

Calibration separators

Among Confind strengths we can count the expertise in designing, manufacturing and commissioning of crude oil test separators dedicated to specific applications in a wide variety of crude oil characteristics, temperatures, pressures.

In more than a decade of manufacturing test separators there have been produced around 230 units operated throughout Romania, Kazakhstan, Kurdistan.

The separator is a pressure vessel, consisting of a cylindrical shell, horizontal, made of courses of plate horizontally welded and two elliptical bottoms made of dish formed plate.

Calibration separators



Calibration separators

The vessel is supported by two elements saddle type.

The separator is provided with technological / instrument nozzles.

- Inside the vessel are placed the following specific equipment and devices:
- Input nozzle for oil and gas mixture provided with device for vortex breaking ;
- System with longitudinal baffle for improving the linear flow of fluid in the gas space;
- System with cross baffle for the coalescence of the liquid drops in the gas flow;
- Vortex breaking system on the liquid output



3

Calibration separators



Calibration separators

CONFIND manufactures three sizes of horizontal biphasic separators designed to separate the mixture in the oil and gas facilities:

Dn = 1100 mm, P = 16 bar

Dn = 800 mm, P = 16 bar

Dn = 1400 mm, P = 16 bar



Calibration separators

NOZZLE No.	DESTINATION	NOZZLE No.	DESTINATION
R 1	Input working fluid mixture	R 8 a,b	Level max. maximorum / min. minimorum
R 2	Oil output	R 9	Washing
R 3	Gas output	R 10	Gas input
R 4	Gas discharge	M 1	Pressure gauge coupling
R 5	Safety valve	M 2	Thermometer coupling
R 6 a,b	Glass Level	M 3	Level transducer coupling
R 7 a,b	Maximum / minimum level	GV	Manhole



Calibration separators

TECHNICAL CHARACTERISTIC

		Di=1100/p=16Bar	Di=1100/p=16Bar
Technical checking and authorization		HG 584 2000; SR EN 13445 - 1,2,3,5/2003	
Working pressure (MPa)		1,6	1,6
Maximum admissible working and calculation pressure PS (MPa)		1,6	1,6
Hydraulic test	Pressure (MPa)	2,7	2,32
	Holding duration (min)	60	60
Sealing test	Necessity	<i>At beneficiary with working service</i>	<i>At beneficiary with working service</i>
	Pressure (MPa)	2,11	1,78
Min. admissible working temperature of the metal wall under pressure Ts	Maximum (°C)	+50	+50
	Minimum (°C)	- 20	- 20
Working chars	Description / Group	Gas, oil, water/gr. 1	Gas, oil, water/gr. 1
	Corrosive towards the vessel metal (mm/year)	0,15	0,15
	Risk (OLUG 200/2000; law no. 451/2001)	Inflammable, explosive	Inflammable, explosive
	Temperature Maximum (°C)	+50	+50
	Minimum (°C)	+5	+5
	Specific weight (kg/m ³)	780 - 950	780 - 950
Admixture for exploitation conditions (mm)		3,0	3,0
Thermal insulation thickness (mm)		-	-
Volume (L)		2270	1000
Maximum weight of the load (kg)		-	-
Net weight of vessel at delivery(kg)		2430	1150
Empty vessel weight, in instalation (kg)		2580	1480
Weight of functioning vessel (kg)		3960	2200
Weight of vessel at the hydraulic test in instalation (kg)		4925	2620
Category HG 584/2004	Risk category	IV	IV
	Evaluation mode with quality assurance	G	G