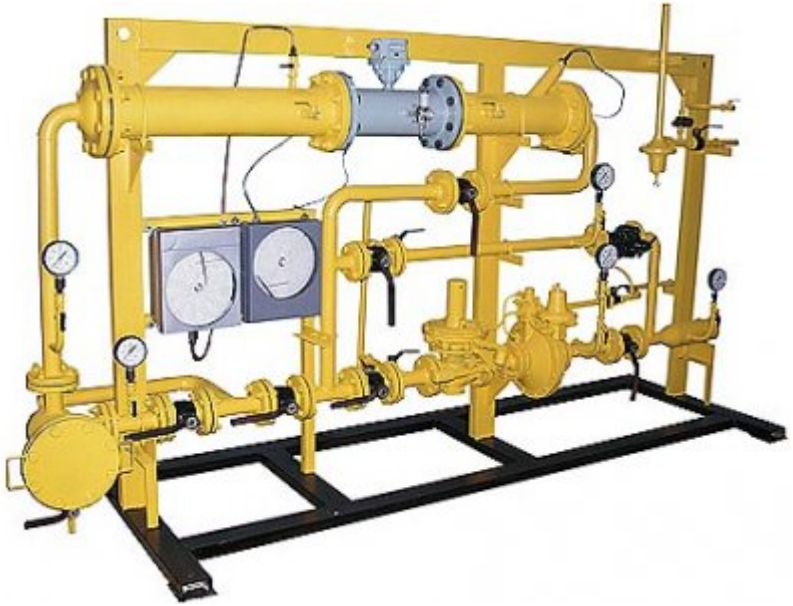
Mixers

Mixers (SM) are evaluated by the value of the demulsifier with the water-and-gas mixture, providing conditions for breaking the water-oil emulsion in the underwater oil pipeline before the preliminary water discharge unit (WDU) and the oil treatment unit (OTU). The use of mixtures of lubricants in the composition of OTUs WTUs can significantly reduce the time of dynamic settling in oil treatment units.

Mixers are also used to store oil with fresh water at oil desalination sites.



Characteristics

Part of the equipment

The mixer (SM) is supplied with or without a base frame, complete with piping, shut-off valves, instrumentation, service platform.
For intensive mixing of an oil emulsion with a demulsifier or oil with fresh water, internal devices of a jet or plate type are used.

The design of the mixer is determined depending on the required performance, physical and chemical properties of oil, formation water, content and nature of solid inclusions (mechanical impurities).

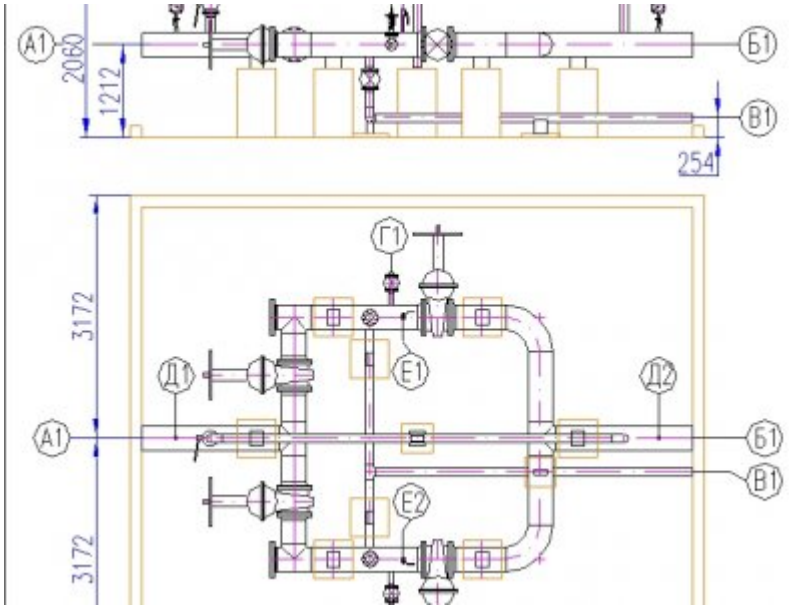
Designation

An example of a record when ordering products:
1) Mixer SMS-1.6-700-5-HL1, where:
SMS - jet type mixer;
1.6 – design pressure, MPa;
700 - conditional diameter, mm;
5 – length, m;
HL1 - climatic version.
2) Mixer SMP-1.6-500-2-U1, where:
SMP - plate type mixer;
1.6 – design pressure, MPa;
500 – conditional diameter, mm;
2 – length, m;
U1 - climatic version.

Technical details

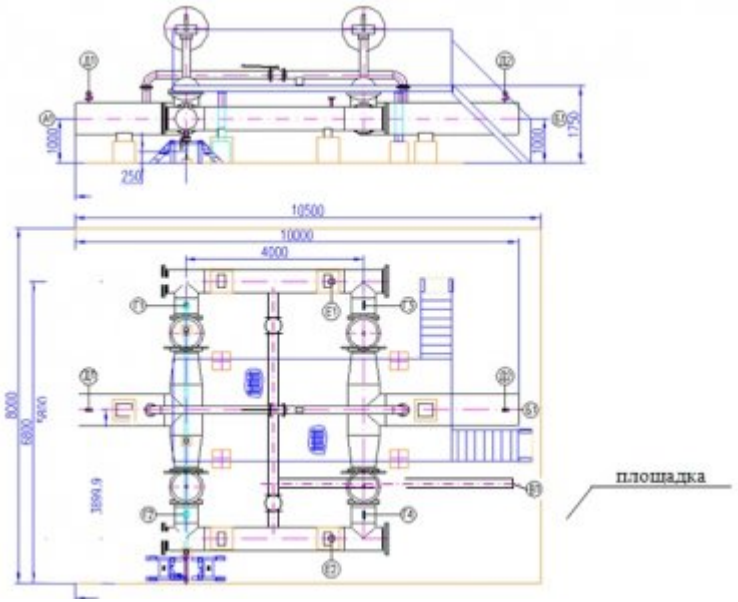
Specifications	
Working fluid	gas-water-oil mixture
Liquid load, m3/day	up to 25000
Water content in oil, % wt. not limited	
Free gas content, % vol., no more than 50	
Design pressure, MPa	1,0; 1,6; 2,5; 4,0
Operating environment temperature, 0C	от +5 - +70
Ambient temperature, 0C	от -60 до +50

SMS-300-3-HL1 - jet type with a capacity of 5000 m3/day



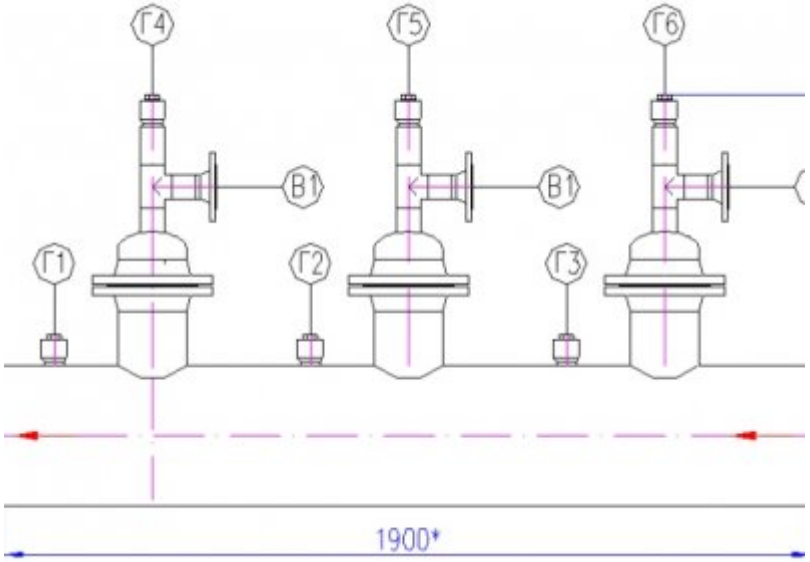
Name	Purpose	Quantity
A1	Oil emulsion inlet	1
B1	Output of oil emulsion	1
V1	Drainage	1
G1,2	For steaming	2
D1,2	For pressure gauge	2
E1,2	Air vent	2

SMP-500-3-HL1 - lamellar type with a capacity of 25000 m3 / day



Name	Purpose	Quantity.
A1	Oil emulsion inlet	1
B1	Output of oil emulsion	1
V1	Drainage	1
G1,2,3,4	For pressure gauge	4
D1,2	For pressure sensor	2
E1,2	For steaming	2

SM-300-3-HL1 with a capacity of 15,000 m3/day



Explication fittings			
Name	Purpose	DN, mm	Quantity
A1	Oil emulsion inlet	300	1
B1	Output of oil emulsion	300	1
V1,2,3	Fresh water inlet	50	3
G1-6	For pressure gauge	G1/2	4

Parameters of produced liquid mixers

Mixer designation	Throughput performance by liquid, m3/day	Mixer body diameter DN, mm	Case length, mm
SMS-700	20000-25000	700	3000-5000
SMP-500		500	

SMS-600	15000-20000	600	3000-5000
SMP-500		500	
SMS-500	7500-15000	500	3000-5000
SMP-400		400	
SMS-400	5000-7500	400	2000-4000
SMP-300		300	
SMS-350	3000-5000	350	2000-3000
SMP-300		300	
SMS-300	1500-2500	300	2000-3000
SMP-200		200	
SMS-250	500-1000	250	2000-3000
SMP-200		200	

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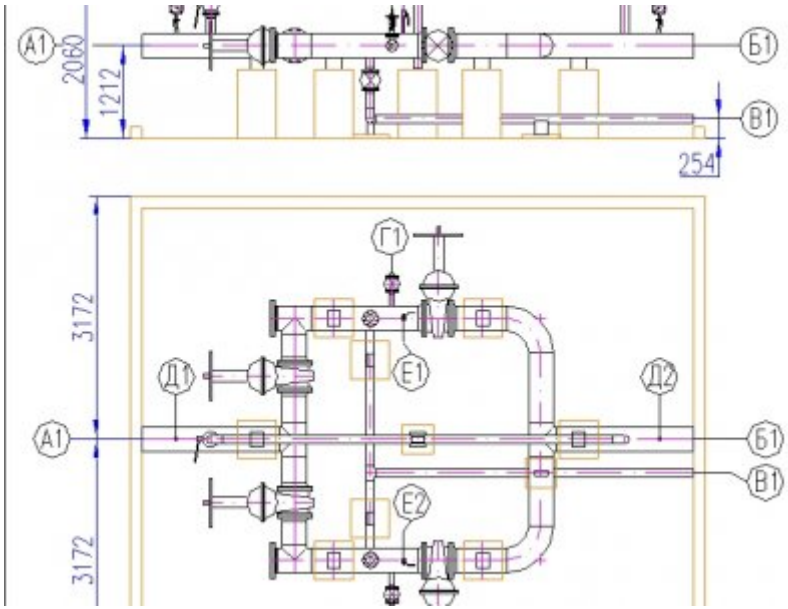
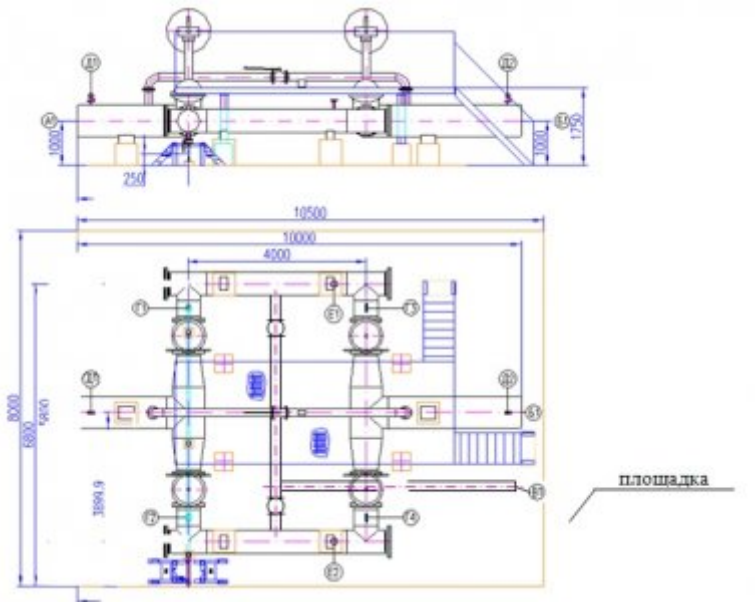
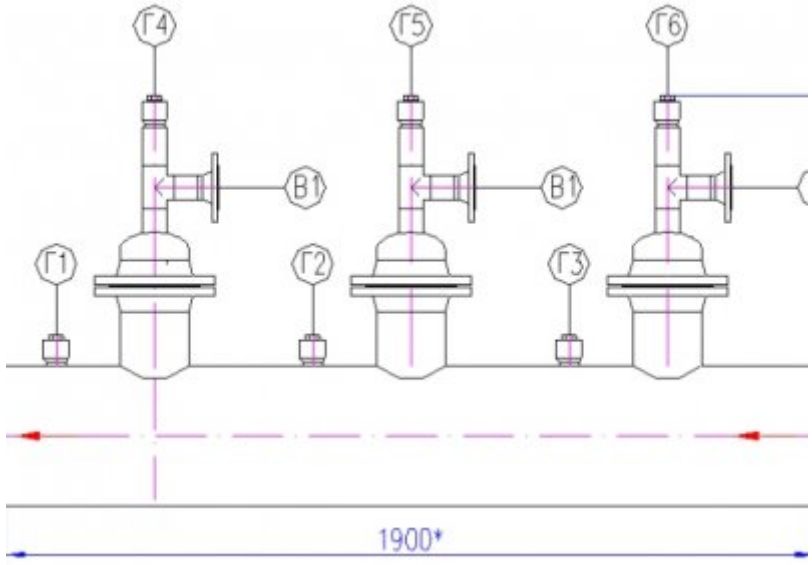
- 
А1
2060
1212
Б1
В1
254
3172
Г1
Е1
Д1
Д2
А1
Б1
В1
Е2
3172

- 
10500
10000
4000
8000
6000
площадка
- 
Г4
Г5
Г6
В1
В1
Г1
Г2
Г3
1900*