



Horizontal flare units

Horizontal flare units (HFU) with remote ignition and control means are designed for burning gases, vapors and liquids during emergency, permanent and periodic discharges at oil, gas and water field treatment facilities of oil and gas fields, chemical, petrochemical and oil refining industries.

Горизонтальные факельные установки разрабатываются и изготавливаются по ТУ 3667-038-56562997-2012.



Characteristics

Climatic version UHL1 with air temperature during operation from minus 60 °C to plus 50 °C.

Depending on the purpose, horizontal flare installations for burning gases and vapors are divided into the following types:

- HFU-B - horizontal flare unit for combustion of gases, purge gases from wells of gas fields, waste gases from wells during plume purge;
- HFU-H - horizontal flare unit for burning gas effluents from safety valves.
- HFU-L - horizontal flare unit for thermal disposal of industrial wastewater (by evaporation of liquid in the flare with simultaneous combustion of organic and harmful substances);

- HFU-LH - horizontal flare unit for burning liquid hydrocarbons.

Designation

Examples of product designation entries:

a) HFU-B-100 horizontal flare unit, where:

100 – nominal diameter of the inlet fitting HFU, mm;

b) HFU-H-650 horizontal flare unit, where:

650 is the amount of flared gas, thousand nm³/day;

c) HFU-L-1 horizontal flare unit, where:

1 – amount of utilized liquid, m³/h;

d) Combined horizontal flare unit HFU-L-1-N-75, where:

1 – amount of utilized liquid, m³/h;

75 is the amount of gas burned, thousand nm³/day.

e) Horizontal flare unit HFU-LH-8,3-XЛ1, where:

8.3 – amount of liquid hydrocarbons (oil) burned, m³/h;

HL1 - climatic version.

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Technical details

Options	Dimensions	
	HFU-B-100	HFU-B-150
The amount of discharged gas,	2,5	5,5
Nominal diameter of HFC inlet fitting, mm	100	150
Working pressure, MPa (ex.)	0,2...20	0,2...20
Number of pilot burners, pcs.	1	1

Note:

1) Based on the calculation results, the pressure in the burner should not exceed 6.3 MPa. If this condition is not met, a throttle washer must be installed on the inlet pipeline.

Таблица 2

Параметры	Типоразмеры						
	ГФУ-Н-75	ГФУ-Н-150	ГФУ-Н-300	ГФУ-Н-450	ГФУ-Н-650	ГФУ-Н-900	ГФУ-Н-1200
Количество обрешиваемого газа, млн. $\text{м}^3/\text{сут.}$	0,075	0,150	0,300	0,450	0,650	0,900	1,200
Рабочее давление на входе в ГФУ, МПа (кгс/см ²)	0...1,0	0...1,0	0...1,0	0...1,0	0...1,0	0...1,0	0...1,0
Количество дежурных горелок, шт.	1	1	1	1	2	2	2

2) The unit is not intended to be used for permanent discharges.

Таблица 3

Параметры	Типоразмеры					
	ГФУ-Ж-1	ГФУ-Ж-2	ГФУ-Ж-4	ГФУ-Ж-8	ГФУ-Ж-12	ГФУ-Ж-16
Количество утилизируемой жидкости, $\text{м}^3/\text{ч}$	1	2	4	8	12	16
Давление утилизируемой жидкости, МПа, не более	1	1	1	1	1	1
Количество газа, необходимое для утилизации жидкости, $\text{м}^3/\text{ч}$, не более	500	1000	2000	4000	6000	8000
Давление сжимаемого газа, МПа, не более	1	1	1	1	1	1
Количество дежурных горелок, шт.	1	1	1	1	1	1

Options	Dimensions				
	HFU-LH-8,3	HFU-LH-16,6	HFU-LH-33,2	HFU-LH-66,4	HFU-LH-99,6
Amount of burnt liquid hydrocarbons (oil), m3/h	8,3	16,6	33,2	66,4	99,6
Number of burners, pcs.	1	2	4	8	12
Working pressure, MPa (ex.)	0,8...1,0	0,8...1,0	0,8...1,0	0,8...1,0	0,8...1,0
Design pressure, MPa	1,6	1,6	1,6	1,6	1,6
Maximum water cut of burned oil, %	25	25	25	25	25
Required compressed air consumption, nm3/min	27	55,3	111	221	332
Min/Max air pressure, MPa	0,8/1,0	0,8/1,0	0,8/1,0	0,8/1,0	0,8/1,0
Pilot burner, ignition system, flame control	Yes, electric ignition, temperature sensor*				
Availability of water irrigation	Yes*				

*complete with ignition systems, flame control, additional protection systems at the request of the Customer.



Типоразмеры				
ГФУ-Н-75	ГФУ-Н-150	ГФУ-Н-300	ГФУ-Н-450	ГФУ-Н-650
0,075	0,150	0,300	0,450	0,650
0...1,0	0...1,0	0...1,0	0...1,0	0...1,0
1	1	1	1	2

Параметры	Типоразмеры				
	ГФУ-Ж-1	ГФУ-Ж-2	ГФУ-Ж-4	ГФУ-Ж-8	ГФУ-Ж-12
ю утилизируемой жидкости, м ³ /ч	1	2	4	8	12
утилизируемой жидкости, МПа, не	1	1	1	1	1
ю газа, необходимое для утилизации, нм ³ /ч, не более	500	1000	2000	4000	6000
сжимаемого газа, МПа, не более	1	1	1	1	1
ю дежурных горелок, шт.	1	1	1	1	1

