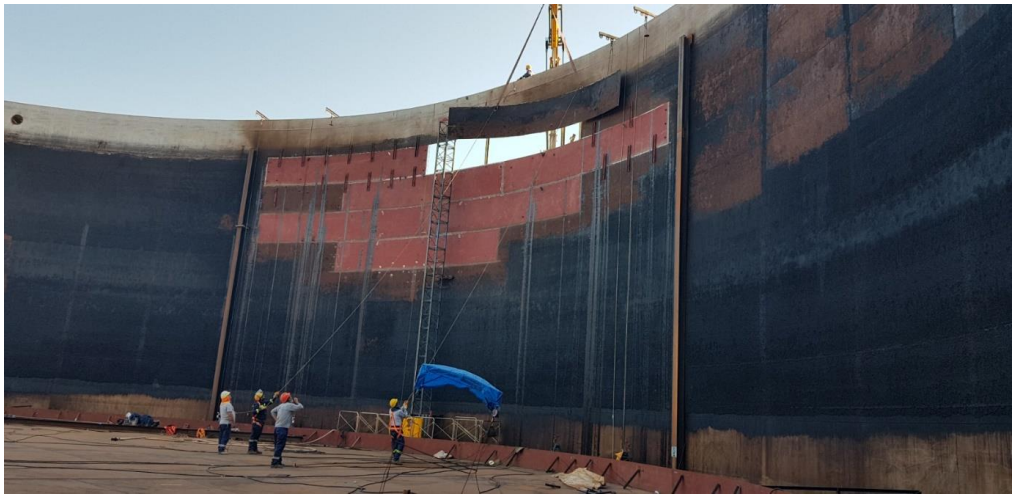



HA32PX
DGN LIFT

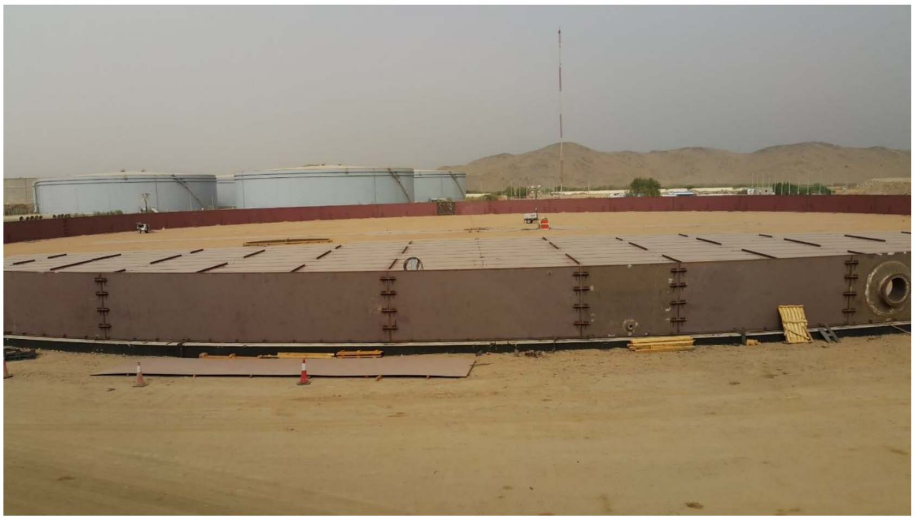

HA32PX







170.000 m³ Capacity 6 pieces New Water Tanks
SAUDI ARABIA 2015-2016



LPG TANKLARI VE EKİPMANLARI **LPG TANKS AND EQUIPMENTS**

LPG TAŞIMA TANKLARI

LPG'nin taşınması ve tedariği için tüm transfer ekipmanları seçenekleriyle Yarı-treyler ve Bobtail tankerleri.
LPG tankları;
hacim kapasitesi 10 m³ ten başlayan Bobtail ve 34 m³ ten başlayan Yarı-treyler tankerleri.

TANKERS FOR TRANSPORT OF LPG

Semi-trailer and Bobtail tankers with the option of complete transfer equipment for LPG transport and supply.
LPG tanks;
volume capacities starting at 10 m³ for the Bobtail and 34 m³ for Semi-trailer tankers.

Genel / Standart Karakteristikler

ADR sınıf 2 basınç altında sıvılaştırılmış gazın taşıma Tankı.
- ADR ye göre dizayn ve imalat.
- Depolanacak ürün: LPG (UN 1965), ticari propan ve bütan.
- Silindirin 120° sini kaplayan alüminyum plakalı güneşlik.
- ADR dizayn basıncı: 27 bar, 23 bar ve 18 bar.
- Test basıncı: 27 bar, 23 bar ve 18 bar.
- Dizayn sıcaklığı: -20°+50°C.

General / Standard Characteristics

Tank for the transport of ADR class 2 liquefied gas under pressure.
- *Design and construction according to ADR.*
- *Product to be contained: LPG (UN 1965), commercial propane and butane.*
- *With parasol aluminium plate covering 120° of cylinder.*
- *ADR design pressure: 27 bar, 23 bar and 18 bar.*
- *Test pressure: 27 bar, 23 bar and 18 bar.*
- *Design temperature: -20° +50°C.*

Kontroller ve Testler

- Dizayn koduna göre muayene.
- 100% RT.
- 27 bar, 23 bar ve 18 bar larda Hidrostatik test.
- Transfer ekipmanlarının sızdırmazlık testi.
- ADR ye göre testler.

Controls and Tests

- *Inspections as per design code.*
- *100% weld Radiography test.*
- *Hydrostatic test at 27 bar, 23 bar and 18 bar.*
- *Testing of tightness for transfer equipment.*
- *Tests according to ADR.*

Dış Kaplama

- Kumlama: SA 2 ½.
- Yüzeyin anti-korozyon koruması: Poliamid Epoksi.
- Son kat: Poliüretan.

External Finish

- *Shot-blasting: SA 2 ½.*
- *Anti-corrosion protection of surface with polyamide epoxy.*
- *Top coating polyurethane.*

Temel Ekipmanlar

- Sıvı dolum, boşaltım ve gaz fazı hatları için Hidrolik vanalar.
- ACME adaptörler ve kapaklar.
- Küresel vanalar.
- Emniyet valfi (PRV)
- Manometre.
- Termometre.
- Manyetik seviye göstergesi (opsiyonel)
- Sabit seviye göstergesi.
- Rotogeç.
- Drenaj hattı.
- Menhol (arka bombede)
- ADR ye göre elektrik ve pnömatik bağlantı.
- Anti-drive away sistemi.
- Tahliye hatları (opsiyonel)
- Pnömatik internal valfler (opsiyonel)
- LPG pompası (opsiyonel)
- LPG sayacı ve Otomatik hortum sarma (opsiyonel)
- Selektör ve Uzaktan acil durdurma (opsiyonel)

Basic Equipment

- *Hydraullic valves for liquid inlet, outlet and gas phase lines.*
- *ACME adapters and plugs.*
- *Ball valves.*
- *Safety relief valves (PRV)*
- *Pressure gauge.*
- *Thermometer.*
- *Magnetic level gauge (optional)*
- *Fixed level gauges.*
- *Rotogauge.*
- *Drain line.*
- *Manhole located on rear head.*
- *Electrical and pneumatic installation, according to ADR.*
- *Anti-drive away system.*
- *Discharge lines (optional)*
- *Pneumatic internal valves (optional)*
- *LPG pump (optional)*
- *LPG flow meter and Automatic hose rewind (optional)*
- *Selector and Remote emergency stop (optional)*

Seçenekler

- Dizayn basıncı ve sıcaklıkları.
- Kalınlıklar, boyama ve dış kaplama rengi.
- Tank yüzeyindeki uyarı işaret ve levhaları.

Options

- *Design pressure and temperatures.*
- *Thicknesses, coating and colour of external finish.*
- *Warning signs on tank body.*

YARI-TREYLER LPG TAŞIMA TANKLARI
SEMI-TRAILER LPG TRANSPORT TANKS

2-DİNGİLLİ YARI-TREYLER LPG TANKI
2-AXLES LPG SEMI-TRAILER TANK

TEMEL ÖZELLİKLER / *BASIC SPECIFICATIONS*

MALZEMELER / *ITEMS*	VERİ / *DATA*
Süspansiyon Sistemi *Suspension System*	Mekanik Süspansiyon veya Haval Süspansiyon *Mechanical Suspension or Air Suspension*
King Pim *King Pin*	2" ve 3,5" Yedek King Pim *2" and 3,5" Spare King Pin*
Dorse Ayağı *Landing Gear*	Statik 50 ton, Dinamik 25 ton Kapasite *Static 50 ton, Dynamic 25 ton Capacity*
Dingil *Axle*	Herbiri 16.000 kg Kapasiteli 2 Dingil *2 Axle Each 16.000 kg Capacity*
Lastik *Wheel*	385 65 R 24 (8 Adet) *385 65 R 24 (8 Pieces)*
Elektrik Sistemi *Electrical System*	ADR ye Göre - Saba *According to ADR - Saba*
Fren Sistemi *Brake System*	Mekanik veya Haval Fren Sistemi *Mechanical or Air Brake System*
Fren Cırcır *Slack Adjuster*	Otomatik *Automatic*
Yedek Lastik *Spare Wheel*	385 65R 24 - Opsiyonel *385 65R 24 - Optional*

YARI-TREYLER LPG TAŞIMA TANKLARI
SEMI-TRAILER LPG TRANSPORT TANKS

3-DİNGİLLİ YARI-TREYLER LPG TANKI
3-AXLES LPG SEMI-TRAILER TANK

TEMEL ÖZELLİKLER / *BASIC SPECIFICATIONS*

MALZEMELER / *ITEMS*	VERİ / *DATA*
Süspansiyon Sistemi *Suspension System*	Mekanik Süspansiyon veya Haval Süspansiyon *Mechanical Suspension or Air Suspension*
King Pim *King Pin*	2" ve 3,5" Yedek King Pim *2" and 3,5" Spare King Pin*
Dorse Ayağı *Landing Gear*	Statik 50 ton, Dinamik 25 ton Kapasite *Static 50 ton, Dynamic 25 ton Capacity*
Dingil *Axle*	Herbiri 12.000 kg Kapasiteli 3 Dingil *3 Axle 12.000 kg Capacity*
Lastik *Wheel*	385 65 R 22,5 (6 Adet) *385 65 R 22,5 (6 Pieces)*
Elektrik Sistemi *Electrical System*	ADR ye Göre - Saba *According to ADR - Saba*
Fren Sistemi *Brake System*	Haval Fren Sistemi, ABS, EBD *Air Brake System, ABS, EBD*
Fren Cırcır *Slack Adjuster*	Otomatik *Automatic*
Yedek Lastik *Spare Wheel*	385 65R 22,5 - Opsiyonel *385 65R 22,5 - Optional*

LPG TAŞIMA TANKLARI

BOBTAIL LPG TAŞIMA TANKLARI

10 m3 ten 34 m3 e kadar çeşitli kapasitelerde LPG Bobtail tankerlerinin üreticisiyiz..
Ancak, müşteri talebine bağlı olarak diğer kapasitelerde de tanker üretilebilir. Emniyet bağlantı elemanları, vanalar, boru hatları, çamurluk, lastikler gibi tüm aksesuarlar ihtiyaça göre sağlanır. Tanklar boşaltım pompasıyla temin edilir. Ünite normlara göre güvenlik özellikleriyle gelir. LPG Bobtail tankerleri boşaltım sistemlerindeki değişik kapasiteler ve çeşitli ekipman konfigürasyonları ile LPG nin toplu dağıtımı içindir. Eğer belirli bir proje için belirli bir teknik özellik gerekli olursa, değişik ekipman alternatiflerini birleştiren özel yapım modeller dizayn edilip üretilebilir. Basınçlı kaplar ADR, TPED, EN 12493, EN 14025, EN 12252, ASME and CODAP Koduna göre dizayn edilmiş ve oluşturulmuştur.

2 Dingilli Kamyonlar
- 4x2 veya 4x4
- 10 m3, 14m3, 17m3

3 Dingilli Kamyonlar
- 6x2 veya 6x4
- 17m3, 23m3

4 Dingilli Kamyonlar
- 8x2
- 32 m3, 34 m3

Dağıtım pompalı ve LPG sayaçlı Bobtail tanklar opsiyoneldir.

Pompa motoru için kullanılabilir seçenekler:

1- Hidrolik motor aracılığıyla kamyonun PTO sundan .
2- Şaft aracılığıyla kamyonun PTO sundan.
3- Elektrik motor.

Sayaçlı LPG Bobtail aşağıdakileri yerine getirebilir;

1) Sayaç ve hortum makarası aracılığıyla LPG transferi,
2) Pompa aracılığıyla ama sayaçsız LPG transferi,
3) LPG nin bir tanktan boşaltımı ve Bobtail tankına transferi,
4) LPG nin bir tanktan diğer tanka transferi.

Bobtail Tank Aksesuarları - Standart

- Emniyet valfi.
- Dolum ve boşaltım bağlantıları.
- Güvenlik sistemleri.
- Internal valfler, pnömatik çalışan & aşırı akım özellikli.
- Seviye göstergesi.
- Çelik alet dolabı.
- Topraklama bağlantısı.
- LPG pompası.
  - Hidrolik motor.
  - Elektrik motor.
  - Şaft.
- Anti-drive away sistemi.
- Yangın söndürücü.
- Reflektörler, güvenlik işaretleme ve etiketleme.

Bobtail Aksesuarları - Opsiyonel

- Hortum makarası; sıvı, buhar veya her ikisi.
- Elektrikle güçlendirilmiş sarma.
- Hidrolikle güçlendirilmiş sarma.
- Pnömatikle güçlendirilmiş sarma.
- Dolum konnektörü, paslanmaz çelik.
- LPG sayacı ve fiş yazıcısı.
- Hidrolik çalışan internal valfler.
- Selektör.
- Uzaktan acil durdurma.

LPG TRANSPORT TANKS

BOBTAIL LPG TRANSPORT TANKS

We are manufacturer of LPG Bobtail tankers of various capacities ranging from 10 m3 to 34 m3.
However, other tank capacities can be manufactured upon customer request. All accessories like safety fittings, valves, pipelines, mudguard, tyres are provided as per requirement. The tanks are provided with unload ing pump. The unit comes with safety features as per norms. LPG Bobtail tankers are for LPG bulk distribution, in different capacities and various equipment configurations in the offloading systems. If a particular techni cal specification is required for a certain project, custom made models are designed and manufactured combining the different equipment alterna tives. The pressure vessels are designed and constructed as per the ADR, TPED, EN 12493, EN 14025, EN 12252, ASME and CODAP Code.

2 Axle Trucks
- *4x2 or 4x4*
- *10 m3, 14m3, 17m3*

3 Axle Trucks
- *6x2 or 6x4*
- *17m3, 23m3*

4 Axle Trucks
- *8x2*
- *32 m3, 34 m3*

Bobtail tanks with a delivery pump and LPG flow meter is optional.

Available options for pump drive:

1- From truck's PTO by hydraulic drive.
2- From truck's PTO by shaft.
3- Electric drive.

LPG Bobtail with flow meter can perform the followings;

1) LPG transferring through the flow meter and the hose reel,
2) LPG transferring through the pump, but not through the flow meter,
3) Unloading LPG from a tank and transferring it to a bobtail tank,
4) Transferring LPG from a tank to another tank.

Bobtail Tank Accessories - Standard

- *Safety relief valves.*
- *Loading and unloading connections.*
- *Safety systems.*
- *Internal valves, pneumatic operated & with excess flow feature.*
- *Level gauges.*
- *Steel equipment cabinet.*
- *Earthing rod.*
- *LPG pump.*
  - *Hydraulic drive.*
  - *Electric drive.*
  - *Shaft drive.*
- *Anti-drive away system.*
- *Fire extinguisher.*
- *Reflectors, safety marking and labeling.*

Bobtail Accessories - Optional

- *Hose reel; liquid, vapor or both.*
- *Electric powered rewind.*
- *Hydraulic powered rewind.*
- *Pneumatic powered rewind.*
- *Filling connector, stainless steel.*
- *LPG flow meter and ticket printer.*
- *Hydraulic operated internal valves.*
- *Selector.*
- *Remote emergency stop.*

STATİK LPG DEPOLAMA TANKLARI

LPG DEPOLAMA TANKLARI

- Yatay Yerüstü Tankları
- Yatay Yeraltı Tankları
- Dikey Yerüstü Tankları

Yerüstü ve yeraltı kurulumlarındaki statik LPG depolama tankları **ASME Section VIII DIV.1 e göre ASME U, ASME Section I e göre ASME S Damgalı, EN 13445, AD 2000 Merkblatt, PD 5500 ve Avrupa Direktifi 2014/68/EC (97/23/EC nin yeni versiyonu) ve CE** markalı olarak yapılır. Talep üzerine, tankları yerel yönetmeliklere göre üretebiliriz.

KAPASİTELER:

Kapasite aralığı 1 den 400 m3 e kadardır. Geniş çap aralıklarımız sayesinde tank ebatlarının olası kapsamı herbir projenin karakteristiğine uyum sağlayan depolama kapasite gereksinimlerine herzaman imkan tanır.

DEPOLANAN ÜRÜN VE DİZAYN BASINCI:

Bu katalogdaki bilgi, dizayn basıncı 17.2 bar olan LPG depolamadan yararlanır. Benzer karakteristikteki diğer ürünler veya diğer basınçlar için lütfen bize danışın.

KAPLAMALAR:

Tankın dış koruması hem yerüstü hemde yeraltı kurulumlarında korozyona karşı son derece dayanıklıdır.

Standart Kaplama: Tankın dış yüzeyinin kumlanması, son derece koruyucu epoksi-poliamit astar ve son katın uygulanması (son kat, tankın yerüstü veya yeraltına kurulacak olmasına bağlı olarak değişiklik gösterebilir).

Özel Kaplamalar: Yeraltı tanklar için "kalın kaplama", darbelere karşı son derece dayanıklı ve dielektrik dayanım sertifikalı (15.000 V a kadar).

Müşteri Talebindeki Özel Kaplamalar: Müşteimizin özelliklerine ve/veya Proje gereksinimlerine bağlı olan özel kaplamalar.

KATOTİK KORUMA:

Katotik koruma ekipmanları, anotlar (isteğe bağlı aktivasyon karışımı torması ile), kablolama ve bağlantı terminalleridir. Yeraltı uygulamalarında her tank modeli için dizayn edilir.

STATIC TANKS FOR STORAGE OF LPG

LPG STORAGE TANKS

- *Horizontal Aboveground Tanks*
- *Horizontal Underground Tanks*
- *Vertical Aboveground Tanks*

*Static tanks for the storage of **LPG** in aboveground and underground installations, manufactured in accordance to **ASME Section VIII DIV.1 with ASME U, ASME Section I with ASME S Stamps, EN 13445, AD 2000 Merkblatt, PD 5500 and European Directive 2014/68/EC (new version of 97/23/EC) with CE** marking. Upon request, we can manufacture tanks according to local regulations.*

CAPACITIES:

Capacity range is 1 to 400 m3. Thanks to our extensive range of diameters, the scope of possible tank sizes always allows storage capacity requirements to adapt to the characteristics of each project.

STORED PRODUCT AND DESIGN PRESSURE:

The information in this catalogue refers to storage of LPG at a design pressure of 17.2 bar.
For other products of similar characteristics or other pressures, please consult us.

FINISHES:

External tank protection are highly resistant to corrosion, both for aboveground and underground installa tions.

- ***Standard Finish:** Shot-blasting of the outer surface of the tank, application of high protective epoxy-poly amide primer and top coat (top coat may vary depending on whether the tank is installed aboveground or underground).*
- ***Special Finishes:** "thick coat" finish for underground tanks, highly resistant to impacts and with dielectric strength certification (up to 15.000 V).*
- ***Special Finishes at Customer's Request:** Special finishes according to our customer's specifications and/or Project requirements.*

CATHODIC PROTECTION:

Cathodic protection equipments are anodes (optionally with bag of activating mix), wiring and connection termi-nals. Designed for every tank models for underground installation.

STATİK LPG DEPOLAMA TANKLARI
STATIC TANKS FOR STORAGE OF LPG

ASME STATİK LPG DEPOLAMA TANKLARI
ASME STATIC TANKS FOR STORAGE OF LPG

YATAY YERÜSTÜ & YERALTI / *HORIZONTAL ABOVEGROUND & UNDERGROUND*

ASME LPG Tank Uygulamaları

LPG depolama tankları endüstriyel, ticari, ve tarım alanlarında geniş bir ekipman parkuruna yakıt sağlar. Örneğin okul bölgelerindeki filo araçlarının dolum işlemi, devlet kurumları, nakliye şirketleri, kapalı asansör sistemleri, çiftlik ısıtması, araç yakıt dolumu, bitki kurutma, haşere ile mücadele, standby elektrik jeneratörleri, ısıtma, soğutma, sıcak su, kuzineler, elbise kurutucuları, şömineler, ısı pompaları, barbekü ızgaraları ve yüzme havuzları cihazları.

LPG tankları statik kullanım için ASME,Section VIII, Division I e göre dizayn edilmiş ve üretilmiştanklardır. Standart tank ölçüleri endüstriyel ve ticarikullanım için 1 m^3 - 400 m^3 aralığındadır.

ASME LPG Vessel Applications

LPG storage tanks provide fuel for a wide range of industrial, commercial, and agricultural equipment including: fleet vehicle fueling by school districts, government agencies, and transport companies, indoor lift machinery, farm heating, vehicle fuel, crop drying, pest control, standby electric generators, appliances for heating, cooling, and hot water, ranges, clothes dryers, fireplaces, heat pumps, barbeque grills and swimming pools.

LPG tanks are designed and constructedto ASME, Section VIII, Division I for stationary usevessels. Standard vessel sizes for industrial and commercial bulk uses range from 1 m^3 to 400 m^3.

OTOGAZ SKİD SİSTEM EKİPMANLARI
AUTOGAS SKIDS SYSTEM EQUIPMENTS

OTOGAZ SKİD SİSTEMLERİ / *AUTOGAS SKIDS*

1 Yatay Yerüstü **SKİD SİSLEMLERİ** / *Horizontal Aboveground **SKID SYSTEMS***
2 Dikey Yerüstü **SKİD SİSTEMLERİ** / *Vertical Aboveground **SKID SYSTEMS***
3 Yeraltı **SKİD SİSTEMLERİ** / *Underground **SKID SYSTEMS***

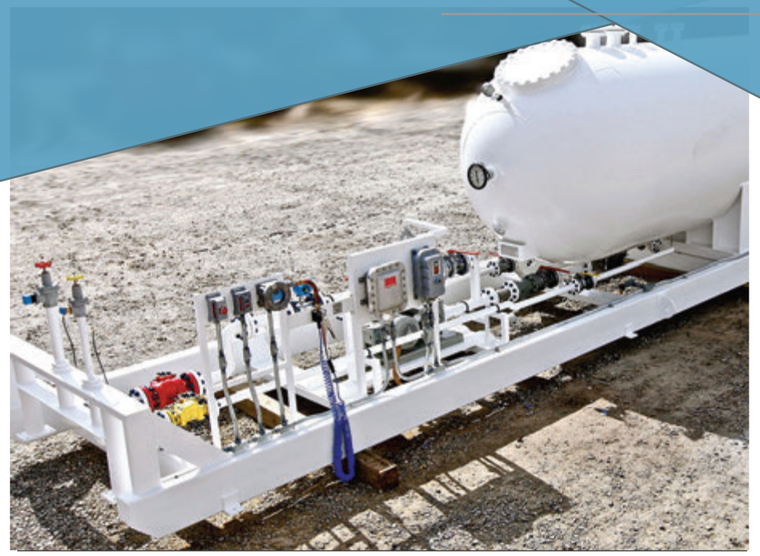
Bir çatı altında pompalama ekipmanı ve dispenserden kurulmuş bağımsız LPG depolama üniteleri.
Maksimum güvenliği garanti ederek, gazın sıvı fazdan araçlara tedariğine imkan tanıyan transfer ekipmanını içerir.
Basitleştirilmiş kurulum: Sadece üniteye güç kaynağı bağlantısı ve zemine (toprak bağlantısı ile) sabitleme gerektirir.

Stand-alone LPG storage units with pumping equipment and dispenser incorporated in a frame.
Includes transfer equipment to allow the supply of gas in liquid phase to vehicles, with the maximum guarantee of safety.
Simplified installation: Only requires connection of power supply to the unit and anchoring to the ground (with earth connection).

MODELLER / *MODELS:*

- **AKCDFN : Dispenser veya Dolum Sütunu Olmayan / *Without Dispenser or Filling Column***
- **AKCWF : Dolum Sütunu Olan / *With Filling Column***
- **AKCWD : Dispenserli / *With Dispenser***
- **AKCDFN**U : Yeraltı Kurulumu için. Dispenser veya Dolum Sütunu Olmayan**
  For Underground Installation. Without Dispenser or Filling Column

OTOGAZ SKİD SİSTEM EKİPMANLARI
AUTOGAS SKIDS SYSTEM EQUIPMENTS



NİTELİKLER / *FEATURES*

LPG depolama tankı: 20 bar dizayn basıncına ve transfer ünitesi için özel bağlantılara sahip standart tankı.
Karkas: Komple kurulan üniteyi barındıran destek yapısı.
LPG transfer hatları:
• Sıvı faz boşaltım hattı: Sıvı LPG için sınırlayıcı, kesici vana ve filtre içerir.
• Baypas vanalı tanka dönüş hattı (pompayı aşırı basınçtan korur).
• Pompadan-dispensere transfer hattı: Emniyet valfi ve basınç göstergesi içerir. (AKCWF türleri destek sütunlu kesici vana içerir. AKCWD modelinde kesici vana dispenserin içine entegre edilmiştir). "emniyet şalteri" ile kullanım. Acil durum butonu.
LPG filtresi: Pompadan önce yerleştirilmiş sıvı fazdaki LPG için filtre.
LPG transfer pompası: Özel olarak LPG nin sıvı fazı içindir.
(AKCWD:) dispenser veya (AKCWF**) dolum sütunu:**
Litre ve fiyat toplayıcılı veya basit dolum sütunlu dispenser, her ikisinde de, Avrupa-tipi ağızlık ve hortum kopması durumunda güvenlik sistemine sahip özel bir LPG transfer hortumu mevcuttur.
Elektrik kurulumu: Ekipmanı ana şebekeye bağlamak için gerekli olan bütün elemanlarıyla tam elektrik kurulumu.
Önlem/emniyet: Karkas ünitesinde kurulmuş LPG tank ölçüsüyle bağlantılı kuru-toz yangın söndürücüler. Elektrik kabini güvenli bir bölgeye yerleştirilebilir.

LPG storage tank: *Standard tank with a design pressure of 20 bar and special connections for transfer unit.*
Frame: *A support structure that houses the complete installed unit.*
LPG transfer lines:
• *Liquid phase outlet line: Includes limiter, shutoff valve and filter for liquid LPG.*
• *Return line to tank (protects the pump from overpressure) with a by-pass valve.*
• *Pump-to-dispenser transfer line: Includes safety valve and pressure gauge. (AKCWF types include shutoff valve with the supply column. In the AKCWD model the shutoff valve is integrated in the dispenser). Operation with "deadman's switch". Emergency button.*
LPG filter: *Filter for LPG in liquid phase, located before the pump.*
LPG transfer pump: *Specifically for LPG in liquid phase.*
(AKCWD**:) dispenser or (AKCWF**) filling column:
Dispenser with litre and price totalizer or simple filling column, both having a specific LPG transfer hose, with a hose breakage safety system and European-type nozzle.
Electrical installation: *Complete electrical installation with all of the elements necessary to connect the equipment to the main power.*
Prevention/safety: *Dry-powder fire extinguishers according to the LPG tank size, incorporated in the frame unit. The electrical cabinet should be located in a safe zone.*

LPG NAKLİYE VE SERVİSİ
LPG TRANSPORT AND SERVICE

TANK KONTEYNERLERİ / *TANK CONTAINERS*

Bir ISO Tank konteyneri ISO standartlarında imal edilmiş bir çelik basınçlı kaptır. Toplu sıvıların depolanması ve nakliyesinde kullanılan ISO karkas içinde tutulur. Bir ISO tank konteyneri konteyner gemileri, kamyonlar ve demiryolu gibi değişik nakliye yöntemleri için uygundur. Kolayca yüklenebilir ve boşaltılabilir. Boşaltım tamamlandığında tank konteyneri temizleme tesisi tarafından temizlenecek ve birsonraki dolum hizmetine devam edecek. Bir tank konteyneri sıvıların dünya etrafındaki birçok konuma nakliyesinde güvenli ve uygun maliyetli bir yöntem sağlar.

An ISO Tank container is a steel pressure vessel built according to ISO standards. It is held in ISO frame that is used for the storage and transportation of bulk liquids. An ISO tank container is suitable for different modes of transportation, such as container ships, trucks and rail. It can be easily loaded and unloaded. Once the unloading is complete, the tank container will be cleaned thoroughly at a cleaning facility, and then it will continue to serve the next load. A tank container provides a safe and cost-effective mode to transport bulk liquids to most locations around the world.

10, 20, 30 ve 40 ft tank konteynerleri LPG nin demiryolu veya karayolu üzerinden ve deniz yoluyla nakliyesi içindir.
Yüksek mukavemetli çelikten imal edilmiş, içinde dalgakıran ve opsiyonel türde bombeleri bulunan çelik karkas üzerine monte edilmiş silindir konteyner.

10, 20, 30 and 40 ft tank containers for transporting LPG on rail or road and by sea.
High-strength steel cylindrical container with surge plates inside and optional type dished ends, mounted in steel frame.

LPG NAKLİYE VE SERVİSİ
LPG TRANSPORT AND SERVICE

TANK KONTEYNERLERİ / *TANK CONTAINERS*

Aşağıda karakteristikleri belirtilen tank konteynerleri türü modellerdir. Bir müşterinin özelihtiyaçlarına göre bir dizaynın herhangi bir adaptasyonu yeni bir proje ve karşılık gelen tip onayını gerektirebilir.
The characteristics of the tank containers described below . Any adaptation ofa design to a customer's specific requirements shall involve a new project and the corresponding type-approval.

Genel / Standart Karakteristikler
- ADR sınıf 2 basınç altında sıvılaştırılmış gazın nakliyesi için Tank-konteyneri.
- ADR, ISO, CSC, IMDG koduna göre inşa edilir.
- Depolanacak ürün: LPG (UN 1965), ticari propan ve bütan.
- ADR dizayn basıncına göre dizayn edilir.
- Maksimum çalışma basıncı.
- ADR dizayn basıncında test edilir.
- Dizayn sıcaklığı: -20° +50°C.

Kontroller ve Testler
- Dizayn koduna göre muayene.
- RT testi.
- Hidrostatik test.
- Sızdırmazlık testi.
- Prototip konteyner üzerinde ISO yük testleri.
- ISO, CSC testleri.

Dış Kaplama
- Kumlama: SA 2 ½.
- Yüzeyin anti-korozif koruması: Poliamid Epoksi.
- Son kat: Poliüretan.

Ekipman
- Sıvı dolum, boşaltım ve gaz fazı hatları için Hidrolik vanalar.
- ACME adaptörleri ve kapakları.
- Emniyet valfleri (PRV)
- Küresel vanalar.
- Termometre.
- Manometre.
- Rotogeç.
- Tahliye hattı.
- Sabit seviye göstergesi.
- Menhol (arka bombede)
- Vanaların metal kabini.

Seçenekler
- Dizayn basıncı ve sıcaklıkları.
- Kalınlıklar, boyama ve dış kaplama rengi.
- Konteyner yüzeyindeki uyarı işaret ve levhaları.

General / Standard Characteristics
- *Tank-container for the transport of ADR class 2 liquefied gas under pressure.*
- *Production according to ADR, ISO, CSC, IMDG code.*
- *Product to be contained: LPG (UN 1965), commercial propane and butane.*
- *Designed as per ADR design pressure.*
- *Maximum working pressure.*
- *Tested at ADR design pressure.*
- *Design temperature: -20° +50°C.*

Controls and Tests
- *Inspections as per design code.*
- *Radiography test.*
- *Hydrostatic test.*
- *Tightness test.*
- *ISO load tests on prototype container.*
- *ISO, CSC tests.*

External Finish
- *Shot-blasting: SA 2 ½.*
- *Anti-corrosion protection of surface with polyamide epoxy.*
- *Top coating polyurethane.*

Equipment
- *Hydraullic valves for liquid outlet, inlet and gas phase lines.*
- *ACME adapters and plugs.*
- *Safety Relief Valves (PRV)*
- *Ball valves.*
- *Thermometer .*
- *Pressure gauge.*
- *Rotogauge.*
- *Drain line.*
- *Fixed level gauge.*
- *Manhole located on rear head.*
- *Metal cabinet for valves.*

Options
- *Design pressure and temperatures.*
- *Thicknesses, coating and colour of external finish.*
- *Warning signs on container body.*


OMTIS
ASPHALT PLANT & EQUIPMENT
WWW.OMTISMAKINA.COM

FAALİYETLER / *PRODUCT RANGE*

- ▶ **ASFALT PLENTLERİ** */Asphalt Plants*
  - Batch Tipi Sabit */Batch Type Fixed*
  - Batch Tipi Mobil */Batch Type Mobile*
  - Durummix Tipi Sabit */Drum Mix Type Fixed*
  - Durummix Tipi Mobil */Drum Mix Type Mobile*
  - Yardımcı Ekipmanları */Auxiliary Equipments*
- ▶ **TOZ TUTUCULAR** */Dust Collectors*
  - Ters Hava */Reversed Air Flow Type*
  - Ters Akışkan Tipi */Counter Fluid Flow Type*
  - Kaset Tipi */Casette Type*
  - Jet Pulse Tipi */Jet Pulse Type*
  - Multisiklon Tipi */Multicyclon Type*
- ▶ **YEDEK PARÇA** */Spare Parts*
- ▶ **ASFAL PLENTİ** */Asphalt Plants*
  - Bakım - Onarım */Maintenance and repair*
  - Revizyon */Revision*
  - Taşıma ve Montaj */Transportation and Montage*

BATCH TİPİ ASFALT TİPİ

Mechasol 60-400 t/h kapasiteye sahip dünya standartlarına asfalt üretebilen modern plentler geliştirmiştir. Teknofalt Sabit Asfalt Plentleri müşteri isteklerine ve ihtiyacına göre çok değişik alternatif tasarımlarla üretilebilmektedir. Asfalt plentleri ses, toz, ısı, gürültü açısından güvenli, çevre ve kullanıcı dostudur. Ünite ölçüleri karayolları gabarilerine uygun olarak tasarlanmıştır. Kolay hızlı montaj-demontaj için modüler bir yapı geliştirilmiştir. Üniteler maksimum verimi alabilecek şekilde düşünülmüş birim asfalt maliyeti minimize edilmiştir. Değişik asfalt üretimine (mastik asfalt, renkli asfalt, sökülmüş (re-cycling) malzeme kullanımı vb.) imkan sağlar. Tamamen bilgisayar kontrollü olup manüel, yarı otomatik ve tam otomatik çalıştırılabilir. Üretimlerimiz teknolojik yeterlilik ve çevre koruma açısından dünyadaki tüm standartları karşılamakta hatta daha üstün özellikler göstermektedir. Ürünlerimizin modüler yapısı, kolay montaj edilmesini ve yer değiştirmeleri çok kısa sürelerde gerçekleştirilmesini sağlamaktadır.

BATCH TYPE ASPHALT TYPE

Mechasol has developed modern plants capable of producing world-class asphalt with a capacity of 60-400 t/h. Teknofalt can produce Fixed Asphalt Plants with very different alternative designs according to the customer requests and needs. The asphalt plants are safe in terms of voice, dust, heat, noise and environment and user friendly. Unit dimensions are designed in accordance with highway clearances. A modular structure has been developed for easy and fast assembly and disassembly. The units are designed to obtain maximum efficiency and the unit asphalt cost is minimized. It enables the production of various asphalt (mastic asphalt, colored asphalt, use of stripped (recycling) materials, etc.). It is fully computer controlled, and can be operated manually, semi-automatically and fully automatically. Our production meets all the standards in the world in terms of technological competence and environmental, protection, even have superior features. Modular structure of our products enables easy assembly and replacement in a very short time.

Asfalt Plenti

SB 220 SABİT BATCH TİPİ ASFALT PLENTİ

Mechasol mobil ve sabit olmak üzere 30-300 t/h kapasiteye sahip dünya standartlarına asfalt üretebilen modern plentler geliştirmiştir. Müşteri İsteklerine göre çok değişik alternatif tasarımlara sahiptir. Asfalt plentleri ses, toz, ısı, gürültü açısından güvenli, çevre ve kullanıcı dostudur. Ünite ölçüleri karayolları gabarilerine uygun olarak tasarlanmıştır. Kolay hızlı montaj-demontaj için modüler bir yapı geliştirilmiştir.

Mechasol enhanced mobile and fixed modern asphalt plants which has 30-300 t/h capacity and can produce world class asphalt. It has alternative designs according to costumer needs. Asphalt plants have safety about voice, dust, temperature, noise and they are nature friendly. Units dimensions are designed up to Highway Commission Gabarite's. Modular constractures were designed for easy and fast montage-demontage processes.

SB 160 SABİT BATCH TİPİ ASFALT PLENTİ

Ürünlerimizin en önemli özelliği maliyet ve işletme giderleri açısından daha ekonomik olmasıdır.

One of the most important property of our products isbeing economic about cost and operational expenditure.

Üniteler maksimum verimi alabilecek şekilde düşünülmüş birim asfalt maliyeti minimize edilmiştir.

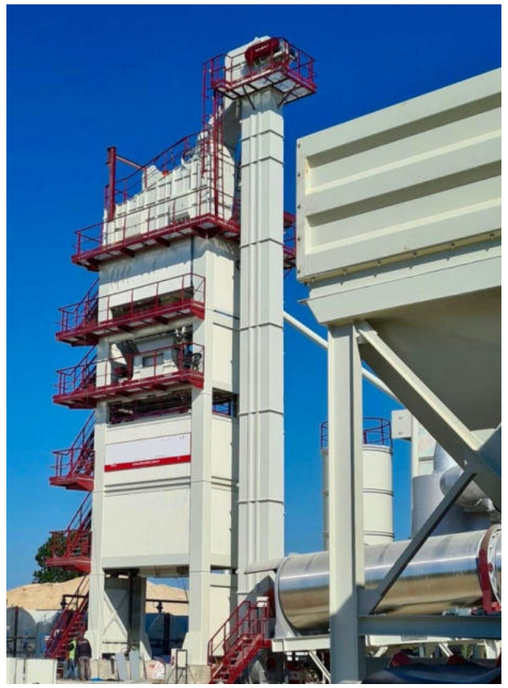
Units were designed by thinking of maximum afficiency and unit cost was minimalized.

Düşük enerji ihtiyacı, yakıt sarfiyatı optimize edilmiş olması, 2 kişi ile (plent operatörü ve yükleme operatörü) çalıştırılabilmesi yanında, uzun ömürlü sistem ve donanımlar, minimize edinmiş bakım ihtiyaçları sayesinde işletme maliyetleri düşüktür.

Operational expenditure is very low because of the low energy needs, minimalized fuel consumption, long lived system and equipments, minimalized maintenance needs and it is able to runned by 2 persons (1 plant operator and 1 loading operator).

TEKNİK BİLGİ TABLOSU

PLENT TİPİ PLANT TYPE		SB-MB 60	SB-MB 80	SB-MB 100	SB-MB 120	SB-MB 160	SB-MB 200	SB-MB 250	SB-MB 340	SB-MB 400
Soğuk Besleme Siloları Tip Silo Kapasitesi M3	Cold Feeding Silos (Type/Silo Capacity m	8,10,12,15,20m3 650mm'ye kadar boşaltma genişliği frekans kontrolü								
Düz Toplama Bantı Bant Genişliği (mm) Bant Boyu	Flat Belt Belt Wideness (mm) Belt Length (mm)	650	650	650	650	650	650	650	800	800
		Silo sayısına bağlı olarak değişmektedir.								
Eğik Bant Bant Genişliği (mm)	Sloping Belt Belt Wideness (mm)	650	650	650	650	650	650	650	800	800
Kurutucu Kurutucu Çapı Kurutucu Boyu	Dryer Dryer Diameter (m) Dryer Length (m)	1.50 6.50	1.80 8.00	1.80 8.00	2.00 8.00	2.20 8.60	2.20 9.00	2.40 9.00	2.40 10.0	2.70 12.0
Elek	Screen	4,5,6 Katlı								
		4,5 Bölmeli								
Sıcak Agrega Siloları Kapasite (ton)	Hot Aggregate Silos Capacity (ton)	9	9	9	16	16	20	25	30	30
Agrega Tartı Tartım Kapasitesi (kg)	Aggregate Weight Weighing Capacity (kg	1000	1250	1500	1500	2000	2500	3000	4000	5000
Filler Tartı Tartım Kapasitesi	Filler Weight Weighing Capacity (kg)	150	150	150	200	200	250	300	400	500
Bitüm Besleme Kapasitesi (m3)	Bitumen Feeding Capacity (lt/sn)	6	6	6	6	10	10	15	15	20
Mikser Karışım Kapasitesi (kg)	Mixer Mixture Capacity (kg)	800	1000	1250	1500	2000	2500	3000	4000	5000
Otomasyon	Automation	Otomasyon Sistemi								
Bitüm - Yakıt Tankı Kapasitesi (m3)	Bitumen-Fuel Tanks Capacity (m3)	20, 40, 50, 60, 80								
Kızgın Yağ Sistemi X 1000 (kcal/saat)	Hot Oil System x 1000 (kcal/saat)	500	500	500	750	750	1000	1000	1000	1000
Elektrikli Isıtma	Electrical Heating	Her kapasite isteğe bağlı olarak istenilen kapasitede yapılmaktadır.								



Asfalt Plenti */Asphalt Plants*

SOĞUK BESLEME SİLOSU VE BANTLAR

COLD FEEDING SILO AND BELT

· 8-18 m^3 kapasiteli, ihtiyaca göre 3/4/5/6 adet veya daha fazla kullanılabilir,
· Frakans kontrollü hassas dozajlama, sorunsuz akış,
· İnce malzeme akışı için vibratör,
· Kumanda kabininden izlenebilir/kontrol edilebilir.
· İri malzeme girişini önlemek için ızgara sistemi.

· 8-18 m^3 capacity, 3/4/5/6 pieces or more can be used if needed,
· Frequency controlled sensitive dosing
· Issueless flow
· Vibrator for fine material flow
· To be controlled and checked from control room
· Gridion system to stem coarse materials

JET PULS FİLTRE / *JET PULS FILTER*

· 200 C'ye dayanıklı NOMEX filtre torbaları, (daha yüksek sıcaklık durumunda torbaların yanmasını önleyen temiz hava sistemi)
· Otomatik çalışma sistemi, kumanda kabininden izleme
· 20mg/m3 ün altında dünya standartlarına uygun emisyon
· Kompakt, daha küçük hacimle daha büyük filtrasyon alanı
· Presepertörden alınan kaba malzeme ve filtreden elde edilen filler malzemenin geri kullanımı
· Çok düşük işletme maliyeti, çok uzun ömür

· *200 C heat resistant NOMEX filter bags, (in higher heat situations, clear air systems to avoid burning of bags)*
· *Automatic operation system and controlling from cockpit*
· *Less than 20 mg/m^3 world class emission system*
· *Compact, with less volume larger filtration zone*
· *Recycling of bulk material which is getting from preseperator and filler material which is getting from filter*
· *Very low operational expenditure and long life*

KURUTUCU / *DRAYER*

· Isı ve aşınmaya dayanıklı özel alaşımlı malzeme
· 4 makaradan veya zincirle tahrik edilebilir
· Ring ve makaraların sertleştirilmesi sayesinde uzun dayanım süresi
· Kurutucu kovalarının mükemmel tasarımı ile tüm malzemeye eşit ısı aktarımı,
· Kolay değiştirilebilir yapıda kova sistemi,
· Kurutucu iç dizaynı ve brülör sisteminin tam uyumu sayesinde maksimum ısı aktarımı ve yüksek verim

· *Heat and abrasion resisting special alloy material*
· *4 capstan roller or chain driven system*
· *Long strength period under auspices of tempering rings and rollers*
· *Equal heat transfer to whole material with the perfect design of the dryer buckets*
· *Bucket system which is designed for changing easily*
· *Maximum heat transfer and high efficiency because of the perfect match between dryer interior design and burner system*

ELEK / *SCREEN*

· İsteğe bağlı 4/5/6 katlı elek
· Vibratör veya eksantrik ağırlık sistemi ile tahrik
· Gerdirme, mükemmel eğim, mükemmel yük dağılımı
sayesinde sorunsuz kapasite
· Malzemelerin karışımını önleyen mükemmel iç tasarım
· Kolay elek değişimi, kolay bakım için bakım kapakları,
platformlar
· 0-5 bölmesi üzerinden by-pass çalışma

· *4/5/6 storey units up to needs*
· *Vibrator or eccentrically loaded driven system*
· *Issueless capacity because of turnbuckle, wonderful slope*
and wonderful load distribution
· *Wonderful interior design with the localising system*
· *Easy to change screen parts, inspection hatch for easy*
maintenance
· *By-pass system through 0-5 divisions*

OMTİS AND SUBSIDIARIES

OIL & GAS EPC PROJECT REFERENCE

INTERNATIONAL PROJECTS

TANAP Metering Skids

Quick Facts	
Year built	Ongoing
Customer	TANAP
End user	TANAP
Location	Turkey
Sizing	14” through 48”
Capacity	**31 BCMA** (3,850,000 Sm^3/h)
Measurement	Ultrasonic and Orifice meters
Pressure	55.6 barg
Material class	Carbon steel, ANSI specifications

Scope of Work

There are 13 skid based metering points that are within this projects specification, summary of these metering skids are stated in the table below:

Stations	Fiscal Metering Station	High Pressure (HP) For Fuel Gas to Turbine-Compressor Package	Low Pressure (LP) For Fuel Gas to Gas Generator and/or HVAC system
MS1 Georgia / Turkey boarder metering point	3+2 Stream (Orifice + USM)	N/A	2x100 % redundant LP Skid USM Meters to fiscal standards
CS1 Compressor station 1 fuel gas metering point HP & LP off takes	N/A	2x100 % redundant HP Skid USM – Meters to fiscal standards	2x100 % redundant LP Skid USM Meters to fiscal standards
CS5 Compressor station 5 fuel gas metering point HP & LP off takes	N/A	2x100 % redundant HP Skid – Meters to fiscal standards	2x100 % redundant LP Skid USM- Meters to fiscal standards
CS5 Offtake	N/A	2x100 % redundant HP Skid Meters to fiscal standards	N/A
MS2 Eskisehir metering point	2+1 Stream (Orifice +USM)	N/A	2x100 % redundant LP Skid USM - Meters to fiscal standards
MS3 Tracia metering Point	2+1 Stream (Orifice + USM)	N/A	2x100 % redundant LP Skid USM Meters to fiscal standards
MS4 Turkey / Greece metering point	2+1 Stream (USM+USM)	N/A	2x100 % redundant LP Skid USM - Meters to fiscal standards

Star Refinery, Pressure Control and Metering Facility

Quick Facts	
Year built	2016
Customer	Star Rafineri A.S.
End-user	Star Rafineri A.S.
Location	Turkey
Capacity	200.000 Sm3/h
Pressure In	35-75 bar
Pressure Out	42 bar

Scope of works

Pipeline Works

- Hot-tap Operation: on an existing 24" artery of 14" transmission pipeline
- Underground Valve Group for Tie-in: 14" Ball valve +GOO Actuator + Bypass valves

Civil Works

Electric and Automation Works

- Generator, Compensation panel, AC panel and AC distribution, Lighting and lightning, Charger and DC distribution, Battery group, Inverter, Cables, Cable trays inside building and outside above ground, earthing etc.,
- PLC panel equipment, Local scada system, Modbus server, BOTAŞ RTU, FC Panel, Printers, Modbus converters, Remote access tools, Media converters, Cables, Field instruments, Actuators and Flow computers etc.,

Mechanical Works

Design, Manufacturing (piping at factory), Assembling, Testing (hydro testing, NDT testing at factory and N2 testing at site) and Commissioning of PRMS with including these sections:

- ESD Valve Skid: 14" Ball valve +GOO Actuator + Bypass valves
- Filtering Skid: 2 x 200.000 scm/h Multi-cyclone Seperators & Coalescer Filters
- Metering Skid: 1 x 200.000 scm/h Ultrasonic Meters & 2 x 200.000 scm/h Turbine Meters (8,76 BCMA)
- Heat Exchanger and Pressure Regulating Skids: 2 x 200.000 scm/h Vertical Shell-Tube Type Heat Exchangers & 2 x 200.000 scm/h pilot operated Active (PCV – fail to open) & Monitor (Axial – fail to close) Pressure Regulators ,
- Outlet Valve Skid; 14" Ball valve +GOO Actuator + Bypass valves
- Hot Water Boilers Skid; 2 x 2.000.000 kcal/h NA R type boilers with burners and accessories.
- Gas Chromatograph

Siemens Bandırma-II Combined Cycle Power Plant

Pressure Regulating & Metering Station

Quick Facts	
Year built	2015
Customer	SIEMENS A.Ş.
End-user	Enerjisa
Location	Turkey
Capacity	**1,17 BCMA** (133.500 Sm3/h)
Pressure In	25-75 bar
Pressure Out	38,2 bar

Preheater Station and Filtering Station

Quick Facts	
Year built	2015
Customer	SIEMENS A.Ş.
End-user	Enerjisa
Location	Turkey
Capacity	**1,14 BCMA** (130.000 Sm3/h)
Pressure In	35-38 bar
Pressure Out	35-38 bar

Scope of Work

The scope of supply contains the following lots as a turnkey project to provide fuel gas for the GT under the required conditions from the arterial pipeline of BOTAS.

- Lot 1

  Hot-Tap Operation, 36”x24”x18” Full Encirclement LOR Flanged 3 Way Split Tee, ANSI 600
  18” Line Valve Group with By-Pass Valves, ANSI 600, GOO Actuated
  12” Take-Off Valve Group with By-Pass Valves, ANSI 600, GOO Actuated
  Including mechanical, civil, instrumentation and cabling works.
- Lot 2

  Underground Pipeline Construction between Lot-1 and PRMS (16” API 5L X52, 550 m.)
- Lot 3

  Natural Gas Pressure Control and Metering System including fabrication, mechanical installation, testing, civil works, electrification, cabling and automation works
- Lot 4

  Underground Pipeline Construction between PRMS and Preheating Skids before GT (16”, 1200 m.)
- Lot 5

  Underground Pipeline Construction between PRMS and Auxiliary Boiler (4”, 1200 m.)
- Lot 6

  Preheating Skids including GT metering and final filter sections

SAMSUNG-ACWA Power Kırıkkale Combined Cycle Power Plant

Quick Facts	
Year built	Ongoing-2016
Customer	SAMSUNG C&T
End-user	ACWA Power
Location	Turkey
Capacity	**1,49 BCMA** (170.000 Sm3/h)
Pressure In	35-75 bar
Pressure Out	32-50 bar

Scope of Work

The scope of supply contains the following lots as a turnkey project to provide fuel gas for the GT under the required conditions from the arterial transmission pipeline.

- Hot-Tap Operation, 48”x24”x16” Full Encirclement LOR Flanged 3 Way Split Tee, ANSI 600
- 16” Line Valve Group with By-Pass Valves, ANSI 600, GOO Actuated
- 16” Take-Off Valve Group with By-Pass Valves, ANSI 600, GOO Actuated
- Including mechanical, civil, instrumentation and cabling works.
- Underground Pipeline Construction between Hot-Tap Point and PRMS (16” API 5L X52, 3.000 m.)
- Gas Filter/Separator Skids
- Pressure Control Skids

- Metering Skids
- Including fabrication, mechanical installation, testing, civil works, electrification, cabling and automation works

Solventas Jetty Loading/Off Loading Project

Quick Facts	
Year built	2016
Customer	Emerson
End-user	Solventaş
Location	Turkey

Scope of Work

This Material Requisition covers minimum requirements for the design, manufacture, Assembly Inspection & testing, surface protection, preservation and supply of the fuel oil ship loading / unloading as a part of Solventas Early Production System.

- Duel stream coriolis meter Fuel oil ship loading / unloading –Emerson designed and constructed in accordance with the technical requirements and associated attachments of this material requisition.
- Single l stream coriolis meter Diesel Oil ship loading /unloading metering skid.

Total Jetty Loading/Off Loading Project

Quick Facts	
Year built	2016
Customer	Emerson
End-user	Total
Location	Turkey

Scope of Work

This Material Requisition covers minimum requirements for the design, manufacture, Assembly Inspection & testing, surface protection, preservation and supply of the fuel oil ship loading / unloading as a part of Total Early Production System.

- 2 X Duel stream coriolis meter Fuel oil ship loading / unloading –Emers designed and constructed in accordance with the technical requirements and associated attachments of this material requisition.
- Single l stream coriolis meter Diesel Oil ship loading /unloading metering skid.

TURKMENISTAN PROJECTS

Mary II Power Plant Project

Quick Facts	
Year built	Ongoing 2016
Customer	Çalık Energy FZE
End user	Turkmenenergo
Location	Turkmenistan
Capacity	2 x 350.000 Sm3/h
Pressure In	55-30 bar
Pressure Out	25,1 29,8 bar

Project Description:
The Mary II Combined Cycle Power Plant Project with the 1574 MW capacity is built by Çalık Enerji at Mary Province & will be the biggest capacity power plant in Turkmenistan. The GT was provided by GE. Two identical PRMS will be supplied by Akfel with a flow rate of 350.000 scm/h.

Scope of Work
Design, manufacture and supply of a natural gas pressure reducing and metering system.

- Inlet Valve Skids; 18" Ball valve +GOO Actuator + Bypass valves
- Outlet Valve Skids; 20" Ball valve +GOO Actuator + Bypass valves
- Gas scrubbing and filtering, 4 x 350.000 scm/h Multi-cyclone Separators & Coalescer Filters (Diameter: DN1050)
- Shell & Tube Type Gas Heat Exchangers, 4 x 7.000.000 kcal/h Heat Exchanger (Diameter: DN900).
- Gas Fired Hot-Water Boiler, 6 x 3.500.000 kcal/h NA R type boilers with burners and accessories.
- Emergency Shutdown Valves; 20" Ball valve +GOO Actuator + Bypass valves
- Pressure let-down
- Metering
- Gas Chromatograph
- Skid mounted piping and instruments
- Insulating joints
- Automation & Electrical Works

Watan Power Plant Project

Quick Facts	
Year built	2015
Customer	Çalık Energy FZE
End-user	Turkmenenergo
Location	Turkmenistan
Capacity	100.000 m3/h
Pressure In	55-30 bar
Pressure Out	25,1-29,8 bar

Project Description:
The Watan Simple Cycle Power Plant Project was achieved by Çalık Enerji in Beyik Turkmenbashi. The GT was provided by GE. The required natural gas conditions for turbines is obtained by PRMS with a flow rate 100.000 Scm/h which was manufactured by Akfel.

Scope of Work
Design, manufacture and supply of a natural gas pressure reducing and metering system with flow rate of 100.000 Scm/h.

- Gas scrubbing and filtering
- Shell & Tube Type Gas Heat Exchangers
- Gas Fired Hot Water Boiler
- Pressure let down
- Metering
- Gas Chromatograph
- Gas turbine electrical heaters

- Skid mounted piping and instruments
- Insulating joints
- Emergency Shutdown Valves

Derweze Power Plant Project

Quick Facts	
Year built	2015
Customer	Çalık Energy FZE
End-user	Turkmenenergo
Location	Turkmenistan
Capacity	**1,75 BCMA** (200.000 Sm3/h)
Pressure In	55-30 bar
Pressure Out	25,1-29,8 bar

Scope of Work
Design, manufacture and supply of a natural gas pressure reducing and metering system.

- Gas scrubbing and filtering
- Shell & Tube Type Gas Heat Exchangers
- Gas Fired Hot-Water Boiler
- Pressure let-down
- Metering
- Gas Chromatograph
- Gas turbine electrical heaters
- Skid mounted piping and instruments
- Insulating joints
- Emergency Shutdown Valves

AHAL-2 Power Plant Project

Quick Facts	
Year built	2014
Customer	Çalık Energy FZE
End-user	Turkmenenergo
Location	Turkmenistan
Capacity	**1,75 BCMA** (200.000 Sm3/h)
Pressure In	55-30 bar
Pressure Out	25,1-29,8 bar

Scope of Work
Design, manufacture and supply of a natural gas pressure reducing and metering system.

- Gas scrubbing and filtering
- Shell & Tube Type Gas Heat Exchangers
- Gas Fired Hot-Water Boiler
- Pressure let-down
- Metering
- Gas Chromatograph

- Gas turbine electrical heaters
- Skid mounted piping and instruments
- Insulating joints
- Emergency Shutdown Valves

LEBAP Power Plant Project

Quick Facts	
Year built	2014
Customer	Çalık Energy FZE
End-user	Turkmenenergo
Location	Turkmenistan
Capacity	40.000 Sm3/h
Pressure In	55bar
Pressure Out	45-48 bar

MARY Power Plant Project

Quick Facts	
Year built	2014
Customer	Çalık Energy FZE
End-user	Turkmenenergo
Location	Turkmenistan
Capacity	40.000 Sm3/h
Pressure In	55bar
Pressure Out	45-48 bar

AZERBAIJAN PROJECTS

Azerbaijan, Container Based Pressure Control & Metering System

Quick Facts	
Year built	Ongoing 2016
Customer	SENTRA
End-user	GAS EXPORT (SOCAR)
Location	Azerbaijan
Capacity	5x5.000 Sm^3/h 1x6.000 Sm^3/h 3x8.000 Sm^3/h

Scope of Work

Engineering, procurement, construction, commissioning of Container Based Natural Gas Pressure Control and Metering System

- Pressure Control Skid
- Metering Skid
- Gas Filter/Separator Skids
- Emergency Shut Down Unit
- Odorization Unit
- Automation and Control System

Azerbaijan, Container Based Pressure Control & Metering System

Quick Facts	
Year built	2015
Customer	SENTRA
End-user	GAS EXPORT (SOCAR)
Location	Azerbaijan
Capacity	5 x 10.000 S m^3/h 1 x 12.000 S m^3/h

Project Description:

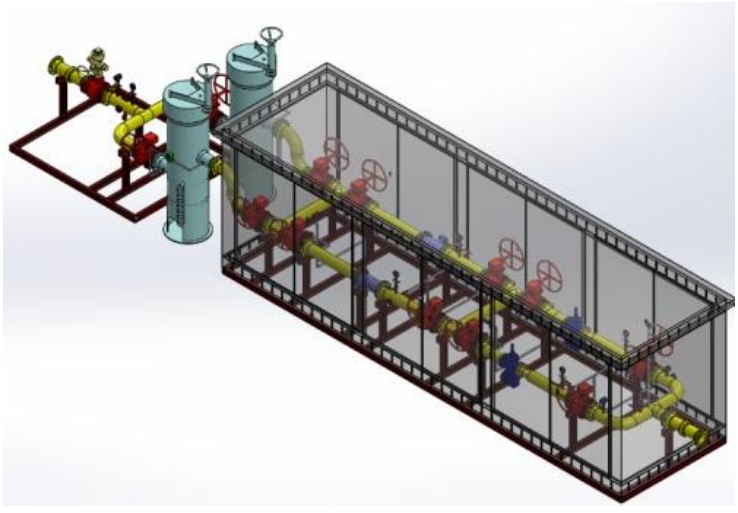
The Gas Export Department receives gas produced by operating companies in Azerbaijan and markets SOCAR's gas in foreign countries.

Moreover Gas Export Department transmits natural gas to Azerigaz PU which is only state distribution company in the Republic of Azerbaijan.

Scope of Work

Engineering, procurement, construction, commissioning of Container Based Natural Gas Pressure Control and Metering System

- Pressure Control Skid
- Metering Skid
- Gas Filter/Separator Skids
- Emergency Shut Down Unit
- Odorization Unit
- Automation and Control System



GEORGIA PROJECTS

Gardabani EPC Power Plant Project

Quick Facts	
Year built	2015
Customer	Çalık Energy
End-user	Gardabani TPP
Location	Georgia
Capacity	52.190 Sm3/h
Pressure In	10,4-12,2 bar
Pressure Out	30-31,8 bar

Scope of Work

Engineering, procurement, construction, commissioning of Natural Gas Pressure Control and Metering System

- Fuel Gas Line Skid
- Pressure Control Skid
- Metering Skid
- Gas Filter/Separator Skids
- Pump Skid

LLC Gardabani TO-PP Power Plant Project

Quick Facts	
Year built	2015
Customer	LLC Gardabani TPP
End user	Gardabani TPP
Location	Georgia
Capacity	55.000 Sm^3 //h
Pressure In	54-12 bar
Pressure Out	18 10,3 bar

Scope of Work

Engineering, procurement, construction, commissioning of Natural Gas Pressure Control and Metering System.

- Fuel Gas Line Skid
- Pressure Control Skid
- Metering Skid
- Gas Filter/Separator Skids
- Pump Skid

TURKEY PROJECTS

Istanbul Gas Distribution Co., Pressure Control and Metering Facility

Quick Facts	
Year built	2015
Customer	Istanbul Gas Distribution Co.
End-user	Istanbul Gas Distribution Co.
Location	Turkey
Capacity	**8,76 BCMA** (1.000.000 Sm^3/h)
Pressure In	35-75 bar
Pressure Out	19-25 bar

Quick Facts	
Year built	2015
Customer	Ozsoy Engineering
End-user	Istanbul Gas Distribution Co.
Location	Turkey
Capacity	**8,76 BCMA** (1.000.000 Sm^3/h)
Pressure In	35-75 bar
Pressure Out	19-25 bar

Scope of works - Esenyurt City Gate:

Pipeline Works

- Hot-tap Operation: on an existing 36" artery of 28" transmission pipeline
- Underground Valve Group for Tie-in: 28" Ball valve +GOO Actuator + Bypass valves

Civil Works

Electric and Automation Works

- Generator, Compensation panel, AC panel and AC distribution, Lighting and lightning, Charger and DC distribution, Battery group, Inverter, Cables, Cable trays inside building and outside above ground, earthing etc.,
- PLC panel equipment, Local scada system, Modbus server, BOTAŞ RTU, FC Panel, Printers, Modbus converters, Remote access tools, Media converters, Cables, Field instruments, Actuators and Flow computers etc.,

Mechanical Works

- Design, Manufacturing (piping at factory), Assembling, Testing (hydro testing, NDT testing at factory and N2 testing at site) and Commissioning of PRMS with including these sections:

- ESD Valve Skid: 28" Ball valve +GOO Actuator + Bypass valves
- Filtering Skid: 5 x 200.000 scm/h Multi-cyclone Separators & 5 x 200.000 scm/h Coalescer Filters
- Metering Skid: 5 x 200.000 scm/h Ultrasonic Meters & 5 x 200.000 scm/h Turbine Meters (8,76 BCMA)
- Heat Exchanger and Pressure Regulating Skids: 5 x 200.000 scm/h Vertical Shell-Tube Type Heat Exchangers & 5 x 200.000 scm/h pilot operated Active (PCV – fail to open) & Monitor (Axial – fail to close) Pressure Regulators ,
- Outlet Valve Skid; 36" Ball valve +GOO Actuator + Bypass valves
- Hot Water Boilers Skid; 5 x 3.500.000 kcal/h NA R type boilers with burners and accessories.
- Gas Chromatograph

Esgaz Muttalip, Pressure Control and Metering Facility

Quick Facts	
Year built	Ongoing-2016
Customer	Esgaz A.S.
End-user	Esgaz Gas Distribution Co.
Location	Turkey
Capacity	300.000 Sm^3/h
Pressure In	35-75 bar

Pressure Out	19-12/25 bar

Quick Facts	
Year built	Ongoing-2016
Customer	Esgaz A.S.
End-user	Esgaz Gas Distribution Co.
Location	Turkey
Capacity	200.000 Sm^3/h
Pressure In	35-75 bar
Pressure Out	19-12 bar

Bursagaz Iznik Pressure Control & Metering System

Quick Facts	
Year built	Ongoing-2016
Customer	Enervis Energy
End-user	Bursagaz Gas Distribution Co
Location	Turkey
Capacity	38.000 m3/h
Pressure In	35-75 bar
Pressure Out	12 - 19 bar

Scope of Work

Engineering, procurement, construction, commissioning of Natural Gas Pressure Reducing and Metering System

Electric and Automation Works

- Generator, Compensation panel, AC panel and AC distribution, Lighting and lightning, Charger and DC distribution, Battery group, Inverter, Cables, Cable trays inside building and outside above ground, earthing etc.,
- PLC panel equipment, Local scada system, Modbus server, BOTAŞ RTU, FC Panel, Printers, Modbus converters, Remote access tools, Media converters, Cables, Field instruments, Actuators and Flow computers etc.,

Mechanical Works

Design, Manufacturing (piping at factory), Assembling, Testing (hydro testing, NDT testing at factory and N2 testing at site) and Commissioning of PRMS with including these sections:

- ESD Valve Skid: 6” Ball valve +GOO Actuator + Bypass valves
- Filtering Skid: 2 x 38.000 scm/h Multi-cyclone Seperators & Coalescer Filters
- Metering Skid: 1 x 38.000 scm/h Ultrasonic Meters & 2 x 38.000 scm/h Turbine Meters
- Heat Exchanger and Pressure Regulating Skids: 2 x 38.000 scm/h Vertical Shell-Tube Type Heat Exchangers & 2 x 38.000 scm/h pilot operated Active (PCV – fail to open) & Monitor (Axial – fail to close) Pressure Regulators ,
- Outlet Valve Skid; 10” Ball valve +GOO Actuator + Bypass valves
- Hot Water Boilers Skid; 2 x 600.000 kcal/h NA R type boilers with burners and accessories.
- Gas Chromatograph
- Odorization Skid

TPAO / Heater Seperator (Gas Production Unit)

Quick Facts	
Year built	Ongoing-2018
Customer	Enervis Energy
End-user	Turkish Petroleum Company
Location	Turkey
Capacity	10 MMCFD
Pressure In	350 Bar
Pressure Out	100 Bar

Scope of Work

Engineering, procurement, construction, commissioning of Gas Production Unit

OMAN PROJECTS

OXY Block-62 Development - HIPPS Skids

Quick Facts	
Year built	2016
Customer	Occidental of Oman
End-user	Occidental of Oman
Location	"Habiba" Block 62, northern Oman
Sizing	12"
Capacity	Natural Gas
Measurement	N/A
Pressure	ANSI Class 900 and 1500
Material class	Carbon steel, ANSI specifications

Project Description

Occidental was awarded Block 62 in November 2008 under a 20-year contract. Block 62 is comprised of both development and exploration opportunities targeting gas and condensate resources.

iSystems, together with OPES and HIMA, provide two (2) HIPPS skids in the main gas process piping.

Scope of Work

Design and supply of two (2) HIPPS skids, each consisting of;

- Two (2) full-bore ball valves with fail-close pneumatic actuators and redundant valve control systems with partial stroke testing facilities;
- Three (3) pressure transmitters with DBB isolation valves;
- Prefabrication and testing of the complete systems including piping, steelwork, electrical, instrument air/gas buffer tanks, secondary instrumentation & valves, etc;
- Integration and iFAT testing with the HIMA control systems

Rabab Harweel Power Plant & HRSG Project Metering Facility

Quick Facts	
Year built	Ongoing-2016
Customer	Al Hassan - Arabian Industries JV
End-user	Petroleum Development Oman (PDO)
Location	Rabab Harweel Power Station, Sultanate of Oman
Sizing	6”
Capacity	44,000 kg/h natural gas
Measurement	2x 6”-600# 4-path Ultrasonic meters
Pressure	Up to 90 barg
Material class	Carbon steel, ANSI specifications

Scope of Work

Design and supply of the Custody Transfer Metering station for natural gas, consisting of;

- Prefabricated gas metering skid with 2 each 6”-600# ultrasonic metering lines, complete with motorized stream inlet & outlet valves and “Z”-configuration piping for meter verification; complete with instrumentation, skid cabling & wiring;
- Redundant Process Gas Chromatograph system, complete with sample takeoff and conditioning;
- Station Control Panel with flow computers and redundant PC-based Supervisory / HMI / Invoicing system.

Al Barakah LACT Metering Skid, WL Crude Oil Export Pipeline

Quick Facts	
Year built	Ongoing
Customer	Occidental Of Oman Inc
End-user	Occidental Of Oman Inc.

Location	Oman
Design Flow Rate	12.600 ton/day
Design Pressure	93 bar
Design Temp.	200 Deg. Fr

Quick Facts	
Year built	2015
Customer	Al Hassan - TR Project JV
End-user	Petroleum Development Oman (PDO)
Location	Zauliyah Gas Plant Project, Sultanate of Oman
Sizing	3” through 6”
Capacity	1.2 MMSCMD (natural gas, wet, sour) 12 m^3/h (condensate)
Measurement	2x 6”-600# 4-path Ultrasonic meters (gas) 2x 1”-600# Coriolis meters (condensate)
Pressure	Up to 95 barg
Material class	Carbon steel, ANSI specifications

Quick Facts	
Year built	2015
Customer	Associated Industries Limited SFZ
End-user	Associated Industries Limited SFZ
Location	Oman
Capacity	1.720 ton/day
Pressure In	60–125 bar
Pressure Out	60–125 bar

Quick Facts	
Year built	2014
Customer	OOCEP
End-user	OOCEP
Location	Oman
Capacity	**1,45 BCMA** (165.000 Sm^3/h)
Pressure In	60–125 bar
Pressure Out	60–125 bar

Scope of Work

Engineering, procurement, construction, commissioning.

- Metering Skid (3 Lines) including Flow Control
- Prover Skids including a pumped auto-sampling system
- Control System
- Sampling & Analyzer Syste

EGYPT PROJECTS

GASCO Power Station, Gas Filtering, Heating, Reducing and Metering Station

Quick Facts	
Year built	2017
Customer	GASCO (Egyptian Natural Gas Co.)
End-user	GASCO (Egyptian Natural Gas Co.)
Location	Egypt
Capacity	167.000 Sm3/h
Pressure In	27-70 barg
Pressure Out	25 barg

Project Description:
The scope of supply contains the following subjects as a turnkey project with flow rates of 167.000 scm/h.

Quick Facts	
Year built	2017
Customer	GASCO (Egyptian Natural Gas Co.)
End-user	GASCO (Egyptian Natural Gas Co.)
Location	Egypt
Capacity	175.000 Sm3/h
Pressure In	29-70 barg
Pressure Out	25 bar 17 bar

Project Description:
The scope of supply contains the following subjects as a turnkey project with flow rates of 175.000 scm/h.

Quick Facts	
Year built	2017
Customer	GASCO (Egyptian Natural Gas Co.)
End-user	GASCO (Egyptian Natural Gas Co.)
Location	Egypt
Capacity	150.000 Sm3/h
Pressure In	25-70 barg
Pressure Out	9 barg

Project Description:
The scope of supply contains the following subjects as a turnkey project with flow rates of 150.000 scm/h.

Quick Facts	
Year built	2017
Customer	GASCO (Egyptian Natural Gas Co.)
End-user	GASCO (Egyptian Natural Gas Co.)
Location	Egypt
Capacity	345.000 Sm3/h
Pressure In	27-70 barg
Pressure Out	25 barg

Project Description:
The scope of supply contains the following subjects as a turnkey project with flow rates of 345.000 scm/h.

Quick Facts	
Year built	2017
Customer	GASCO (Egyptian Natural Gas Co.)
End-user	GASCO (Egyptian Natural Gas Co.)
Location	Egypt
Capacity	440.000 Sm3/h
Pressure In	25-70 barg
Pressure Out	7 barg

Scope of works

Electric and Automation Works

- 2 split body air conditioning system,
- 1 UPS System (2 DC-panels + 1 Battery bank),
- 1 control panel including flow computers, PLC with redundant processor and interfacing cards,
- 1 Supervisory PC-Based control system,
- 1 fixed and automatic fire fighting system (FM200),
- 1 normal lighting system
- 1 power distribution system,
- 5 fire break-multiple through cables
- Free space for future installation of RTU and telecom equipment,
- 1 Junction Box dedicated to collect telemetry signals. This J.B to be mounted under the space of future RTU & complete with Knife - type terminals for easy separation and testing access,
-

- Compensation panel, AC panel and AC distribution, Lighting and lightning, Charger and DC distribution, Battery group, Inverter, Cables, Cable trays inside building and outside above ground, earthing etc.,
- PLC panel equipment, Local scada system, Modbus server, FC Panel, Printers, Modbus converters, Remote access tools, Media converters, Cables, Field instruments, Actuators and Flow computers etc.,

Mechanical Works

Design, Manufacturing (piping at factory), Assembling, Testing (hydro testing, NDT testing at factory and N2 testing at site) and Commissioning of PRMS with including these sections:

- Inlet Valve Skid: 16" Ball valve +GOO Actuator + Bypass valves
- Filtering Skid: 2 x 167.000 scm/h, Filter Separator Dual Stage Cylone-Cartridge
- Metering Skid: 3 x 85.000 scm/h ,Ultrasonic Meters
- Water Bath Heater: 2 x 167.000 scm/h ,WBH with Control Panel
- Pressure Regulating Skids: 3 x 85.000 scm/h pilot operated Active (fail to open) & Monitor (fail to close) Pressure Regulators ,
- Outlet Valve Skid; 16" Ball valve +GOO Actuator + Bypass valves
- Gas Chromatograph

EGYPT Pressure Control & Metering SystemS

Quick Facts	
Year built	2017 -2016
Customer	Natgas National Gas Co.
End-user	Natgas National Gas Co.
Location	Egypt
Capacity	2 x 5.000 m^3/h 1 x 10.000 m^3/h

Quick Facts	
Year built	Ongoing-2016
Customer	Egypt Gas
End-user	Egypt Gas
Location	Egypt
Capacity	10 x 5.000 m^3/h 2 x 10.000 m^3/h

Quick Facts	
Year built	2016 -
Customer	Town Gas
End-user	Town Gas
Location	Egypt
Capacity	2 x 10.000 m^3/h

Quick Facts	
Year built	2016 -
Customer	Nile Valley Gas Company S.A.E.
End-user	Nile Valley Gas Company S.A.E.
Location	Egypt
Capacity	1 x 15.000 m^3/h 2 x 10.000 m^3/h

Quick Facts	
Year built	Ongoing-2016
Customer	Trans Gas
End-user	Trans Gas
Location	Egypt
Capacity	1 x 5.000 m^3/h

Quick Facts	
Year built	2016
Customer	House Gas
End-user	Masreen Iron Company
Location	Egypt
Capacity	5.000 m^3/h
Pressure In	15 – 70 bar
Pressure Out	5-5,5 bar

Quick Facts	
Year built	2015
Customer	House Gas
Location	Egypt
Capacity	20.000 Sm^3/h
Pressure In	23–70 bar
Pressure Out	5-7 bar

Scope of Work

Engineering, procurement, construction, commissioning of Natural Gas Pressure Control and Metering System.

- Fuel Gas Line Skid
- Pressure Control Skid
- Metering Skid
- Gas Filter/Separator Skids
- Pump Skid
- Odorization Unit
- Automation and Control System

ALGERIA PROJECTS

Sarl Biscra Pressure Control & Metering System

Quick Facts	
Year built	2014
Customer	SARL BISCIRA
Location	Algeria
Capacity	40.000 Sm^3/h
Pressure In	40 – 75 bar
Pressure Out	4 bar

Scope of Work

Engineering, procurement, construction, commissioning of Natural Gas Pressure Control and Metering System

- Fuel Gas Line Skid
- Pressure Control Skid
- Metering Skid
- Gas Filter/Separator Skids
- Pump Skid

Boufarik 750 MW Power Plant Project

Quick Facts	
Year built	2014
Customer	GAMA Power Systems
End-user	Sonelgaz
Location	Algeria
Capacity	**1,85 BCMA** (200.079 Nm3/h)
Pressure In	70-32 bar
Pressure Out	35-30 bar

Scope of Work

Design, manufacture and supply of natural gas pressure reducing and metering skids

- Flow capacity : 1,85 BCMA (200.079 Nm3/h)
- Inlet pressure : 32-70 barg (design: 80 barg)
- Outlet pressure : 30-35 barg
- Gas speed : ≤20m/s
- Inlet /outlet pipeline size/class : 16” ANSI 600 SCH80
- Inlet /outlet gas temperatures : 5°C / 27-31°C
- Ambient temperature range : -2°C / +45°C
- Design temperature range : -10°C / +60°C
- Noise level : <85dB
- Piping design code : ASME B31.1 Power Piping / SONELGAZ / DPEM
- Gas scrubbing and filtering : 1x Multicyclone sep. + 2x Coalescing filters
- Gas metering : Elster-Instromet UFM "Q.Sonic plus" 6-path
- Gas Gromatography package : AZBIL-Yamatake HGC 303 c/w redundant sampling.
- Gas Heating : 2x WBH 6,5 MW (forced draft)
- Gas pressure reducing : Gorter-Honeywell 8" R100 (2+2 streams)
- Scope of service : EPC and site supervision NG PRMS

PRESSURE REDUCING AND METERING STATIONS REFERENCES

EPC / END-USER	YEAR	PROJECT NAME	PROJECT DESCRIPTION	CAPACITY
BOTAŞ BORU HATLARI İLE PETRO TAŞIMA AŞ.	2006	DENİZLİ EAST CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	100.000m3/h
BOTAŞ BORU HATLARI İLE PETRO TAŞIMA AŞ.	2006	DENİZLİ WEST CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	100.000m3/h
BOTAŞ BORU HATLARI İLE PETRO TAŞIMA AŞ.	2006	BOLVADİN	Mechanical Construction and Erection of Regulating and Metering Station	7.500m3/h
BOTAŞ BORU HATLARI İLE PETRO TAŞIMA AŞ.	2006	AFYON OSB.	Mechanical Construction and Erection of Regulating and Metering Station	60.000m3/h
BOTAŞ BORU HATLARI İLE PETRO TAŞIMA AŞ.	2006	ISPARTA CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	75.000m3/h
BOTAŞ BORU HATLARI İLE PETRO TAŞIMA AŞ.	2005	ISPARTA OSB.	Mechanical Construction and Erection of Regulating and Metering Station	15.000m3/h
BOTAŞ BORU HATLARI İLE PETRO TAŞIMA AŞ.	2005	BURDUR OSB.	Mechanical Construction and Erection of Regulating and Metering Station	10.000m3/h
BOTAŞ BORU HATLARI İLE PETRO TAŞIMA AŞ.	2005	ANTALYA OSB.	Mechanical Construction and Erection of Regulating and Metering Station	30.000m3/h
BOTAŞ BORU HATLARI İLE PETRO TAŞIMA AŞ.	2005	DENİZLİ OSB.	Mechanical Construction and Erection of Regulating and Metering Station	30.000m3/h
BOTAŞ BORU HATLARI İLE PETRO TAŞIMA AŞ.	2005	DENİZLİ AKÇA	Mechanical Construction and Erection of Regulating and Metering Station	40.000m3/h
BOTAŞ BORU HATLARI İLE PETRO TAŞIMA AŞ.	2006	AFYON CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	75.000m3/h
İGDAŞ İSTANBUL DOĞAL GAZ DAĞITIM AŞ.	2006	İSTANBUL AMBARLI CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	300.000 + 150.000 m3/h
İGDAŞ İSTANBUL DOĞAL GAZ DAĞITIM AŞ.	2010	İSTANBUL TEPEÖREN CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	250.000 + 125.000 m3/h
İGDAŞ İSTANBUL DOĞAL GAZ DAĞITIM AŞ.	2015	İSTANBUL ESENYURT CITY GATE	Mechanical Displacement of Regulating and Metering Station	400.000 m3/h
İGDAŞ İSTANBUL DOĞAL GAZ DAĞITIM AŞ.	2015	İSTANBUL ESENYURT CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	800.000 + 200.000 m3/h

PRESSURE REDUCING AND METERING STATIONS REFERENCES

EPC / END-USER	YEAR	PROJECT NAME	PROJECT DESCRIPTION	CAPACITY
İGDAŞ İSTANBUL DOĞAL GAZ DAĞITIM AŞ.	2015	İSTANBUL ESENYURT CITY GATE	Manufacturing of Pressure Vessels for Regulating and Metering Station, 10 x AHX 750 HEAT EXCHANGER	800.000 + 200.000 m3/h
ELSTER (2007)	2007	KUPIANKS POWER PLANT	Production, Construction & Commissioning Of Container Type Regulating and Metering Station	35.000m3/h
BOTAŞ BORU HATLARI İLE PETRO TAŞIMA AŞ.	2005	KÜTAHYA EMET	Mechanical Construction and Erection of Regulating and Metering Station	7.500m3/h
AGDAŞ ADAPAZARI GAZ DAĞITIM AŞ.	2005	ADAPAZARI AKYAZI	Mechanical Construction and Erection of Regulating and Metering Station	30.000m3/h
AGDAŞ ADAPAZARI GAZ DAĞITIM AŞ.	2008	ADAPAZARI ŞEHİR	Mechanical Construction and Erection of Regulating and Metering Station	100.000m3/h
AGDAŞ ADAPAZARI GAZ DAĞITIM AŞ.	2007	ADAPAZARI HENDEK CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	60.000m3/h
AGDAŞ ADAPAZARI GAZ DAĞITIM AŞ.	2013	ADAPAZARI FERİZLİ CITY GATE	Manufacturing & Assembly of Regulating and Metering Station	80.000m3/h
AGDAŞ ADAPAZARI GAZ DAĞITIM AŞ.	2013	ADAPAZARI FERİZLİ CITY GATE	Manufacturing of Pressure Vessels for Regulating and Metering Station, 2 x AHX 600 HEAT EXCHANGER	80.000m3/h
AGDAŞ ADAPAZARI GAZ DAĞITIM AŞ.	2013	ADAPAZARI FERİZLİ CITY GATE	Manufacturing & Assembly of Regulating and Metering Station	80.000m3/h
AGDAŞ ADAPAZARI GAZ DAĞITIM AŞ.	2013	ADAPAZARI BEKİRPAŞA CITY GATE	Manufacturing & Assembly of Regulating and Metering Station	200.000 m3/h
AGDAŞ ADAPAZARI GAZ DAĞITIM AŞ.	2013	ADAPAZARI BEKİRPAŞA CITY GATE	Manufacturing of Pressure Vessels for Regulating and Metering Station, 3 x AHX 600 HEAT EXCHANGER	200.000 m3/h
AGDAŞ ADAPAZARI GAZ DAĞITIM AŞ.	2013	ADAPAZARI BEKİRPAŞA CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	200.000 m3/h
AGDAŞ ADAPAZARI GAZ DAĞITIM AŞ.	2013	ADAPAZARI KARASU CITY GATE	Manufacturing of Pressure Vessels for Regulating and Metering Station, 2 x AHX 600 HEAT EXCHANGER	100.000m3/h
AGDAŞ ADAPAZARI GAZ DAĞITIM AŞ.	2013	ADAPAZARI KARASU CITY GATE	Manufacturing & Assembly of Regulating and Metering Station	100.000m3/h
AGDAŞ ADAPAZARI GAZ DAĞITIM AŞ.	2013	ADAPAZARI KARASU CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	100.000m3/h

PRESSURE REDUCING AND METERING STATIONS REFERENCES

EPC / END-USER	YEAR	PROJECT NAME	PROJECT DESCRIPTION	CAPACITY
AGDAŞ ADAPAZARI GAZ DAĞITIM AŞ.	2015	ADAPAZARI DAĞDİBİ CITY GATE	Mechanical Displacement of Regulating and Metering Station	80.000m3/h
GAZDAŞ TRAKYA BÖLGESİ DOĞAL GAZ DAĞITIM AŞ.	2008	TEKİRDAĞ CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	90.000m3/h
GAZDAŞ TRAKYA BÖLGESİ DOĞAL GAZ DAĞITIM AŞ.	2007	KIRKLARELİ CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	57.600m3/h
GAZDAŞ TRAKYA BÖLGESİ DOĞAL GAZ DAĞITIM AŞ.	2008	EDİRNE CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	80.000m3/h
GAZDAŞ TRAKYA BÖLGESİ DOĞAL GAZ DAĞITIM AŞ.	2011	LÜLEBURGAZ CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	100.000m3/h
GAZDAŞ TRAKYA BÖLGESİ DOĞAL GAZ DAĞITIM AŞ.	2011	BABAESKİ CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	30.000m3/h
GAZDAŞ TRAKYA BÖLGESİ DOĞAL GAZ DAĞITIM AŞ.	2011	ÇERKEZKÖY CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	300.000m3/h
GAZDAŞ GAZİANTEP BÖLGESİ DOĞAL GAZ DAĞITIM AŞ.	2013	GAZİANTEP BEYLERBEYİ CITY GATE	Mechanical Displacement of Regulating and Metering Station	15.000m3/h
GAZDAŞ GAZİANTEP BÖLGESİ DOĞAL GAZ DAĞITIM AŞ.	2011	GAZİANTEP BEYLERBEYİ CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	360.000m3/h
GAZDAŞ GAZİANTEP BÖLGESİ DOĞAL GAZ DAĞITIM AŞ.	2012	GAZİANTEP KİLİS CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	80.000m3/h
GAZDAŞ TRAKYA BÖLGESİ DOĞALGAZ DAĞITIM AŞ.	2011	ÇERKEZKÖY CITY GATE (RMSA + RMSB)	Mechanical Construction and Erection of Regulating and Metering Station	100.000m3/h + 70.000m3/h
GAZDAŞ TRAKYA BÖLGESİ DOĞALGAZ DAĞITIM AŞ.	2013	GAZDAŞ RMS-B MAINTANANCE	Mechanical & Electrical Maintanance of 61 x RMSB	
GAZDAŞ TRAKYA BÖLGESİ DOĞALGAZ DAĞITIM AŞ.	2012	GAZDAŞ RMS-A MAINTANANCE	Mechanical, Electrical & Automation Maintanance of 23 x RMSA	
PALEN EN. D.GAZ DAĞ. END. TİC.AŞ.	2006-2009	ERZURUM CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	150.000 + 75.000 m3/h
KOÇ STATOİL	2007	ANTALYA KOÇ STATOİL CNG FUEL STATION	Manufacturing of Pressure Vessels for CNG Metering & Refueling Station, 1x Seperator	30.000m3/h

PRESSURE REDUCING AND METERING STATIONS REFERENCES

EPC / END-USER	YEAR	PROJECT NAME	PROJECT DESCRIPTION	CAPACITY
DELTA ENERJİ ÜRETİM VE TİC AŞ.	2008	DELTA POWER PLANT	Mechanical Construction and Erection of Regulating and Metering Station	13.000m3/h
AKMERCANGAZ DOĞALGAZ DAĞITIM SAN.VE TİC.LTD.ŞTİ.	2008	ADIYAMAN AKMERCANGAZ	Mechanical Construction and Erection of Regulating and Metering Station	100.000m3/h
AKMERCANGAZ DOĞALGAZ DAĞITIM SAN.VE TİC.LTD.ŞTİ.	2010	ADIYAMAN GÖLBAŞI AKMERCANGAZ	Mechanical Construction and Erection of Regulating and Metering Station	40.000m3/h
AKMERCANGAZ DOĞALGAZ DAĞITIM SAN.VE TİC.LTD.ŞTİ.	2010	ADIYAMAN BESNİ AKMERCANGAZ	Mechanical Construction and Erection of Regulating and Metering Station	30.000m3/h
AKMERCANGAZ DOĞALGAZ DAĞITIM SAN.VE TİC.LTD.ŞTİ.	2011	ADIYAMAN KAHTA AKMERCANGAZ	Mechanical Construction and Erection of Regulating and Metering Station	50.000m3/h
AKMERCAN GEPA DOĞALGAZ DAĞITIM SAN.VE TİC.LTD.ŞTİ.	2011	BİLECİK PAMUKOVA AKMERCAN GEPA	Mechanical Construction and Erection of Regulating and Metering Station	50.000m3/h
SAMGAZ DOĞAL GAZ DAĞITIM AŞ.	2010	SAMSUN CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	280.000m3/h
SAMGAZ DOĞAL GAZ DAĞITIM AŞ.	2010	SAMSUN CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	80.000m3/h
SAMGAZ DOĞAL GAZ DAĞITIM AŞ.	2010	SAMSUN CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	30.000m3/h
SAMGAZ DOĞAL GAZ DAĞITIM AŞ.	2010	SAMSUN CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	55.000m3/h
CENGIZ ENERJI	2014	CENGIZ SAMSUN POWER PLANT	Mechanical Construction and Erection of Regulating and Metering Station	125.000m3/h
CENGIZ ENERJI	2014	CENGIZ SAMSUN POWER PLANT	Manufacturing of Pressure Vessels for Regulating and Metering Station, 3 x AHX 750 HEAT EXCHANGER	125.000m3/h
SAMGAZ DOĞAL GAZ DAĞITIM AŞ.	2012	SAMSUN YEŞİLYURT DEMİR ÇELİK	Mechanical Construction and Erection of Regulating and Metering Station	65.000m3/h
SAMGAZ DOĞAL GAZ DAĞITIM AŞ.	2012	YEŞİL YURT DEMİR ÇELİK	Manufacturing of Pressure Vessels for Regulating and Metering Station, 2 x AHX 450 HEAT EXCHANGER	
ENERYA ENERJİ AŞ.	2016	KONYA - AKŞEHİR ŞEHİR	Mechanical Construction and Erection of Regulating and Metering Station	37.000m3/h

PRESSURE REDUCING AND METERING STATIONS REFERENCES

EPC / END-USER	YEAR	PROJECT NAME	PROJECT DESCRIPTION	CAPACITY
ENERYA ENERJİ AŞ.	2016	KONYA - ILGIN ŞEHİR	Mechanical Construction and Erection of Regulating and Metering Station	37.000m3/h
ENERYA ENERJİ AŞ.	2016	KONYA - KADINHANI ŞEHİR	Mechanical Construction and Erection of Regulating and Metering Station	10.000m3/h
KONYA BÜYÜK ŞEHİR BELEDİYESİ	2014	Konya Gas Compressor Facility	Mechanical Construction and Erection of Gas Compressor Facility	3.000 m 3/h with 4 hoses
BURSAGAZ BURSA DOĞAL GAZ DAĞITIM AŞ.	2009	BURSA ŞEHİR RMS A	Mechanical Construction and Erection of Regulating and Metering Station	800.000m3/h
BURSAGAZ BURSA DOĞAL GAZ DAĞITIM AŞ.	2009	BURSA ŞEHİR RMS A	Mechanical Construction and Erection of Regulating and Metering Station	145.000m3/h
ESGAZ ESKİŞEHİR DOĞAL GAZ DAĞITIM AŞ.	2016	ESKİŞEHİR MUTTALİP ŞEHİR	Mechanical Construction and Erection of Regulating and Metering Station	300.000m3/h
ESGAZ ESKİŞEHİR DOĞAL GAZ DAĞITIM AŞ.	2016	ESKİŞEHİR ZİNCİRLİKUYU ŞEHİR	Mechanical Construction and Erection of Regulating and Metering Station	200.000m3/h
SIEMENS AS /ENERJİSA ELEKTRİK ÜRETİM AŞ.	2015	BANDIRMA II CCPP	Mechanical Construction and Erection of Regulating and Metering Station	130.000m3/h
SIEMENS AS /ENERJİSA ELEKTRİK ÜRETİM AŞ.	2015	BANDIRMA II CCPP	Manufacturing of Pressure Vessels for Regulating and Metering Station, 3 x AHX 600 HEAT EXCHANGER	130.000m3/h
KAYSERİGAZ KAYSERİ DOĞAL GAZ DAĞIRIM AŞ.	2015	KAYSERİ CITY GATE	Mechanical Construction and Erection of Regulating and Metering Station	250.000m3/h
KAYSERİGAZ KAYSERİ DOĞAL GAZ DAĞIRIM AŞ.	2015	KAYSERİ CITY GATE	Manufacturing of Pressure Vessels for Regulating and Metering Station, 3 x AHX 600 HEAT EXCHANGER	250.000m3/h
İZMİR DOĞALGAZ A.Ş	2016	İZMİR ALİAĞA CITY GATE	Manufacturing of Pressure Vessels for Regulating and Metering Station, 3 x AHX 600 HEAT EXCHANGER	76.800m3/h
İZMİR DOĞALGAZ A.Ş	2016	İZMİR ALİAĞA CITY GATE	Manufacturing of Pressure Vessels for Regulating and Metering Station, 2 x AHX 500 HEAT EXCHANGER	76.800m3/h
BOTAŞ BORU HATLARI İLE PETRO TAŞIMA AŞ.(2014)	2014	BOTAŞ EMT Crude Oil Metering Station	Production, Construction & Commissioning Of Oil Metering Station	2.750m3/h
TUZLA DENİZ HARP OKULU	2007	TUZLA DENİZ HARP OKULU	Pipeline & Gasification	

PRESSURE REDUCING AND METERING STATIONS REFERENCES

EPC / END-USER	YEAR	PROJECT NAME	PROJECT DESCRIPTION	CAPACITY
TUZLA DENİZ HARP OKULU	2007	TUZLA DENİZ HARP OKULU	Production, Construction & Commissioning Of Regulating and Metering Station	2.500m3/h
TUZLA DENİZ HARP OKULU	2007	TUZLA DENİZ HARP OKULU	Production, Construction & Commissioning Of Regulating and Metering Station	3.000m3/h
ÇALIK ENERJI / GOGC	2015	GARDABANI POWER PLANT	Manufacturing of Pressure Vessels for Regulating and Metering Station, 6 x AHX 600 HEAT EXCHANGER	40.000m3/h
ÇALIK ENERJI / GOGC	2015	GARDABANI POWER PLANT	Manufacturing of Pressure Vessels for Regulating and Metering Station, Filter & Seperators	40.000m3/h
ÇALIK ENERJI / GOGC	2015	GARDABANI POWER PLANT	Production, Construction & Commissioning Of Regulating and Metering Station	40.000m3/h
ÇALIK ENERJI / TURKMEGAZ	2014	AHAL II POWER PLANT	Manufacturing of Pressure Vessels for Regulating and Metering Station, 2 x AHX 750 HEAT EXCHANGER	200.000m3/h
ÇALIK ENERJI / TURKMEGAZ	2014	DERWEZE POWER PLANT	Manufacturing of Pressure Vessels for Regulating and Metering Station, 2 x AHX 750 HEAT EXCHANGER	200.000m3/h
ÇALIK ENERJI / TURKMEGAZ	2014	AHAL II POWER PLANT	Production, Construction & Commissioning Of Regulating and Metering Station	200.000m3/h
ÇALIK ENERJI / TURKMEGAZ	2014	DERWEZE POWER PLANT	Production, Construction & Commissioning Of Regulating and Metering Station	200.000m3/h
ÇALIK ENERJI / TURKMEGAZ	2014	MARY POWER PLANT	Production, Construction & Commissioning Of Regulating and Metering Station	40.000m3/h
ÇALIK ENERJI / TURKMEGAZ	2014	WATAN POWER PLANT	Manufacturing of Pressure Vessels for Regulating and Metering Station, 2 x AHX 750 HEAT EXCHANGER	80.000m3/h
GAMA / SONELGAZ	2014	BOUFARIK CCPP	Spool Manufacturing Of Regulating and Metering Station	200.000m3/h
GAMA / SONELGAZ (2014)	2014	BOUFARIK CCPP	Manufacturing of Pressure Vessels for Regulating and Metering Station, AHX 400 & AHX 200 HEAT EXCHANGER	200.000m3/h
GAZDAŞ TRAKYA BÖLGESİ DOĞALGAZ DAĞITIM AŞ.	2013	GAZDAS RMS-B Stations	Manufacturing of 11 x 5000 SM3/H RMS-B Stations	5000m3/h
SOCAR	2014	AZERGAZ Pressure Vessel	Manufacturing of Pressure Vessels for Regulating and Metering Station, Filter & Seperators	

OMTİS AND SUBSIDIARIES

POWER PLANT PROJECT EQUIPMENTS REFERENCES

TÜRKİYE ROJECTS

Siemens Bandırma-II Combined Cycle Power Plant

Pressure Regulating & Metering Station

Quick Facts	
Year built	2015
Customer	SIEMENS A.Ş.
End-user	Enerjisa
Location	Turkey
Capacity	**1,17 BCMA** (133.500 Sm3/h)
Pressure In	25-75 bar
Pressure Out	38,2 bar

Preheater Station and Filtering Station

Quick Facts	
Year built	2015
Customer	SIEMENS A.Ş.
End user	Enerjisa
Location	Turkey
Capacity	**1,14 BCMA** (130.000 Sm3/h)
Pressure In	35 38 bar
Pressure Out	35-38 bar

Scope of Work

The scope of supply contains the following lots as a turnkey project to provide fuel gas for the GT under the required conditions from the arterial pipeline of BOTAS.

- Lot 1

  Hot-Tap Operation, 36"x24"x18" Full Encirclement LOR Flanged 3 Way Split Tee, ANSI 600
  18" Line Valve Group with By-Pass Valves, ANSI 600, GOO Actuated
  12" Take-Off Valve Group with By-Pass Valves, ANSI 600, GOO Actuated
  Including mechanical, civil, instrumentation and cabling works.

- Lot 2

  Underground Pipeline Construction between Lot 1 and PRMS (16" API 5L X52, 550 m.)

- Lot 3

  Natural Gas Pressure Control and Metering System including fabrication, mechanical installation, testing, civil works, electrification, cabling and automation works

- Lot 4

  Underground Pipeline Construction between PRMS and Preheating Skids before GT (16", 1200 m.)

- Lot 5

  Underground Pipeline Construction between PRMS and Auxiliary Boiler (4", 1200 m.)

- Lot 6

  Preheating Skids including GT metering and final filter sections

SAMSUNG-ACWA Power Kırıkkale Combined Cycle Power Plant

Quick Facts	
Year built	Ongoing-2016
Customer	SAMSUNG C&T
End-user	ACWA Power
Location	Turkey
Capacity	**1,49 BCMA** (170.000 Sm3/h)
Pressure In	35-75 bar
Pressure Out	32 50 bar

Scope of Work

The scope of supply contains the following lots as a turnkey project to provide fuel gas for the GT under the required conditions from the arterial transmission pipeline.

- Hot-Tap Operation, 48”x24”x16” Full Encirclement LOR Flanged 3 Way Split Tee, ANSI 600
- 16” Line Valve Group with By Pass Valves, ANSI 600, GOO Actuated
- 16” Take-Off Valve Group with By-Pass Valves, ANSI 600, GOO Actuated
- Including mechanical, civil, instrumentation and cabling works.
- Underground Pipeline Construction between Hot-Tap Point and PRMS (16” API 5L X52, 3.000 m.)
- Gas Filter/Separator Skids
- Pressure Control Skids
- Metering Skids
- Including fabrication, mechanical installation, testing, civil works, electrification, cabling and automation works

TURKMENISTAN PROJECTS

Mary II Power Plant Project

Quick Facts	
Year built	Ongoing 2016
Customer	Çalık Energy FZE
End user	Turkmenenergo
Location	Turkmenistan
Capacity	2 x 350.000 Sm3/h
Pressure In	55-30 bar
Pressure Out	25,1 29,8 bar

Project Description:
The Mary II Combined Cycle Power Plant Project with the 1574 MW capacity is built by Çalık Enerji at Mary Province & will be the biggest capacity power plant in Turkmenistan. The GT was provided by GE. Two identical PRMS will be supplied by Akfel with a flow rate of 350.000 scm/h.

Scope of Work
Design, manufacture and supply of a natural gas pressure reducing and metering system.

- Inlet Valve Skids; 18" Ball valve +GOO Actuator + Bypass valves
- Outlet Valve Skids; 20" Ball valve +GOO Actuator + Bypass valves
- Gas scrubbing and filtering, 4 x 350.000 scm/h Multi-cyclone Separators & Coalescer Filters (Diameter: DN1050)
- Shell & Tube Type Gas Heat Exchangers, 4 x 7.000.000 kcal/h Heat Exchanger (Diameter: DN900).
- Gas Fired Hot-Water Boiler, 6 x 3.500.000 kcal/h NA R type boilers with burners and accessories.
- Emergency Shutdown Valves; 20" Ball valve +GOO Actuator + Bypass valves
- Pressure let-down
- Metering
- Gas Chromatograph
- Skid mounted piping and instruments
- Insulating joints
- Automation & Electrical Works

Watan Power Plant Project

Quick Facts	
Year built	2015
Customer	Çalık Energy FZE
End-user	Turkmenenergo
Location	Turkmenistan
Capacity	100.000 m3/h
Pressure In	55-30 bar
Pressure Out	25,1-29,8 bar

Project Description:
The Watan Simple Cycle Power Plant Project was achieved by Çalık Enerji in Beyik Turkmenbashi. The GT was provided by GE. The required natural gas conditions for turbines is obtained by PRMS with a flow rate 100.000 Scm/h which was manufactured by Akfel.

Scope of Work
Design, manufacture and supply of a natural gas pressure reducing and metering system with flow rate of 100.000 Scm/h.

- Gas scrubbing and filtering
- Shell & Tube Type Gas Heat Exchangers
- Gas Fired Hot Water Boiler
- Pressure let down
- Metering
- Gas Chromatograph
- Gas turbine electrical heaters

- Skid mounted piping and instruments
- Insulating joints
- Emergency Shutdown Valves

Derweze Power Plant Project

Quick Facts	
Year built	2015
Customer	Çalık Energy FZE
End-user	Turkmenenergo
Location	Turkmenistan
Capacity	**1,75 BCMA** (200.000 Sm3/h)
Pressure In	55-30 bar
Pressure Out	25,1-29,8 bar

Scope of Work
Design, manufacture and supply of a natural gas pressure reducing and metering system.

- Gas scrubbing and filtering
- Shell & Tube Type Gas Heat Exchangers
- Gas Fired Hot-Water Boiler
- Pressure let-down
- Metering
- Gas Chromatograph
- Gas turbine electrical heaters
- Skid mounted piping and instruments
- Insulating joints
- Emergency Shutdown Valves

AHAL-2 Power Plant Project

Quick Facts	
Year built	2014
Customer	Çalık Energy FZE
End-user	Turkmenenergo
Location	Turkmenistan
Capacity	**1,75 BCMA** (200.000 Sm3/h)
Pressure In	55-30 bar
Pressure Out	25,1-29,8 bar

Scope of Work
Design, manufacture and supply of a natural gas pressure reducing and metering system.

- Gas scrubbing and filtering
- Shell & Tube Type Gas Heat Exchangers
- Gas Fired Hot-Water Boiler
- Pressure let-down
- Metering
- Gas Chromatograph

- Gas turbine electrical heaters
- Skid mounted piping and instruments
- Insulating joints
- Emergency Shutdown Valves

LEBAP Power Plant Project

Quick Facts	
Year built	2014
Customer	Çalık Energy FZE
End-user	Turkmenenergo
Location	Turkmenistan
Capacity	40.000 Sm3/h
Pressure In	55bar
Pressure Out	45-48 bar

MARY Power Plant Project

Quick Facts	
Year built	2014
Customer	Çalık Energy FZE
End-user	Turkmenenergo
Location	Turkmenistan
Capacity	40.000 Sm3/h
Pressure In	55bar
Pressure Out	45-48 bar

GEORGIA PROJECTS

Gardabani EPC Power Plant Project

Quick Facts	
Year built	2015
Customer	Çalık Energy
End-user	Gardabani TPP
Location	Georgia
Capacity	52.190 Sm3/h
Pressure In	10,4-12,2 bar
Pressure Out	30-31,8 bar

Scope of Work

Engineering, procurement, construction, commissioning of Natural Gas Pressure Control and Metering System

- Fuel Gas Line Skid
- Pressure Control Skid
- Metering Skid
- Gas Filter/Separator Skids
- Pump Skid

LLC Gardabani TO-PP Power Plant Project

Quick Facts	
Year built	2015
Customer	LLC Gardabani TPP
End user	Gardabani TPP
Location	Georgia
Capacity	55.000 Sm^3 //h
Pressure In	54-12 bar
Pressure Out	18 10,3 bar

Scope of Work

Engineering, procurement, construction, commissioning of Natural Gas Pressure Control and Metering System.

- Fuel Gas Line Skid
- Pressure Control Skid
- Metering Skid
- Gas Filter/Separator Skids
- Pump Skid

EGYPT PROJECTS

GASCO Power Station, Gas Filtering, Heating, Reducing and Metering Station

Quick Facts	
Year built	2017
Customer	GASCO (Egyptian Natural Gas Co.)
End-user	GASCO (Egyptian Natural Gas Co.)
Location	Egypt
Capacity	167.000 Sm3/h
Pressure In	27-70 barg
Pressure Out	25 barg

Project Description:
The scope of supply contains the following subjects as a turnkey project with flow rates of 167.000 scm/h.

Quick Facts	
Year built	2017
Customer	GASCO (Egyptian Natural Gas Co.)
End-user	GASCO (Egyptian Natural Gas Co.)
Location	Egypt
Capacity	175.000 Sm3/h
Pressure In	29-70 barg
Pressure Out	25 bar 17 bar

Project Description:
The scope of supply contains the following subjects as a turnkey project with flow rates of 175.000 scm/h.

Quick Facts	
Year built	2017
Customer	GASCO (Egyptian Natural Gas Co.)
End-user	GASCO (Egyptian Natural Gas Co.)
Location	Egypt
Capacity	150.000 Sm3/h
Pressure In	25-70 barg
Pressure Out	9 barg

Project Description:
The scope of supply contains the following subjects as a turnkey project with flow rates of 150.000 scm/h.

Quick Facts	
Year built	2017
Customer	GASCO (Egyptian Natural Gas Co.)
End-user	GASCO (Egyptian Natural Gas Co.)
Location	Egypt
Capacity	345.000 Sm3/h
Pressure In	27-70 barg
Pressure Out	25 barg

Project Description:
The scope of supply contains the following subjects as a turnkey project with flow rates of 345.000 scm/h.

Quick Facts	
Year built	2017
Customer	GASCO (Egyptian Natural Gas Co.)
End-user	GASCO (Egyptian Natural Gas Co.)
Location	Egypt
Capacity	440.000 Sm3/h
Pressure In	25-70 barg
Pressure Out	7 barg

Scope of works

Electric and Automation Works

- 2 split body air conditioning system,
- 1 UPS System (2 DC-panels + 1 Battery bank),
- 1 control panel including flow computers, PLC with redundant processor and interfacing cards,
- 1 Supervisory PC-Based control system,
- 1 fixed and automatic fire fighting system (FM200),
- 1 normal lighting system
- 1 power distribution system,
- 5 fire break-multiple through cables
- Free space for future installation of RTU and telecom equipment,
- 1 Junction Box dedicated to collect telemetry signals. This J.B to be mounted under the space of future RTU & complete with Knife - type terminals for easy separation and testing access,
-

- Compensation panel, AC panel and AC distribution, Lighting and lightning, Charger and DC distribution, Battery group, Inverter, Cables, Cable trays inside building and outside above ground, earthing etc.,
- PLC panel equipment, Local scada system, Modbus server, FC Panel, Printers, Modbus converters, Remote access tools, Media converters, Cables, Field instruments, Actuators and Flow computers etc.,

Mechanical Works

Design, Manufacturing (piping at factory), Assembling, Testing (hydro testing, NDT testing at factory and N2 testing at site) and Commissioning of PRMS with including these sections:

- Inlet Valve Skid: 16" Ball valve +GOO Actuator + Bypass valves
- Filtering Skid: 2 x 167.000 scm/h, Filter Separator Dual Stage Cylone-Cartridge
- Metering Skid: 3 x 85.000 scm/h ,Ultrasonic Meters
- Water Bath Heater: 2 x 167.000 scm/h ,WBH with Control Panel
- Pressure Regulating Skids: 3 x 85.000 scm/h pilot operated Active (fail to open) & Monitor (fail to close) Pressure Regulators ,
- Outlet Valve Skid; 16" Ball valve +GOO Actuator + Bypass valves
- Gas Chromatograph

EGYPT Pressure Control & Metering SystemS

Quick Facts	
Year built	2017 -2016
Customer	Natgas National Gas Co.
End-user	Natgas National Gas Co.
Location	Egypt
Capacity	2 x 5.000 m^3/h 1 x 10.000 m^3/h

Quick Facts	
Year built	Ongoing-2016
Customer	Egypt Gas
End-user	Egypt Gas
Location	Egypt
Capacity	10 x 5.000 m^3/h 2 x 10.000 m^3/h

Quick Facts	
Year built	2016 -
Customer	Town Gas
End-user	Town Gas
Location	Egypt
Capacity	2 x 10.000 m^3/h

Quick Facts	
Year built	2016 -
Customer	Nile Valley Gas Company S.A.E.
End-user	Nile Valley Gas Company S.A.E.
Location	Egypt
Capacity	1 x 15.000 m^3/h 2 x 10.000 m^3/h

Quick Facts	
Year built	Ongoing-2016
Customer	Trans Gas
End-user	Trans Gas
Location	Egypt
Capacity	1 x 5.000 m^3/h

Quick Facts	
Year built	2016
Customer	House Gas
End-user	Masreen Iron Company
Location	Egypt
Capacity	5.000 m^3/h
Pressure In	15 – 70 bar
Pressure Out	5-5,5 bar

Quick Facts	
Year built	2015
Customer	House Gas
Location	Egypt
Capacity	20.000 Sm^3/h
Pressure In	23–70 bar
Pressure Out	5-7 bar

Scope of Work

Engineering, procurement, construction, commissioning of Natural Gas Pressure Control and Metering System.

- Fuel Gas Line Skid
- Pressure Control Skid
- Metering Skid
- Gas Filter/Separator Skids
- Pump Skid
- Odorization Unit
- Automation and Control System

ALGERIA PROJECTS

Boufarik 750 MW Power Plant Project

Quick Facts	
Year built	2014
Customer	GAMA Power Systems
End user	Sonelgaz
Location	Algeria
Capacity	**1,85 BCMA** (200.079 Nm3/h)
Pressure In	70 32 bar
Pressure Out	35 30 bar

Scope of Work

Design, manufacture and supply of natural gas pressure reducing and metering skids

- Flow capacity : 1,85 BCMA (200.079 Nm3/h)
- Inlet pressure : 32-70 barg (design: 80 barg)
- Outlet pressure : 30 35 barg
- Gas speed : ≤20m/s
- Inlet /outlet pipeline size/class : 16” ANSI 600 SCH80
- Inlet /outlet gas temperatures : 5°C / 27-31°C
- Ambient temperature range : 2°C / +45°C
- Design temperature range : -10°C / +60°C
- Noise level : <85dB
- Piping design code : ASME B31.1 Power Piping / SONELGAZ / DPEM
- Gas scrubbing and filtering : 1x Multicyclone sep. + 2x Coalescing filters
- Gas metering : Elster Instromet UFM "Q.Sonic plus" 6 path
- Gas Gromatography package : AZBIL-Yamatake HGC 303 c/w redundant sampling.
- Gas Heating : 2x WBH 6,5 MW (forced draft)
- Gas pressure reducing : Gorter-Honeywell 8" R100 (2+2 streams)
- Scope of service : EPC and site supervision NG PRMS

OMTİS AND SUBSIDIARIES

OIL & GAS SYSTEMS PROJECT REFERENCES

WATER BATH HEATER REFERENCES

EGYPT 2018
Taqa Gas / Mostafa Gaber
Waterbath Heaters For Power Plants in Egypt

Location	QTY	GAS FLOW RATE (Sm3/h)	GAS INLET PRESSURE (bar)	GAS OUTLET PRESSURE (bar)	GAS INLET TEMP. (°C)	MIN. REQ. OUTLET TEMP. (°C)	OUTLET TEMP (WBH) (°C)	WBH BATH LIQUID TEMP (°C)	ØD1 (mm)	BURNER CAPACITY (KW) min-Max
South Helwan (Atfeeh) Power Station	3	220.000	70-25	24	5	10	28,4	85	3000	3105-5732
6th of October Power Station	2	180.000	70-27	24	5	10	28,4	85	2700	2642-4690
Suez Thermal Power Station	2	150.000	70-27	24	5	10	28,4	85	2400	2200-3908
Damanhour Power Station	2	170.000	45-27	24	5	10	18,4	85	2200	2495-3323
El Mahmodia Power Station	2	345.000	70-27	24	5	10	28,4	85	4000	5064-8989

OMEGA INDUSTRIES

Azerbaijan 2019

3 Pcs Water Bath Heater
Heating Capacity : 800 KW , Pd: 45 Bar

OMEGA INDUSTRIES

Iraq 2020

2 Pcs Water Bath Heater
Heating Capacity : 1500 KW , Pd: 75 Bar

SNMEC ENERGY
SADA - AL NUGUM COMPANY
FOR TRADING, CONTRACTING AND OIL SERVICES LTD

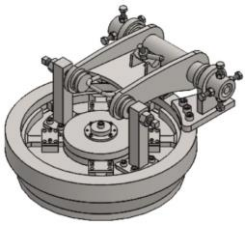
IRAQ 2021
Mohammed Aziz
2 Pcs Water Bath Heater Flow Capacity : 96500 m3/h , Po: 34-42 Bar , Pd : 49 Bar
2021

Group

Nederland 2021
Bart van der Toorren
2 Pcs Water Bath Heater Ø1600 , 550 Kw
TT:6000 mm , Pdesign : 47 Bar 2021

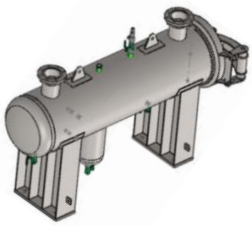
Nederland 2022

Pcs Quick Opening Closure , AISI 316L Pdesign : 47 Bar



Peru 2022

4 Pcs Horizontal Deisel Coallescer Filter

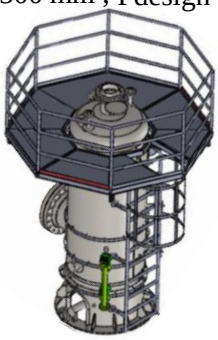


Peru 2022 I

11 Pcs Vertical Deisel Particulate Filter

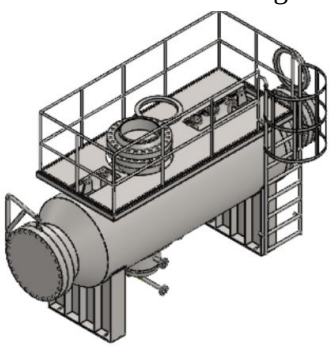
Uzbekistan 2022

46 Pcs Vertical Separator Unit , Ø1200 mm TT:2500 mm , Pdesign : 40 Bar



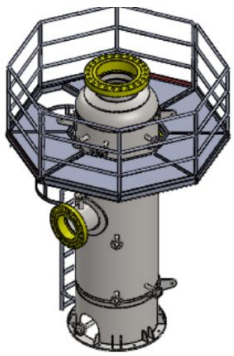
Uzbekistan 2022

3 Pcs Horizontal Filter Unit , Ø1400 mm TT:3500 mm , Pdesign : 63 Bar



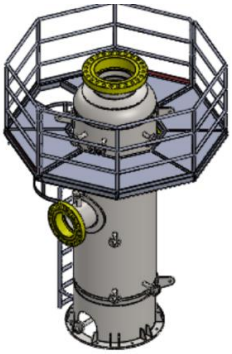
Uzbekistan 2022

2 Pcs Vertical Filter Unit , Ø1200 mm TT:3000 mm , Pdesign : 63 Bar Gazli Underground Storage



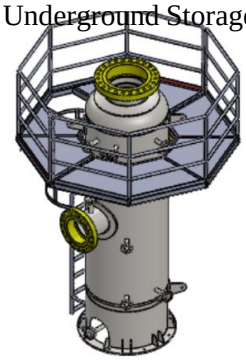
Uzbekistan 2022

3 Pcs Vertical Separator Unit , Ø1500 mm TT:3500 mm , Pdesign : 63 Bar Gazli Underground Storage

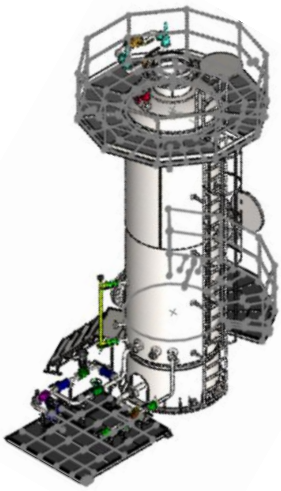


Uzbekistan 2022

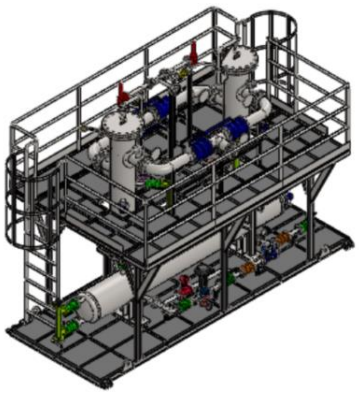
3 Pcs Horizontal Separator Unit , Ø1300 mm TT:3000 mm , Pdesign : 63 Bar Gazli Underground Storage



Uzbekistan 2021
2 Pcs Vertical Separator Unit , Ø2000 mm
TT:6000 mm , Pdesign : 40 Bar

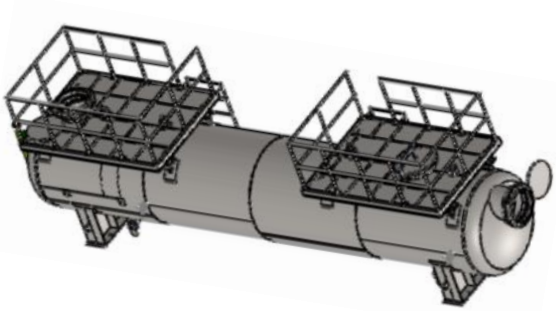


Uzbekistan 2021
2 Pcs Vertical Filter Unit , Ø406mm
TT:2500 mm , Pdesign : 40 Bar



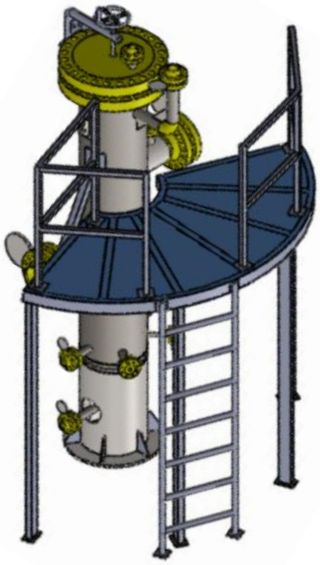
Uzbekistan 2021

1 Pcs Horizontal Flare KO Drum , Ø2000 mm
TT:12000 mm , Pdesign : 16 Bar



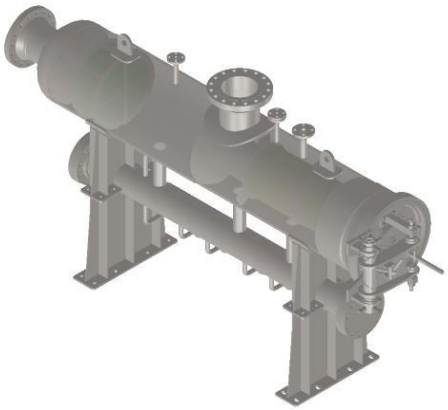
Uzbekistan 2021

2 Pcs Vertical Filter Unit , Ø508 mm
TT:3000 mm , Pdesign : 63 Bar



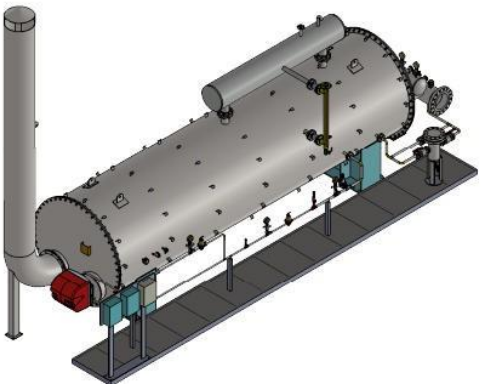
Nederland 2021

2 Pcs Horizontal Double Barrel Filter Separator Ø610 mm
TT:3000 mm , Pdesign : 47 Bar
2021

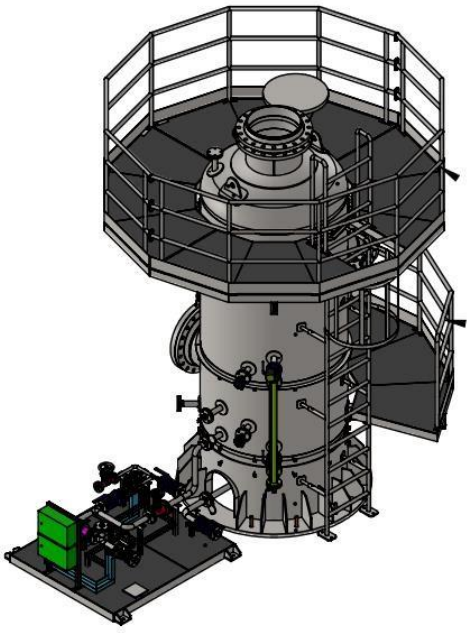


Nederland 2021

2 Pcs Water Bath Heater Ø1600 , 550 Kw
TT:6000 mm , Pdesign : 47 Bar
2021

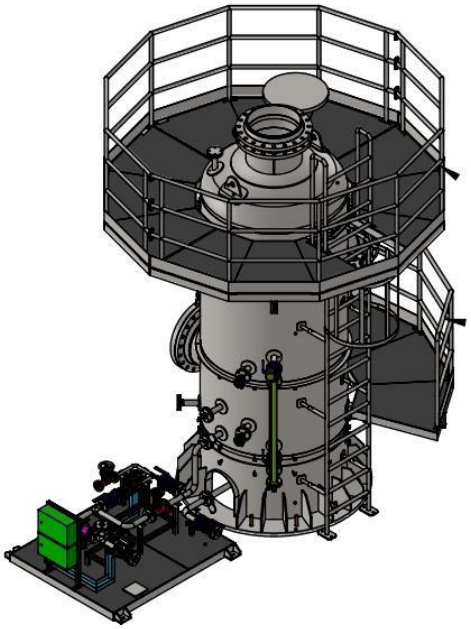


Uzbekistan 2021
2 Pcs Vertical Separator Unit , Ø3000 mm
TT:9000 mm , Pdesign : 25 Bar



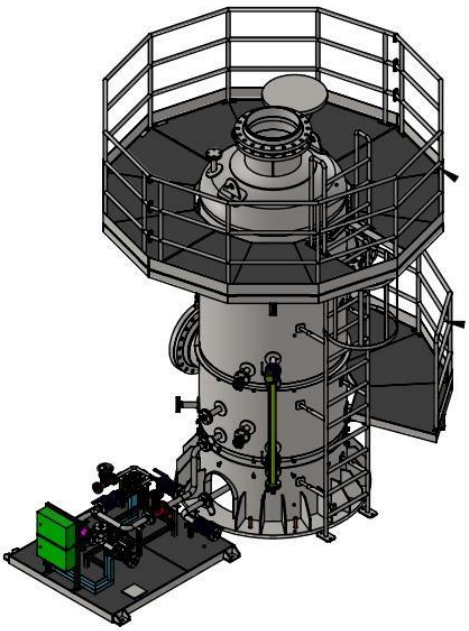
Uzbekistan 2021

2 Pcs Vertical Separator Unit , Ø2700 mm
TT:6000 mm , Pdesign : 25 Bar



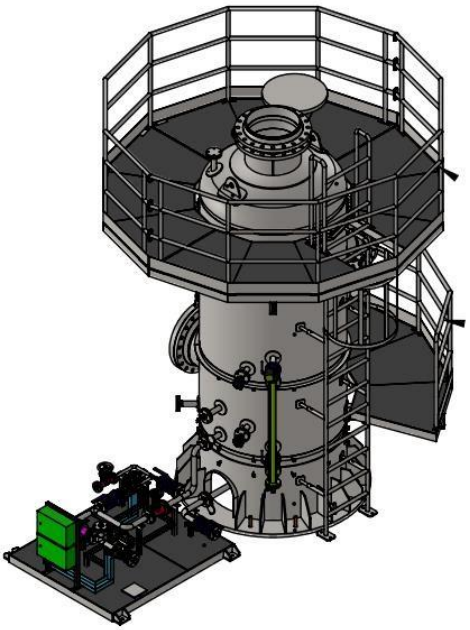
Uzbekistan 2021

2 Pcs Vertical Separator Unit , Ø3000 mm
TT:9000 mm , Pdesign : 25 Bar



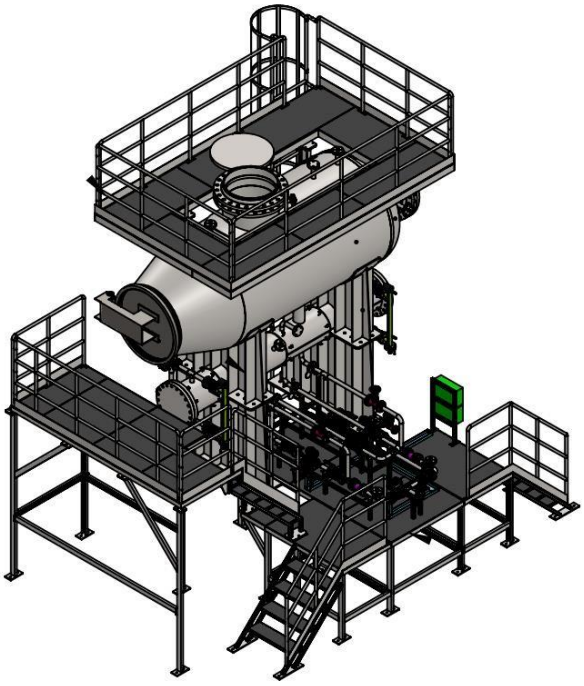
Uzbekistan 2021

2 Pcs Vertical Separator Unit , Ø2700 mm
TT:6000 mm , Pdesign : 25 Bar



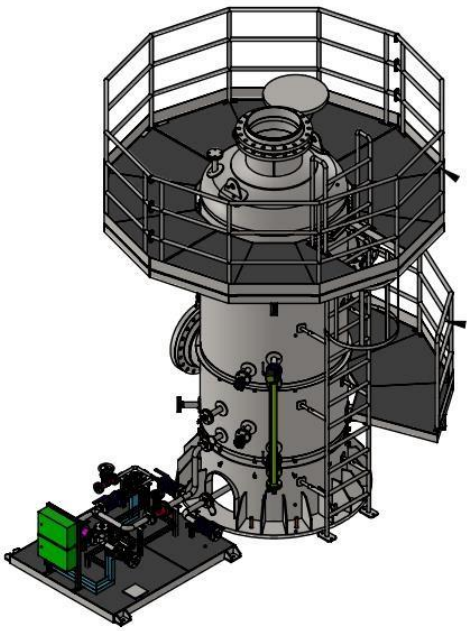
Uzbekistan 2020

6 Pcs Horizontal Filter Separator Unit , Ø1620 ,
Pdesign : 40 Bar



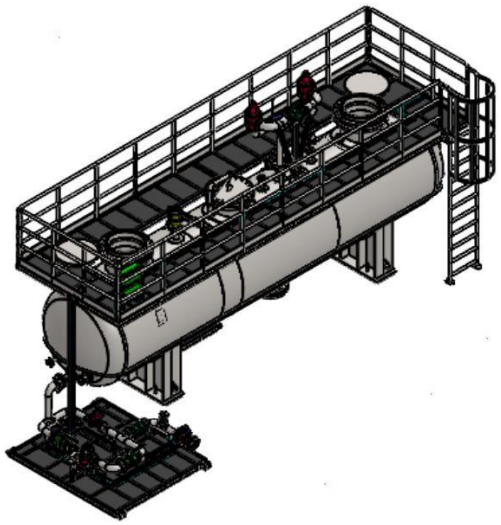
Uzbekistan 2020

8 Pcs Vertical Separator Unit , Ø1200-1620
Pdesign : 40-63 Bar

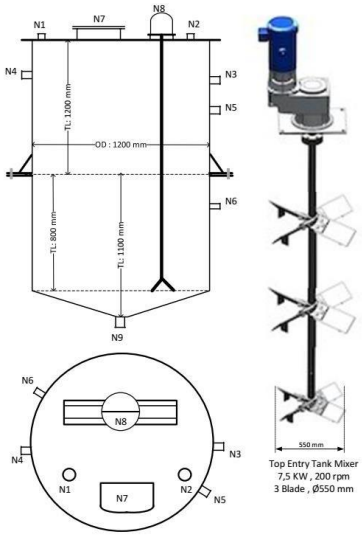


Uzbekistan 2020

8 Pcs Horizontal Separator Unit , Ø2000&2500
Pdesign : 40 Bar



Turkey 2019
3 Pcs Oil Process Tanks



Turkey 2019

1 Pcs Acetic Acid Tank AISI 304L

Uzbekistan 2019

2 Pcs Horizontal Filter Separator Unit
Pdesign : 63 Bar

Turkey 2019

1 Pcs 6 m3 Heated Agitated Tank
OD:Ø2300 mm , AISI 304L

Tank Farm Site
Piping Works Design Works

1 Pcs Inlet Seperator
Pdesign :16 Bar

Turkey 2019
1 Pcs Helezon Group
For Autoclave / AISI
304L

Uzbekistan 2019
1 Pcs Flare KO Drum
Pdesign: 16 Bar

Turkey 2019
4 Pcs Vertical
Filter Separator
Pdesign:75 Bar

Turkey/TPAO 2018
5 Pcs DN600 Heater Separator Skid
Pdesign: 250 Bar

Uzbekistan 2020
4 Pcs Steam Condensate Drum
U Stamped

Kazakstan 2018

6 Pcs Horizontal Double Barrel Filter Separator With QOC 62” OD , 55 mm Thick ANSI600 , Qmax : 750.000 sm3/h
(With SH Teknik)

Azerbaijan 2017

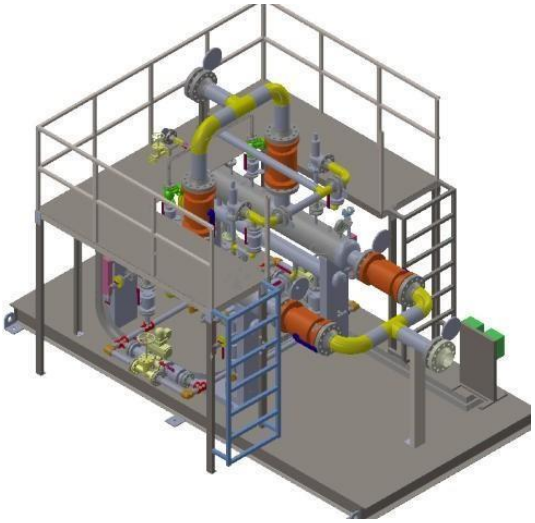
4 Pcs DN1000 Vertical Filter Seperator

Azerbaijan 2017

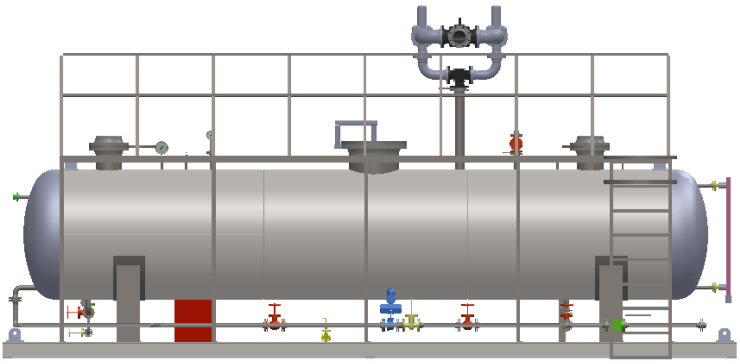
12 Pcs DN500 Filter Seperator

Uzbekistan 2018

2 Pcs Horizontal Filter Seperator Unit



Uzbekistan 2018
1 Pcs Inlet Seperator



Azerbaijan 2018

4 Pcs DN900 Shell&Tube Type Heat Exchanger

Kazakstan 2018

6 Pcs Horizontal Double Barrel Filter Separator With QOC 62” OD , 55 mm Thick ANSI600 , Qmax : 750.000 sm3/h (With SH Teknik)

Azerbaijan 2018

2 Pcs Water Bath Heater With Electric Heater , 100 KW

Azerbaijan 2017

12 Pcs DN500 Filter Seperator

Azerbaijan 2018

4 Pcs Pig Launcher&Recever Ø 1020 mm

Azerbaijan 2017

2 Pcs Waterbath Heater With Gas Burner , 1200 KW

Azerbaijan 2017

4 Pcs Waterbath Heater With Gas Burner , 600 KW

Azerbaijan 2017

3 Pcs Vertical Gas Filter Ø762 , Q:55000 m3/h

OMEGA INDUSTRIES

Azerbaijan 2017

4 Pcs DN1000 Vertical Filter Seperator

OMEGA INDUSTRIES

Azerbaijan 2017

12 Pcs DN500 Filter Seperator

OMTİS Turkey :

Cevizli Mah. Kırıkkale Sk. No:9 Adam Kule Kat:27 D:341 Kartal/İSTANBUL/ TÜRKİYE

Phone/Fax :+90 216 504 36 10

Mobile : +90 532 267 77 94

info@omtismakina.com