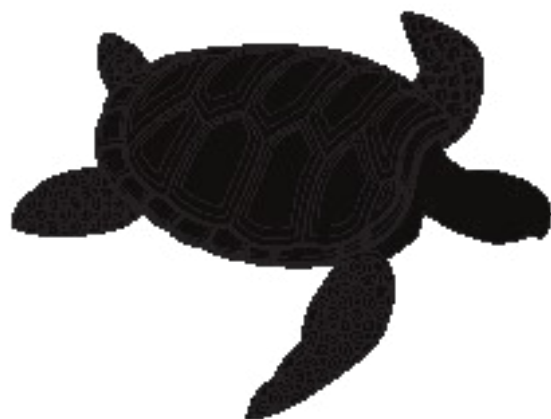




TURTLE HYDROPHORE UNIT



Revision date: 07.05.2015



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NIP: 9580651261

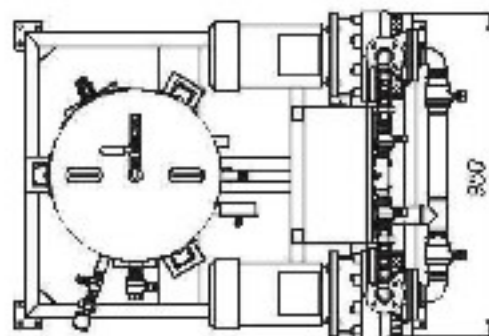
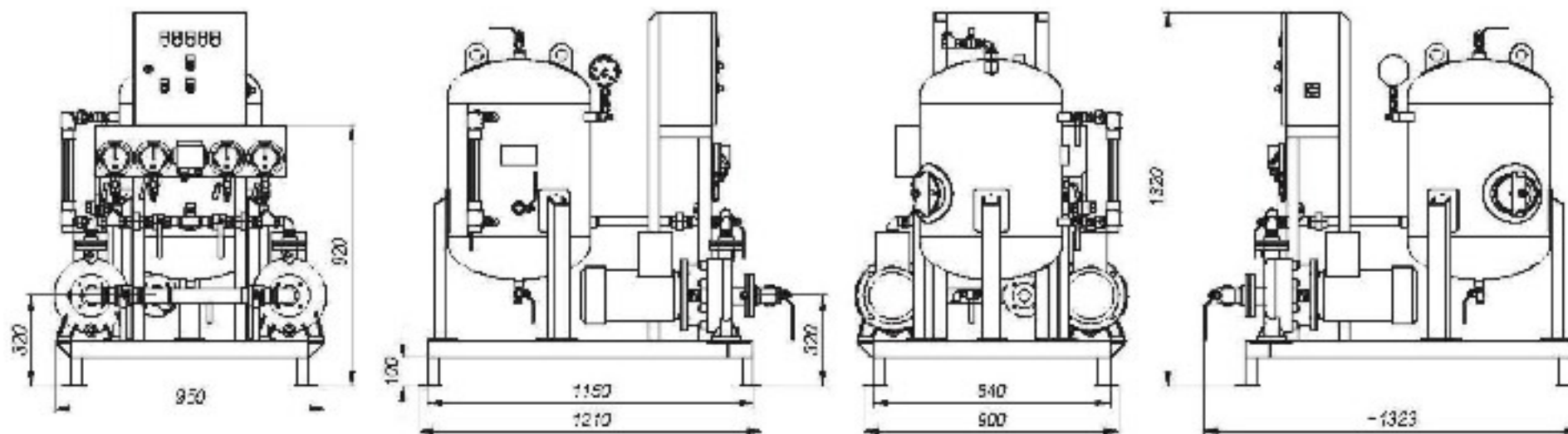
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HYDROPHORE UNIT – TURTLE

date: 07.05.2015

sheet: 1/10

100 liters stainless steel tank with 2 pumps



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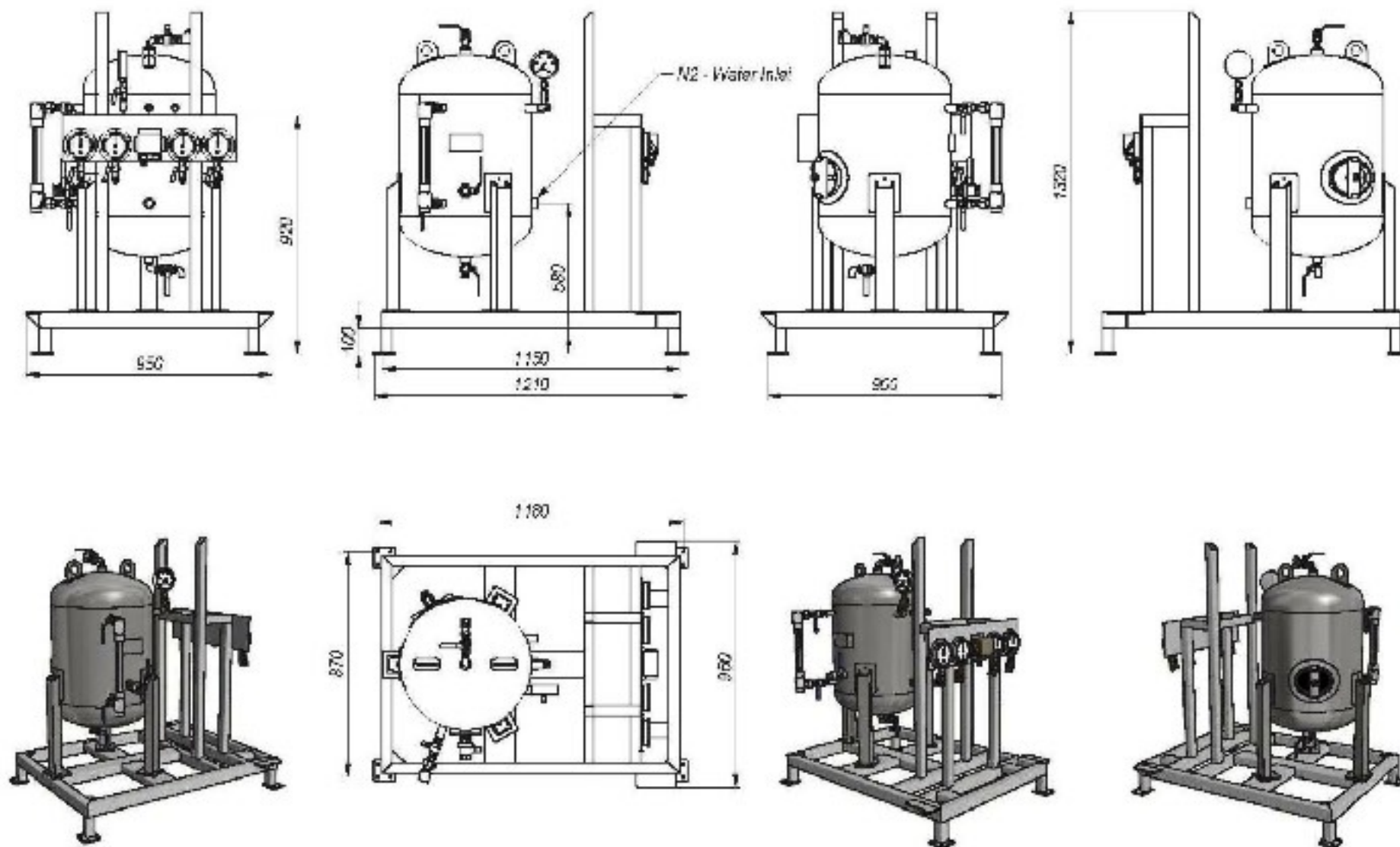
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HYDROPHORE UNIT – TURTLE

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100 liters stainless steel tank without pump



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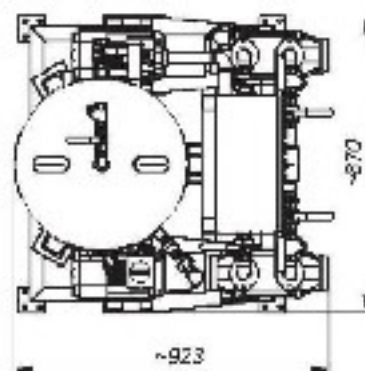
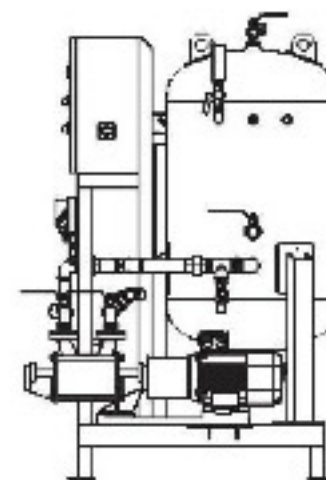
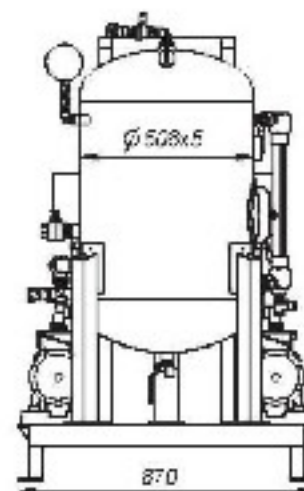
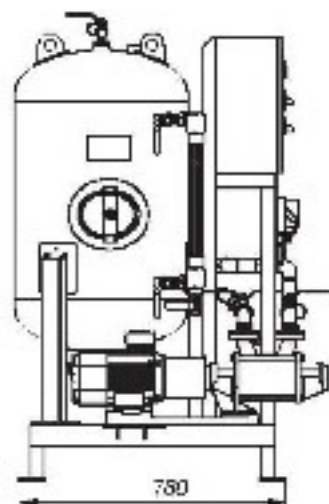
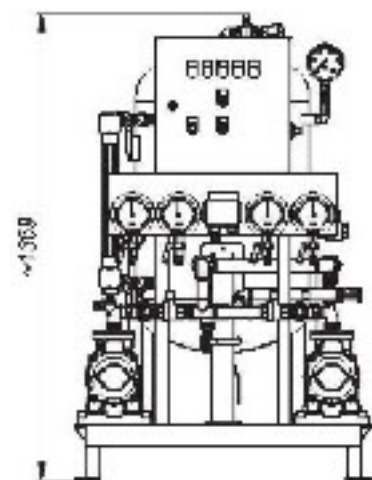
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HYDROPHORE UNIT – TURTLE

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150 liters stainless steel tank with 2 pumps



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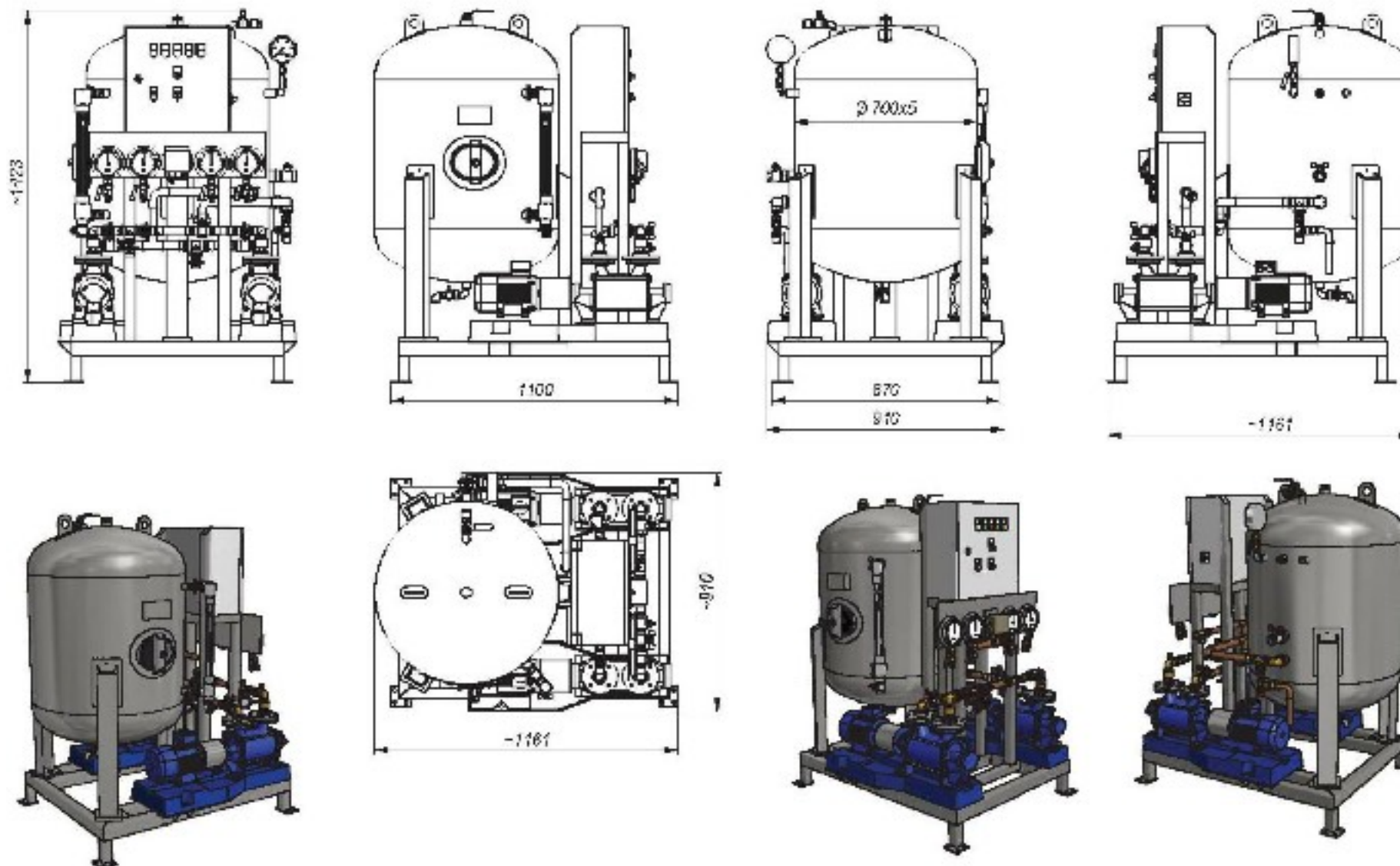
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HYDROPHORE UNIT – TURTLE

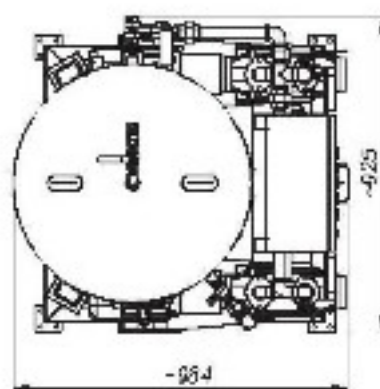
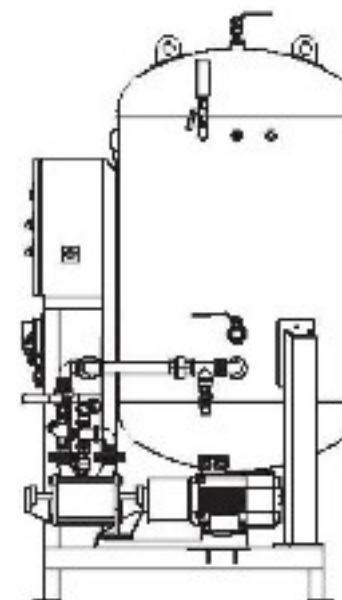
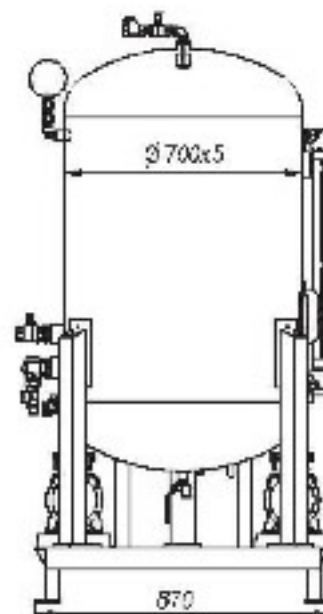
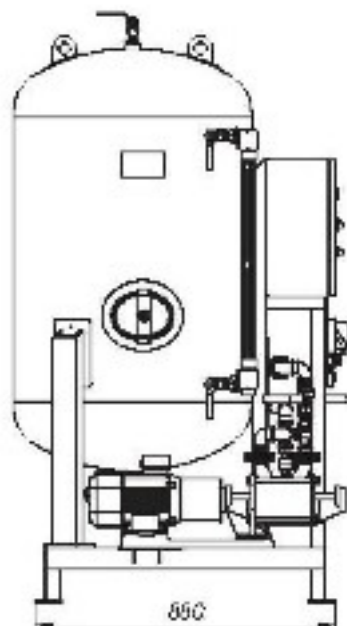
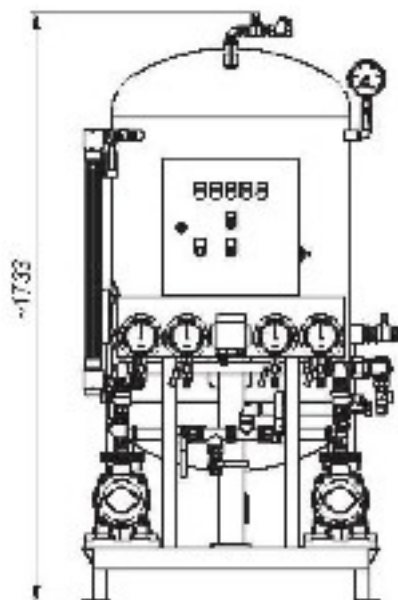
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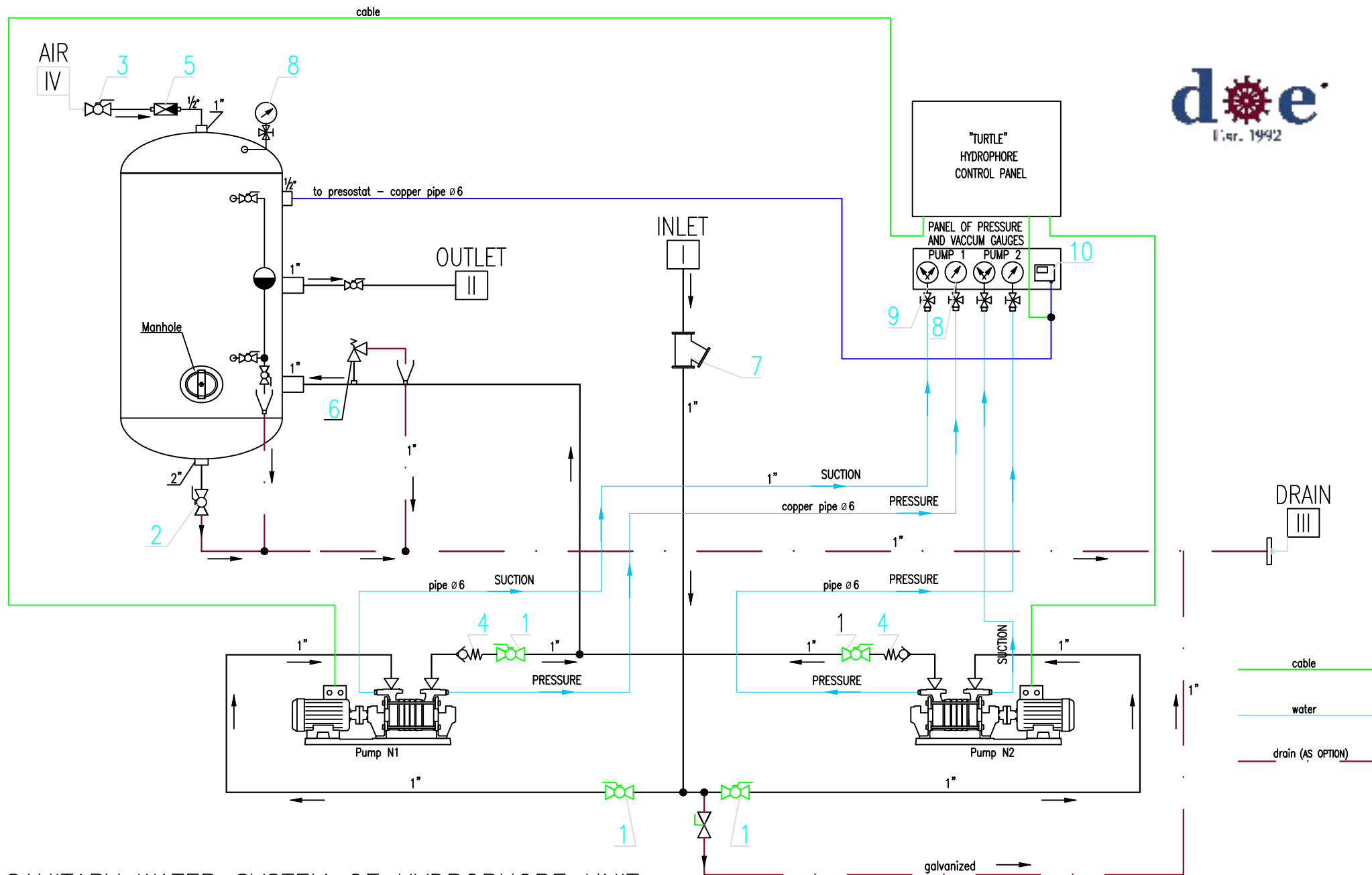
sheet: 4/10

300 liters stainless steel tank with 2 pumps



400 liters stainless steel tank with 2 pumps





SANITARY WATER SYSTEM OF HYDROPHORE UNIT



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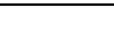

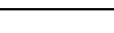
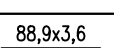
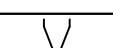
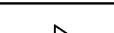
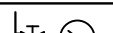
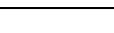

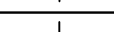
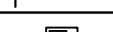
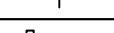

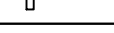

HYDROPHORE UNIT – TURTLE

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MEANING OF SYMBOLS

Symbol	Specification	Symbol	Specification
	Sanitary water pipelines (inlet)		Non return plate valve
	Sanitary water pipelines (outlet)		Non return air valve (screwed joint)
	Compressed air pipelines (inlet)	 $p_o = 0,77 \text{ MPa}$	Spring loaded safety valve, angle (figure indicates the opening pressure in MPa)
	Drain pipelines		
	Outer diameter x wall thickness and flow direction		Funnel (screwed joint)
	Change of pipeline diameter		Pressure gauge with pressure gauge valve
	Branching pipeline		Vacuum gauge with pressure gauge valve
	Crossing pipeline		Pressure control
	Flanged fitting		Level indicator
	Ball valve (screwed joint)		Strainer

MATERIAL SPECIFICATION

Item No.	Item description	Quantity
1	Ball valve	4
2	Ball valve (screw joint)	2
3	Ball valve (screw joint)	3
4	Non return plate valve	2
5	Non return air valve	1
6	Safety valve 8 bars	1
7	Strainer	1
8	Manometer rear flange, 0–9 bar	3
9	Vacuum meter with rear flange, 1–9 bar	2
10	Pressure control	1

Item	Name of connection	Item	Standard	Option SS	Option CuNi
I	SANITARY WATER INLET	1"	copper	SS316	CuNi
II	SANITARY WATER OUTLET	1"	copper	SS316	CuNi
III	SANITARY WATER DRAIN	1"	steel galvanised	steel galvanised	steel galvanised
IV	COMPRESSED AIR INLET	1/2"	brass	brass	brass

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HYDROPHORE UNIT - TURTLE

DESCRIPTION OF THE DESIGN

Hydrophore unit is designed to supply sanitary installation on vessels in fresh water.

Unit consists of tank with a capacity of hydrophore as agreed and supply pumps with parameters as agreed.

Hydrofore tank and supply pumps are mounted to a common aluminium, powder painted frame.

Hydrofore tanks are made of carbon steel and hot galvanized on both sides. Options: stainless steel.

The tank is equipped with the inlet/outlet connections, air supply, connector for manometer and presostat (pressure control) and drain, manhole and level gauge.

Supply pumps are horizontal, self-priming rotodynamic type. Options: horizontal multistage, a compact, modular, reliable Grundfos CM pump

Hydrophore tanks and pumps are connected by pipelines on both sides galvanized steel and are equipped with appropriate stop valves. Options for sanitary water pipelines: stainless steel, CuNi and Cu.

As part of the unit is board of control gauges and power supply and control box.

All connected tested functionally and under pressure working ok.

Drain pipes are galvanised steel pipes with funnels not in contact with other pipes.

Past executions for different orders:

Turtle with
2 pump and 2 tanks



Turtle small
horizontal pumps



Turtle
"COLOMBO"



Turtle without tank,
bigger pumps



Turtle 100L
without pump



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ORDERING INFORMATION



TURTLE -

A	A	A	A
---	---	---	---

 -

B	B
---	---

 -

C

 -

D

 -

E	E
---	---

 -

F

 -

G	G
---	---

Volume of the tank

0	0	0	0	- No tank
0	1	0	0	- 100 L
0	2	0	0	- 200 L
0	3	0	0	- 300 L
0	5	0	0	- 500 L
0	7	0	0	- 700 L
1	0	0	0	- 1000 L
1	5	0	0	- 1500 L
2	0	0	0	- 2000 L
2	5	0	0	- 2500 L
3	0	0	0	- 3000 L

Material of the tank

B	G	- Galvanized black steel
S	S	- Stainless steel 321

Material of the piping

S	S	- Stainless steel
C	U	- Copper
C	N	- CuNi

Pressure of the unit [bar] - from 4 to 8

4

 - 4 [bar]

Output of the pump [m3/h] - from 0 to 20

Type of the pump

0	- No pumps
1	- Selfpriming, horizontal, side channel
2	- Horizontal with ejector
3	- Horizontal without ejector
4	- Vertical with ejector
5	- Vertical without ejector

Quantity of pumps

0	- Without pumps
1	- One pump
2	- Two pumps



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HYDROPHORE UNIT – TURTLE

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