

Crude Oil and Gas Sampling System

Model:(CSA600)

Brand: APACO - Made in Iran

Iran Code:

Sample Point for Crude oil and gas Sampling

Sampling System – A system that is employed in many industries that draws a sample from a process line and prepares it for analysis in an analyzer. Sampling Valve – Main valve which controls the dispensing of a process sample.

Ariya Pazhohesh Alpha Co. (APACO) manufacturer of Liquid & Gas and crude oil, samplers for the Production unit, petrochemical on & offshore industry, for the industry. We are a sampling system factory, we design and fabricate open and closed loop sampling systems for hydrocarbon sampling, chemicals, crude oil and process water sampling.

Upstream, midstream and downstream liquid and gas sampling, Liquid Bottle Sampler Products, Automatic sampling API 8.2, ASTM D.4177 and ISO-3171. Cell sampler for automatic sampling, Custody Transfer Crude Oil Sampling Systems, Fast-Loop Sampling, Laboratory Mixing System for Oil and Water-Cut Karl Fischer water content measurement.

Crude oil sampling for custody transfer, fiscal, allocation or quality measurement purposes should be performed in accordance with sampling standards of ISO 3171, ASTM D 4177, API 8.2 and IP 6.2. These standards dictate a number of key design issues and steps that must be considered to ensure a system fully complies with the standards.

We manufacture a range of fully engineered systems and products for crude oil sampling applications. All products comply with the standards when installed and operated in accordance with the standards. All systems are supplied with a performance warranty that guarantees compliance with the sampling standards even if proved by water injection.

Over 60% of world crude oil is valued on the basis of equipment. Crude oil samplers are available for custody transfer, fiscal and allocation measurement as well as well test, test separator and sampling for calibration of multiphase flow meters. Crude oil sampling systems can be supplied for installation on offshore platforms and FPSOs as well as terminals, pipelines, jetties and locations with SPMs.

Crude oil samplers offer a range of accuracy and uncertainty

A probe based in-line sampler offers the lowest accuracy and highest uncertainty and is the simplest system available.

A bypass (or fast) loop sampler has a higher accuracy, lower measurement uncertainty and lower maintenance.

A bypass or probe based sampler should be used in conjunction with a suitable mixing system if required.

A CoJetix sampler offers the highest accuracy and lowest measurement uncertainty and represents the state of the art in sampling technology.

Both fast loop and other models systems also offer the option for on-line instruments such as densitometers to integrated as part of the sampling loop. This creates a combined sampling and analysis package that provides continuous liquid density measurement, which can be fed to a metering system for mass transfers.

APACO's crude oil sampling systems and products are designed and manufactured drawing on years of experience of crude oil sampling. They offer you the peace of mind that the equipment that you use every day will fully comply with international best practice. APACO systems are simple and reliable to use, easy to maintain and in the event of a dispute provide irrefutable evidence to support your measurement system.

LABORATORY ANALYZER AND TEST METHOD LIST

Proper sampling is one of the important factors for performing laboratory tests correctly. With this type of sample connection and sample points, you can sample oil tests according to the standards that are allowed, in accordance with the standard. In laboratory tests, the following table, which is for oil quality control, refers to the standards that are observed in these sample connections and sample points

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3. LABORATORY ANALYZER AND TEST METHOD LIST

This Item is necessary for sampling, so vendor shall be purpose laboratory test method. Because according ASTM D405712 for test list appendix (X1. CRUDE OIL SAMPLE HANDELING-TEST MATRIX) is important.

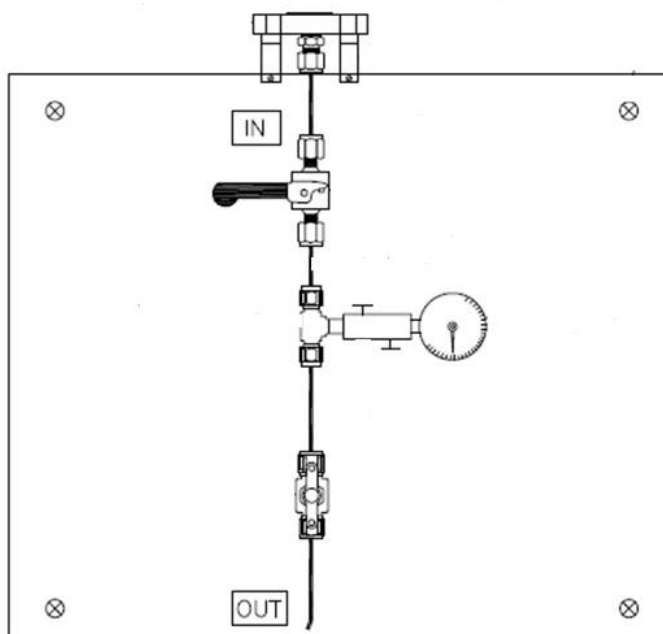
Item No.	Test Name	Ref.
OIL Test		
1	Salt Content	ASTM D3230
2	Salt Content	IP77
3	H ₂ S in Crude oil	ASTM D7621
4	BS&W	ASTM D4007
5	R.V.P	ASTM D323
6	Water Content	ASTM D4006
7	API	ASTM D0287
8	Kinematic Viscosity	ASTM D446(Viscometer)
9	Shrinkage Factor	Manual
10	Sediment in Crude oil	ASTM D0473
11	Wax Content	UOP 46-85
12	Wax Appearance Temperature	microscope
13	Cold Finger	Cold Finger
14	Asphaltene Content	ASTM D6560
Gas Test		
15	Gas Analysis	Chromatography
16	Nitrogen Purity	IS 13270
17	Dew Point/gas & air	ASTM D1142
Water and Waste Water Test		
18	Alkalinity p (pH=4.3)	SM 2320 B
19	Alkalinity T (pH=4.3)	SM 2320 B
20	Dissolved Oxygen	ASTM D888-92
21	Dissolved CO ₂	SM 4500-CO ₂ C
22	Temperature	SM 2550 B
23	Turbidity	ASTM D1889-88
24	Conductivity	ASTM D1123-91
25	Relativity	ASTM D1123-91
26	pH	ASTM 1293-84
27	Density	ASTM D1429-86
28	Sodium	SM 3500-Na D
29	Potassium	SM 3500-K D
30	Calcium	ASTM D511-92
31	Magnesium	ASTM D511-92
32	Barium	Turbid metric
33	Strontium	SM 3500-Sr D
34	Iron (Total)	SM 3500-Fe D
35	Chloride	ASTM D4458-85
36	Sulphate	ASTM D4130-82
37	Bicarbonate	Calculated
38	Carbonate	Calculated
39	Hydroxide	Calculated
40	Nitrate	Colorimetric
41	Phosphorus	ASTM D515-88

Item No.	Test Name	Ref.
OIL Test		
42	H ₂ S	SM 4500-S B
43	Oil and grease	SM 5520 C
44	Suspended Solid	SM 2540 D
45	TDS 180°C	SM 2540 C
46	Total Hardness	Calculated
47	Temporary Hardness	Calculated
48	Permanent Hardness	Calculated

4. SAMPLE CONNECTION TYPE

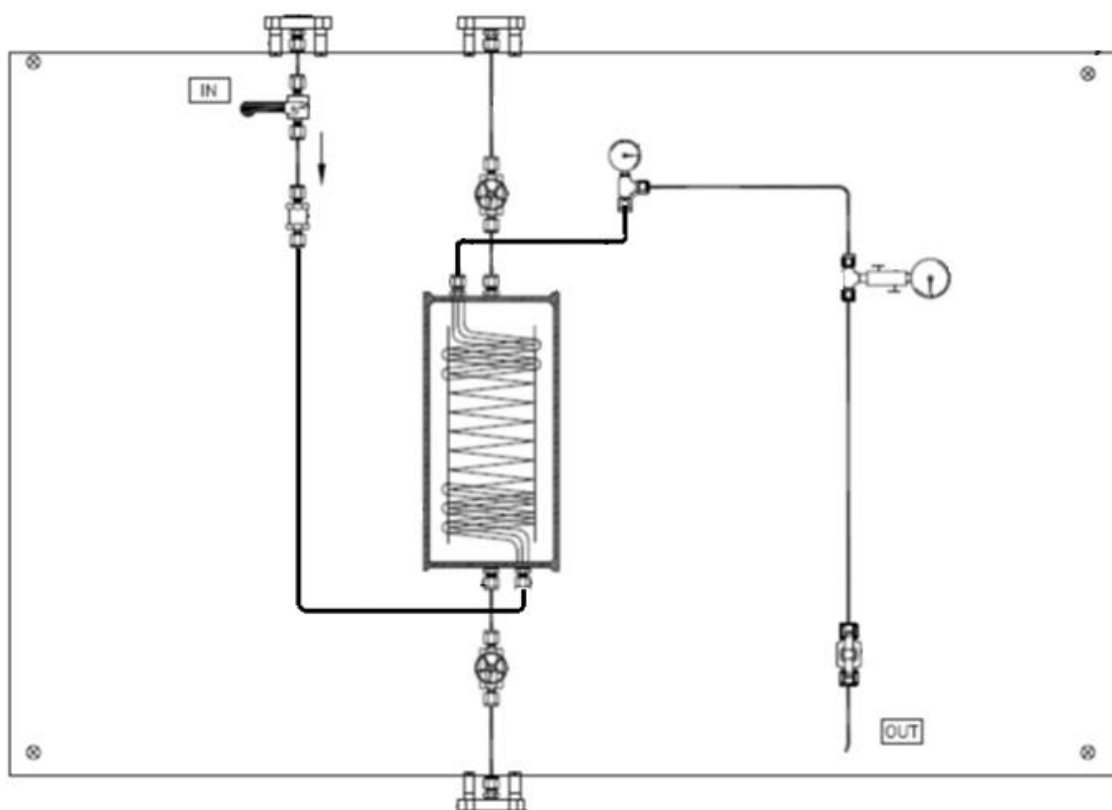
According to Oil Process Facility needed type 1, type 2, type 3, type 4. So in this proposal is you can see for type sample connection.

TYPE 1-Tubing CLASS



TYPE 2-Tubing CLASS :

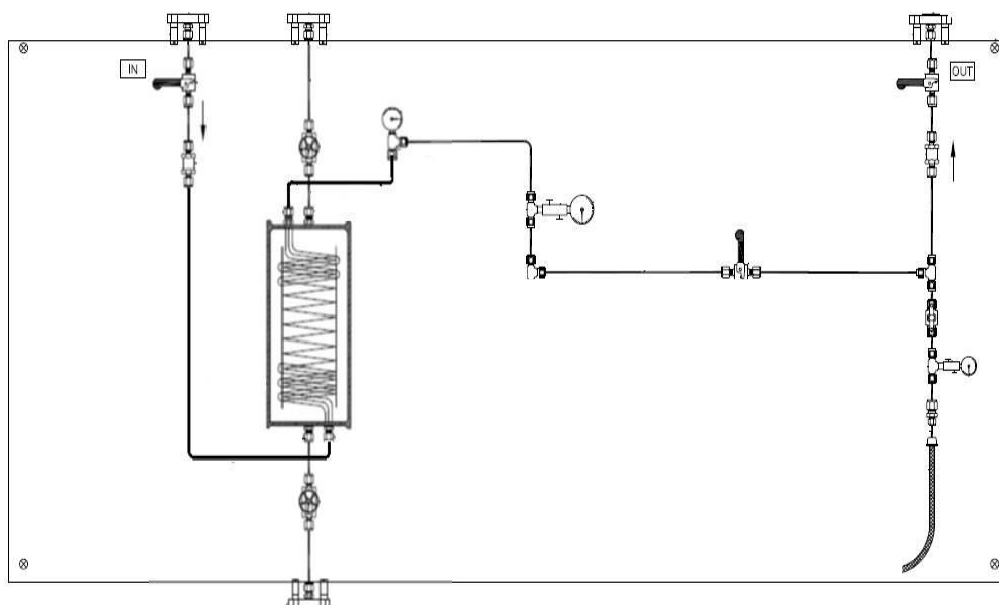
This type of sampling system is related to sampling in cool and atmospheric conditions, which is one of the most common sampling systems.



Abolha

TYPE 4-Tubing CLASS high class:

This type of sampling system is of a special type and exists for situations where the oil sample must be sampled under pressure for specific laboratory analyzes with a line nature. Aafa has also made this type of sampling system in a portable form.



5. Delivery Time and Term:

Delivery Time for packages sample connection is 90 working day.
Delivery place in AOGC location.

6. Guarantee Term:

The Guarantee for sample connection is 12 Month and 36 Month after sales service.