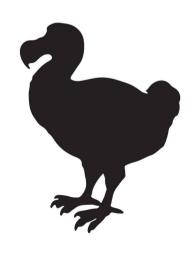


DODO - Mineralizator/ pH Adjustment & Rehardening unit

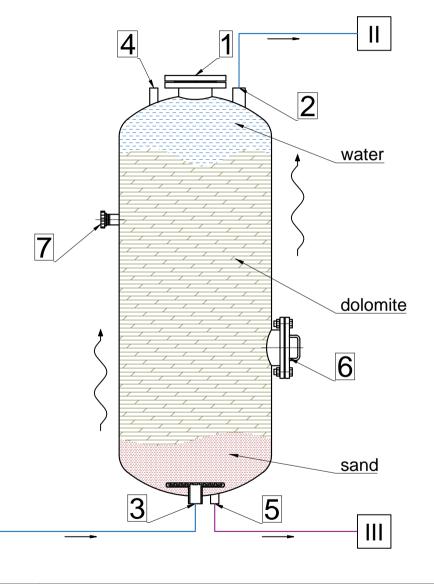




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Item	Name of connection			
1	Filling opening for dolomite			
2	Water outlet			
3	Water inlet			
4	Safety valve			
5	Drain			
6	Manhole			
7	Sight glass			

No.	Name of connection	
I	FW INLET	
Ш	MINERALIZED WATER OUTLET	
Ш	DRAIN	

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FRESH WATER DOLOMITE

> **DRAIN** SAND

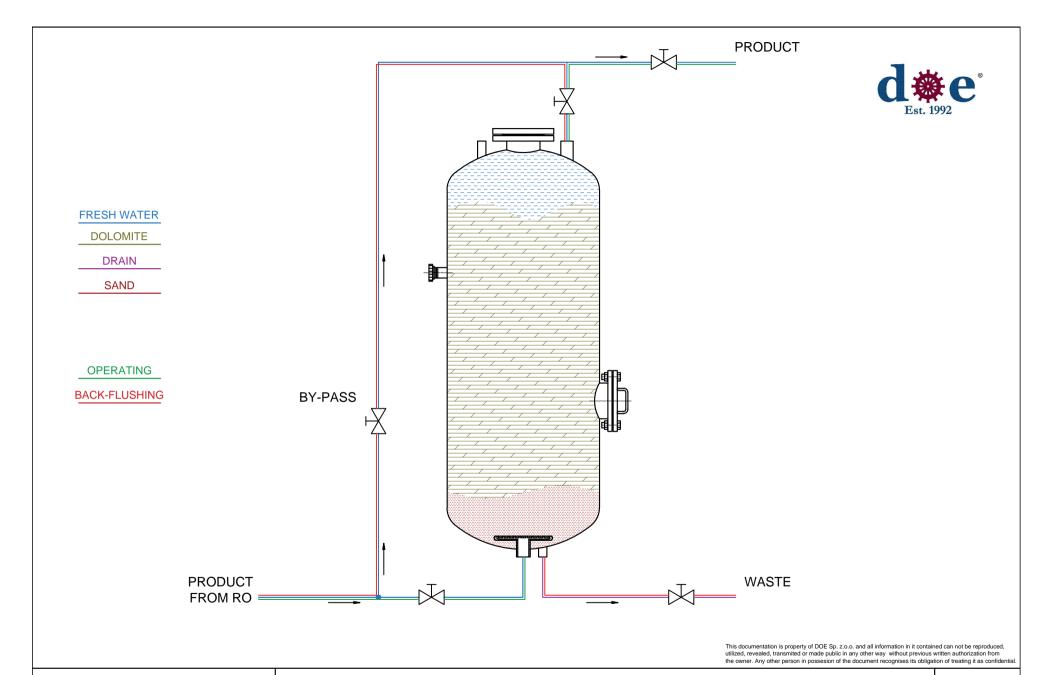
> > Doe sp. z o.o. T: +48 58 62361 ul. Sibeliusa 3 F: +48 58 66437 81-015 Gdynia, Poland E: doe@doe.pl NIP: 9580651261

T: +48 58 6236145 F: +48 58 6643737

DODO - CONNECTIONS & P&ID

Date: 26-04-2016

Sheet: 2/7





Doe sp. z o.o. T: +48 58 62361 ul. Sibeliusa 3 F: +48 58 66437 81-015 Gdynia, Poland E: doe@doe.pl

T: +48 58 6236145 F: +48 58 6643737

DODO - RECOMMENDED CONNECTION

Date: 26-04-2016

Sheet: 3/7

DODO

Dodo is a rehardening unit, mineralizator and pH adjustment in one. Dodo consists of the tank with all connections. Tank is filled with dolomite and sand.

Water is pumped from the bottom of the tank. It goes through the mineral bed to the top of the tank. Water going through the mineral bed becomes mineralized and pH adjusted. It makes the water potable without any bad smell after filtrating.

To maintain constant pH-adjustment/rehardening as far as possible it is necessary to refill the unit when the rehardening material has been consumed down to the sight glass.

The tank must be refilled with dolomite or any other rehardening material to the upper weld seam between shell and dished end.

It's recommended to mount by-pass valves on the tank. By using the by-pass valves level of alkalinity can be adjusted, and back-flush cleaning can be made.

Another Dodo connections:

- Drain placed on the bottom of the tank, to drain the water;
- Safety valve needed if the pressure in the tank will increase too much;
- Flange on the top of the tank to fill it with sand or dolomite;
- Inlet and outlet connections for flowing water;
- Sight glass for visual measuring level of the rehardening material;
- Manhole for inspections and cleaning.

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Date: 26-04-2016



Mineral bed

Mineral bed consist of coarse-grained sand and dolomite. Halfcalcinated dolomite is a rehardening material for processing of drinking water (CaCO₃ * MgO).

Dolomite is used for de-acidising and binding aggresive carbonic acid in water. Moreover it prevents from corrosion of plumbings and pipes.

Dolomite neutralise the amount of carbondioxide in product. Iron and manganese are partially removed by rising the pH value.

In DODO takes place the reaction which products are magnesium- and calciumcarbonate. Both are natural accompanying substances which are anyhow present in water.

$$CaCO_3 + CO_2 + H_2O \rightarrow Ca(HCO_3)_2$$

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DODO - Carbon filling

Instead of dolomite, Dodo unit can be filled with active carbon bed. In such situation Dodo can be used to remove contaminants and impurities, using chemical adsorption.

Adsorption is a process whereby pollutant molecules in the fluid to be treated are trapped inside the pore structure of the carbon substrate.

Active carbon bed is the most effective at removing chlorine, sediment, volatile organic compounds, taste and odour from water. But it's not effective at removing minerals, salts, and dissolved inorganic compounds. Typical particle sizes that can be removed by carbon filters range from 0.5 to 50 micrometres.

Active carbon bed needs more maintenance. It should be more often replaced than dolomite in mineral bed.



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ORDERING INFORMATION

DODO

Volume of tank

0	0	7	5	- 75 L
0	1	5	0	- 150 L
0	3	0	0	- 300 L
0	5	0	0	- 500 L
1	0	0	0	- 1000 L

DOE Supplying

- Only tank, without armature
- Tank with equipment recommended (by-pass,safety valve etc.)

Filling

- Dolomite filling
- Carbon filling

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