



## Introduction

Asia Instruments Co. is one of the most well-known companies in the field of energy and industrial projects which was originally founded in 1994 in Tehran, Iran. In 2000, For expanding and following the implementation of Iran's policies to support domestic production and boost the national economy, Asia Instruments started to construct a plant to fabricate Metering Systems, Truck Loading, HIPPS (Well Head Control Package), Filtration Packages, Sampling Systems, Control System, various Process Packages, as well as Analyzer and Instrumentation Packages in Payam Economic Special Zone which is located in Mehrshahr, Karaj, Iran.

- Mobile Master Meter
- Calibration Rig
- Mobile Water Draw Package



Our maintenance and service department maintains various sizes of CAN manufactured by Seraphin USA in order to perform calibration of metering systems in export terminals and refineries, having certification by Governmental Supervision on Petroleum Export and Domestic Transactions (SPEDT). Being experienced for more than two decades in the field of industrial projects, attracting foreign investment, technology transfer, exploiting the capabilities of highly qualified experts and managers in this field, and applying science and innovation have helped us to reach high grades in quality, time, and cost management while competing most effectively in the ever-changing and challenging energy industries.



This plant with an area of 12,500 square meters and investment value of 10 million Euro includes production line for analytical and process packages, center for calibration & proving, and a warehouses stocked with equipment related to Oil, Gas and Petrochemical industry. Asia Instruments is the only local company having:





## Scope of Services

Efforts to expand market presence through technology transfer into the country to localize products and equipment, increasing the quality of products, supplying materials related to the field of Oil, Gas and Petrochemical, presenting after sales services to the customers and attracting their satisfaction form the main goals of Asia Instruments. In this regard, services which are provided by this company lay into two main categories of producing some products in our plants and supplying materials and equipments from our foreign partners. Products which are produced in our factory are based on conducted technology transfer including Metering Systems, Control Systems, Process packages, Analyzer packages, Wellhead Control Systems, Sampling Systems, and Truck Loading/Unlodng systems.

In the section of supplying equipment, Asia Instruments with help of the expert staff it has in the field of Oil, Gas and Petrochemical projects and regarding needs of the industry, has signed agreements in the form of Exclusive Agent, Distributor, and Partnership Agreement with foreign companies. Also, in order to supply required equipment, develop marketing activities, meet customer's requirement and do financial transactions, has established offices around the globe to better assist its customers with the focus of globalization.





## Quality Certificate

Since Asia Instruments has been successful in providing services through manufacturing and supplying required equipment of projects in oil industry, has been rewarded with several qualification certificates. One of these certificates is certificate of construction and integration of metering and proving skids for measuring fluids volume and HC from Supervision on Petroleum Export and Domestic Transactions Organization.

## Vendor List

Being experienced for more than two decades in the field of industrial projects, attracting foreign investment, technology transfer, exploiting the capabilities of highly qualified experts and managers in this field have helped us to be registered in Supplier and Manufacturers Approved Vendor Lists of Iranian well-known oil, gas and petrochemical companies .





## Metering System

Asia Instruments is the first manufacture and integrator of metering packages in Iran, includes production lines for skid mounted metering systems for various types of liquid & gas, center of calibration for proving of meters as well as provers. Asia Instruments is one of few companies who has a mobile Water Draw Package, a mobile Calibration Rig, Mobile Master Meter and various sizes of CAN's manufactured by Seraphin, USA. Asia Instruments performs calibration of metering systems in Export Terminals, Refineries & Petrochemical Plants all around the country and been certified by Supervision on Petroleum Export and Domestic Transactions (SPEDT).

Asia Instruments provides total solution for the custody transfer & fiscal metering packages related to liquid & gas industries via basic & detail engineering, procurement, manufacturing/construction, installation, commissioning and after sales services.



## Loading Arms

Asia Instruments designs and manufactures loading arm metering and blending skid-mounted systems and integrates them with the entire bulk fluid handling operation for maximum operational efficiency. We provide support to every bulk fluid handling operation for Bulk Terminal loading and blending refined fuels, truck and rail loading /unloading for chemical, industrial fluids and liquid propane gases.





## Analyzer Packages

Analyzer Packages are complete integrated systems, able to execute several automatic and on-line analysis of process fluids (gas or liquid). Asia Instruments Company is able to carry out and provide quality engineering services and complete solutions for systems integration, from the detailed design to the startup of the customized solutions.

Analyzer Systems are normally supplied and installed in the special Analyzer Houses including air conditioning, power distribution, panel lighting, termination and junction boxes, gas and flame detection, relevant piping and wiring.



## Process Packages

Our activities include sand removal from process streams and produced water treatment using cyclone based separation devices complimented by a wide range of established and emerging technologies.



## Wellhead Control Systems

Our Wellhead Control Systems and Fusible Loop Panels are designed and built based on the requirements of the project and are valued by clients due to their high safety, reliability & endurance level and their user-friendly and trouble-free operations. Asia Instruments has both experience in off-shore and onshore panels.





## Sampling Systems

Asia Instruments manufactures a wide range of Sampling Systems designed for sampling liquids and gases in pipelines. This equipment is renowned for its durability, proven by decades of trouble free use on production platforms and other harsh offshore and onshore environments world-wide. We have the capability to design and engineer complete Sampling systems to meet the customer's specific requirements and internationally accepted standards for automatic sampling of hydrocarbon liquids and gases: ISO 3171, ISO 4257, ISO 10715 and API 8.2, 14.1.



**N2 Purging Package**

In the Oil and Gas industry gaseous nitrogen is used in a wide variety of applications to decrease fire or explosion risk or avoiding oxidation. Asia Instruments provide a comprehensive range of Nitrogen Purging Packages designed to be used across a range of industries. Over the years, we have grown into one of the leading N2 Purging Specialists provide bespoke solutions for clients.



**Steam/Water Sampling Systems**

A well-designed steam and Water Analysis (Sampling) System can help in monitoring the critical parameters in the steam. These parameters include PH, conductivity, silica, sodium, dissolved oxygen, phosphate, and chlorides. Thanks to our experience and cooperation with well-known European companies we are now one of few companies able to manufacture and integrate customized SWAS which can extract steam/water and analyze its characteristics accurately.





## Emergency Shut-Down systems (ESD)

Due to failure of the utility supply or failure of important components in the plant, emergency shutdown is needed which is performed via ESD System.

An Emergency Shutdown System is a method for stopping process operations and isolating from incoming connections or currents to reduce the possibility of an unwanted event quickly.



## Control Systems

Asia Instruments Company with the help of his experts provides Control System Solutions, complete from design and development through to FAT, SAT and start-up, followed by training, documentation and after sales support. The service which are provided are:

- Performing FEED and Feasibility Studies
- Project Management
- Designing the Control System
- PLC, DCS, ESD and F&G system recommendation
- Procurement
- Installation & commissioning of PLC, DCS, ESD and F&G Systems
- Training, Support and after sales services

In this regards, domestic specialists always pursue customer satisfaction along with foreign partners with high quality end product, minimum delivery time and cost reduction.





The French company, founded in 1925 designs and manufactures high accuracy flowmeters for liquid hydrocarbon applications both in Oil & Gas and aerospace industries.

Present across the globe, FH's flow metering equipment are developed around two main technologies including Helical Turbine and Ultrasonic. Faure Herman is able to perform in-house calibration and recalibration of flow meters over a wide range of flow rates and viscosities thanks to its COFRAC-ILAC certified testing laboratory.

Asia Instruments works as exclusive agent of Faure Herman company in order to sale their products in the territory of Iran as well as uses their flow meters in Metering Skids.



Camtech Manufacturing FZCO is the first and one of the few API accredited valve manufacturing company in the UAE, Middle East and North Africa region. Camtech Manufacturing FZCO is designer and manufacturer of mainly Ball, Gate, Globe, Check, Butterfly, Through Conduit & Choke valves in metallurgy such as carbon steel, stainless steel, duplex and super duplex steel, for size range from 1/2" to 56" and class rating from 150 to 2500.

Asia Instruments Company after taking training and technical courses by its experts team, is working as the exclusive agent of Camtech Manufacturing Company and with construction of a maintenance workshop in Bandar Imam Special Economic Zone, services are provided to the petrochemical companies.





EXHEAT is recognized as one of the world leaders in the design and manufacture of electric process heaters and associated control systems for both hazardous and non-hazardous area equipment .

All manufacturing and testing is done in-house at Ex-Heat head office in the UK. Asia Instruments Co. as exclusive representative of Exheat supplied wide range of electrical heaters in Iran as detailed Electric reference list.



HB Rod-Type Industrial Immersion Heaters



Ex d and Ex e Hazardous Area Process Heaters



Ex d and Ex e Hazardous Area Immersion Heaters



FAW Hazardous Area Air Warmers

Autocontrol Technologies was established in 1994, in order to offer fresh solutions in the on-line instrumentation, process measurements, Automatic Sampling Systems for Crude Oil Custody Transfer, Heating, Ventilation & Air Conditioning units and control automation fields, assisting the customer from design to installation with complete turn-key services. In 2015, the process instrumentation division was established and is focused in Sensing technologies, measuring instruments, Controlling equipment, Automation systems and all related Accessories. Asia Instruments Co. is able to design and manufacture all aforementioned equipment under license of this company.

### **AI Energy Solutions (AIES)**

AIES is a Group Company of Arabian Industries LLC, provides specialist process engineering packages for the oil and gas industry. Asia Instruments Company has a partnership agreement with this company in order to localize some products in Iran and transferring of technology. Our activities include sand removal from process streams and produced water treatment using cyclone based separation devices, complimented by a wide range of established and emerging technologies. Asia Instruments with cooperation of AIES can provide you with the most cost effective solution for your specialist separation requirements.



## Sample Projects

No	Project Name	Description	Client	Contract Date
1	Ethane Export Gas Metering Package; Parsian C2+ Recovery & Fractionation project	Ethane Metering system with 2 streams 12" class 300, Ultrasonic flow meter and (N+1) Z Configuration and related Analyzers and control system.	PARSIAN SEPEHR-HAMPA ENERGY	2019
2	Ethane Export Gas Metering Package South Pars 19	Ethane Gas Metering Package (Unit 116) No. of Runs: 3 Streams + 1 Master Run Configuration: N+1+1 ANSI Class rating: 300#, Ultrasonic Meter Line Size: Header=16" and Runs=8" Analyzers: OGC, HC & Water Dewpoint, Densitometer.	PETRO PARS	2019
3	Metering package For Kashan-Rey liquid Metering Skid	Gasoline/Motor Spirit Metering Package No. of Runs: 2 Streams Configuration: 1xDuty + 1xStandby ANSI Class rating: 150#, Turbine Flowmeter Prover: Mobile PD Master Meter Package + Calibration CANS.	DANIAL PETRO	2019
4	Ethane Export Gas Metering Package – Kangan C2 Recovery And Fractionation Plant	Ethane Metering system with 3 streams 16" class 300, Bi-directional Ultrasonic flow meter and (N+1+1) Z Configuration and related Analyzers and control system.	KANGAN PETRO REFINING CO. (KPRC)	2019
5	Gas Metering Package – Parsian C2+ Recovery & Fractionation Gas Metering System	Three (3) Gas Metering Skids: 2 No. s of Natural Gas Metering System with 3 streams in 28"-line, Ultrasonic flow meter, (N+1+1) Configuration and related Analyzers and control system. 1 No. of Fuel Gas Metering System with 1 stream in 4"-line, Ultrasonic flow meter, Single line Configuration and related Analyzers and control system.	PARSIAN SEPEHR-ENERGY GOSTAR NASIR	2019
6	Gas Metering System of BBII Package A	Ethane Metering system with 3 streams 28" class 900, Ultrasonic flow meter and (N+1+1) Z Configuration and related Analyzers and control system.	SAZEH - JAHANPARS	2019
7	Tange-E-Bijar GAS Development Field	ESD, DCS, Telemetry	NIOC	2019
8	Truck Loading Arm (Unit 50)	Design and fabrication of 20 stations of truck loading arm in unit 50 of Isfahan Refinery	NEYR-MAPNA CO.	2018
9	Oily Water Treatment	design and fabrication of oily water treatment package in BBII Gas Refinery	SAZEH-JAHANPARS CO.	2018
10	Metering System of Methanol Plant	Metering System of a Methanol Plant with the Capacity of 5000 ton/day	TCC CO.	2018
11	Gas Filters	Design and fabrication of 9 sets gas cartridge filters used in metering system of BBII Gas Refinery	JAHANPARS CO.	2018
12	Gas Filters	Design and fabrication of gas cartridge filters used in metering system of Propane Metering System of South Pars Gas Refinery-Phases 22, 23 & 24	PKSK CO	2018



## Sample Projects

No	Project Name	Description	Client	Contract Date
13	Gas Filters	Design and fabrication of gas cartridge filters used in metering system of Metering System of Unit 149 South pars Gas Refinery – phases 22,23,24	PKSK CO	2018
14	Metering System of Bid Boland gas refinery- Package A	Metering system for Butane, Propane and C in BBII Gas Refinery	SAZEH - JAHANPARS CO.	2017
15	Metering System of Bid Boland gas refinery- Package B	Metering system for Butane, Propane and C5 in BBII Gas Refinery	JAHANPARS CO.	2017
16	Cooling Tower Filter Package	Design and fabrication of 2 sets cooling water Filter package in type of Skid mounted with all instruments and control systems	SAZEH - JAHANPARS CO.	2017
17	Gas Filter Separator	Design and fabrication of 5 sets Gas Filter Separator with the capacity of 7060 m3 per hour	NAFTANIR CO.	2017
18	Gas Metering System of IGAT 6 in Shalamche Station	Gas Measurement of IGAT 6 in Shalamche Station with configuration of 1+1+4 and size of 20-inch class 600 through Ultrasonic Flow Meters and capacity of 28,243 m3 per Hour	NAFTANIR CO.	2017
19	Crude Oil Metering System of Azar Oil Field	Crude Oil metering system of AZAR Oil Field with 3 Runs of 8 inch through 3 Turbine Flow Meters of 4 inch	JAHANPARS CO.	2017
20	Gas Metering System of Azar Oil Field	Metering System with the accuracy of Custody Transfer - Z configuration	JAHANPARS CO.	2017
21	Ethan Metering System of South Pars Phases 17&18	Designing and Manufacturing of Propane Metering System of South Pars Gas Refinery- Phases17&18 with the accuracy of Custody Transfer through 3 Ultrasonic Flow meters with size of 10 inch	IPMI CO.	2017
22	Methane Metering of south pars phases 15&16	Designing and Manufacturing of Propane Metering System of South Pars Gas Refinery- Phases15&16 with the accuracy of Custody Transfer through 2 Ultrasonic Flow meters with size of 12 inch	PKSK CO.	2017
23	Ethane Metering System of South Pars Refinery- Phase 13	Measurement of produced Ethane of refinery with the accuracy of Custody Transfer through 2 Ultrasonic Flow meters with size of 12 inch	PKSK CO.	2017
24	Propane Metering System of South Pars Gas Refinery-Phases22, 23&24	Designing and Manufacturing of Propane Metering System of South Pars Gas Refinery- Phases22, 23&24 with the accuracy of Custody Transfer through 2 Turbine Flow meters. size of 12 inch and configuration of 1+1	SEPANIR CO. PKSK CO.	2017
25	Metering System of Unit 149 South pars Gas Refinery - phases 22,23,24	Measurement of produced gas in Unit 149 with the accuracy of Custody Transfer through 2 Turbine Flow meters with size of 12 inch - Compact Piston Prover	PKSK CO.	2017



## Sample Projects

No	Project Name	Description	Client	Contract Date
26	Gas Metering System of NGL 3200 Unit 700	Gas Measurement of NGL 3200 Unit 700 with the accuracy of Custody Transfer through 3 Ultrasonic Flow meters with size of 16 inch and configuration of 1+1+1	SADAF CO.	2016
27	Metering System of NGL 3200 Unit 500	Metering System of NGL 3200 Unit 500 with the accuracy of Custody Transfer through 2 Ultrasonic Flow meters with size of 10 inch and configuration of 1+1	SAZEH CO.	2016
28	Analyzers NGL 3200 Unit 700	GC: ABB (NGC 8206) HC Dew Point: Michell Condumax H2S Analyzer: Galvanic 903 H2S	SADAF CO.	2016
29	Analyzers NGL 3200 Unit 500	Auto Sampler: Doedijns (804 Rm) Sample Receiver: Parker Densitometer: Micromotion FDM11)	SAZEH CO.	2016
30	Ethane Metering System of South Pars Gas Refinery-Phases 20&21	Measurement of produced Ethane of refinery in Unit 116 with the accuracy of Custody Transfer through 3 Ultrasonic Flow meters with size of 12 inch	OIEC CO.	2016
31	Methane Metering System of South Pars Gas Refinery-Phases 20&21	Measurement of produced Methane of refinery in Unit 106 with the accuracy of Custody Transfer through 4 Ultrasonic Flow meters with size of 24 inch	OIEC CO.	2016
32	N2 package System	N2 Package System PSA Type	MAPNA BOILER CO.	2016
33	Ethane Metering System of South Pars Gas Refinery-Phases 15&16	Measurement of produced Ethane of refinery with the accuracy of Custody Transfer through 2 Ultrasonic Flow meters with size of 12 inch	PKSK CO.	2015
34	Analyzers South Pars Gas Refinery-Phases 17&18	Dew Point: Michell Condumax Gas Chromatograph: Yamatake (HGC303)	IPMI	2015
35	Gas Metering System of South Pars Gas Refinery-Phase 12	Measurement of produced gas of refinery with the accuracy of Custody Transfer through 3 Ultrasonic Flow meters with size of 28 inch—Skid Mounted Metering System with the capacity of 3218 m <sup>3</sup> /hr.	PETROPARS CO. NARGAN CO.	2014
36	Methane Metering System of South Pars Gas Refinery-Phases 17&18	Measurement of produced Ethane of refinery in Unit No. 160 with the accuracy of Custody Transfer through 3 Ultrasonic Flow meters with size of 10 inch	IPMI	2014