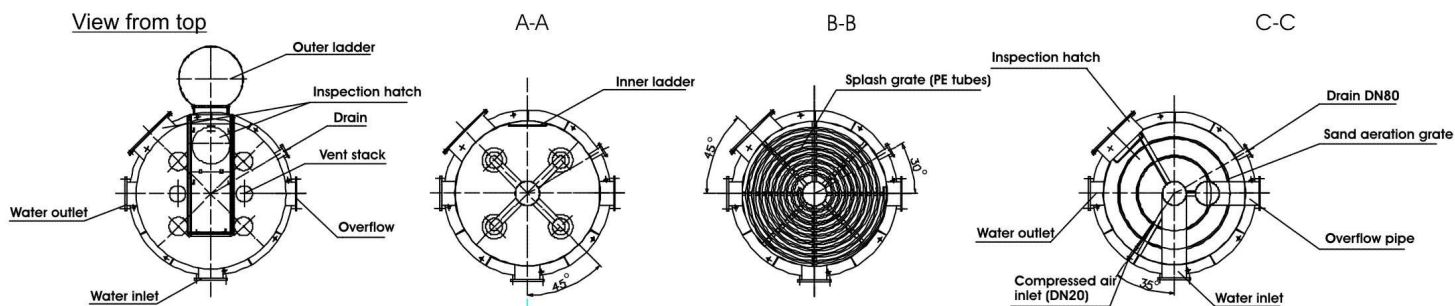




AERATION TOWER DF



Application

The aeration tower is intended for use in water treatment stations for aeration and degassing of water for industrial and house use; at the same time, it plays a role of an active surface contact tank.

Construction:

The aeration tower can be made of plain constructional or stainless steel. For outside installations, it is provided with coated corrugated metal sheet sheathing with mineral wool thermal insulation; coating colors from the RAL palette per request.

The aeration towers made of constructional steel are coated with food grade approved epoxy paint inside and corrosion protective paint outside; thermally insulated corrugated metal sheeting can also be provided.

The aeration tower is installed on a foundation using anchor bolts.

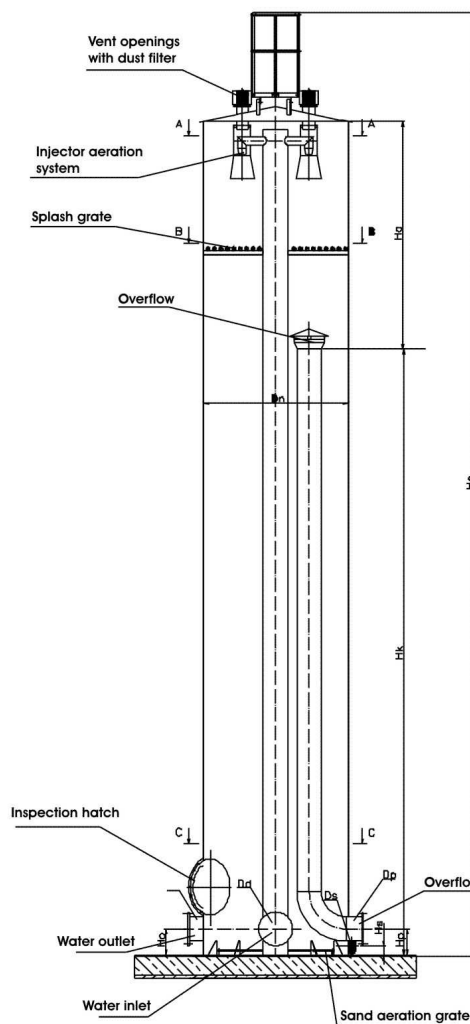
Operation:

Water fed to the inlet connection in the lower part of the aeration tower is delivered via a pipe to the injector system at the top and sprayed over the splash grate for natural aeration and degassing. The water aeration makes the iron and manganese compounds pass onto the higher oxidation degree and facilitates their precipitation. The aerated water then leaves the tower via water outlet.

The aeration tower is provided with an emergency overflow pipe, however, the customer is advised to install a control system to regulate the water level in the tower, e.g. one which uses float or conductometric sensors. A sand aeration grate is installed at the bottom of the aeration tower for removal of deposited sedimentation products during idle times of the unit.

The aeration tower consists of:

- water inlet pipe Dd
- water outlet pipe Do
- water aeration system with injectors and cascade splashing
- overflow pipe Rp
- inner ladder and outside ladder
- venting system with air inlet openings in the upper part of the aeration tower
- vent stack and inspection hatch
- bottom sand aeration grate for churning the sediments



Dn [mm]	ø1000	ø1500	ø2000	ø2300	ø2500	ø3000	ø3500	ø4000
Hc* [mm]				Hk+Ha+1435				
Ds [mm]	ø88,9	ø88,9	ø88,9	ø88,9	ø88,9	ø88,9	ø88,9	ø88,9
Do [mm]	ø168,3	ø219,1	ø273,0	ø273,0	ø323,9	ø406,4	ø406,4	ø457,2
Dp [mm]	ø168,3	ø219,1	ø273,0	ø273,0	ø323,9	ø406,4	ø406,4	ø457,2
Dd [mm]	ø168,3	ø219,1	ø273,0	ø273,0	ø323,9	ø406,4	ø406,4	ø457,2
Hk* [mm]	7000	7000	7000	7000	7000	7000	7000	7000
Ha [mm]	2000	2000	2500	2500	3000	3000	3000	3000
Ho [mm]	180	210	240	240	270	320	320	370
Hp [mm]	180	210	240	240	270	320	320	370
Hs [mm]	120	120	120	120	120	120	120	120
Weight [kg]	2500	2900	3600	4000	5200	6300	7400	8500
Active volume [m ³]	5,5	12	22	29	34	49,5	67	87
Versions	EN 14301 stainless steel (standard) Constructional steel (option) Splash grate and sand aeration grates (PE/PVC or EN1.4301 SS) Mineral wool insulated corrugated steel sheathing (option)							

THE AERATION TOWER DF HAS APPLICABLE APPROVALS OF THE NATIONAL INSTITUTE OF HYGIENE AND C.O.B.R.T.I. INSTAL