

SEPARATOARE DE TOTAL

CONFIND manufactures three sizes of three-phase horizontal separators 30, 70 and 80 m³ and P_n = 6 bar (0,6 MPa), designed to separate the mixture of oil, water and gas.

Separator is a horizontal pressure vessel, consisting of a cylindrical shell made of five courses of plate longitudinally welded and elliptical bottoms made of formed plate.

The vessel is supported on two elements saddle type. Separator is provided with technological nozzles and instrumentation nozzles.



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The vessel is divided in 3 compartments by means of 2 walls, as follows:

- compartment 1(for mixing) in which the mixed fluids (oil + water + gas) enter in the compartment through the input nozzle(R1) provided with deflector. In this compartment takes place both the separation of the gas and the gravity settling of the free water in the mixture which is directed at the lower part in compartment 3 by means of a run over pipe for level adjustments.
- compartment 2(for oil) in which the oil separated in compartment 1 is collected.



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- compartment 3(for water) collects the settled water from compartment 1 through the run over pipe for level adjustment. This compartment is separated from compartment 2 by a cross wall.



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NOZZLE No.	DESTINATION	NOZZLE No.	DESTINATION
R 1	Mixture input	R 13	Oil minimum - minimum level
R 2	Gas output	R 14 a,b	Spare nozzle
R 3	Oil transducer	R 15 a-c	Leakage
R 4	Safety valve	R 16	Salt water input
R 5	Adjusting water nozzle	R 17	Water maximum - maximum level
R 6	Water transducer	R 18	Max. level for water discharge
R 7 a+h	Glass Level	R 19	Min. level for water discharge
R 8	Water output	R 20	Water minimum - minimum level
R 9	Oil output	R 21	Spare nozzle
R 10	Oil maximum - maximum level	M 1	Pressure gauge
R 11	Max. level for oil discharge	Gv1 a,b	Manhole
R 12	Min. level for oil discharge	Gv2	Oil compartment manhole



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TECHNICAL CHARACTERISTIC		70 mc	70 mc	70 mc	
Regime for technical checking and authorization		HG 584/2000; SREN 13445 - 1,2,3,5/2003			
Working pressure (MPa)		0,6	0,6	0,3	
Maximum admissible working and calculation pressure PS (MPa)		0,6	0,6	0,6	
Hydraulic test	Pressure (MPa)	1,84	1,72	0,82	
	Holding duration (min)	60	60	60	
Sealing test	Necessity	At beneficiary with working service			
	Pressure (MPa)	1,41	1,32	0,6	
Min. admissible working temperature of the metal wall under pressure Ts	Maximum (°C)	+50	+50	+100	
	Minimum (°C)	- 20	- 20	- 15	
Working chars	Description / Group	Gas, oil, water/gr. 1			
	Corrosive towards the vessel metal (mm/year)	0,15	0,15	0,3	
	Risk (CUG 200/2000; law no. 451/2001)	Inflamable, explosive		Toxic	
	Temperature	Maximum (°C)	+50	+50	+50
		Minimum (°C)	+5	+5	+15
Specific weight (kg/m ³)	780 - 950	780 - 950	930 - 990		
Admixture for exploitation conditions (mm)		3,0	3,0	3,0	
Thermal insulation thickness (mm)		80	80	80	
Volume (L)		70000	30000	80000	
Maximum weight of the load (kg)		-	-	-	
Net weight of vessel at delivery (kg)		16750	10836	17810	
Empty vessel weight, in instalation (kg)		20810	13836	19100	
Weight of functioning vessel (kg)		56700	35936	77500	
Weight of vessel at the hydraulic test in instalation (kg)		90800	44386	97700	
Category HG 584/2004	Risk category	IV	IV	IV	
	Evaluation mode with quality assurance	G	G	G	

