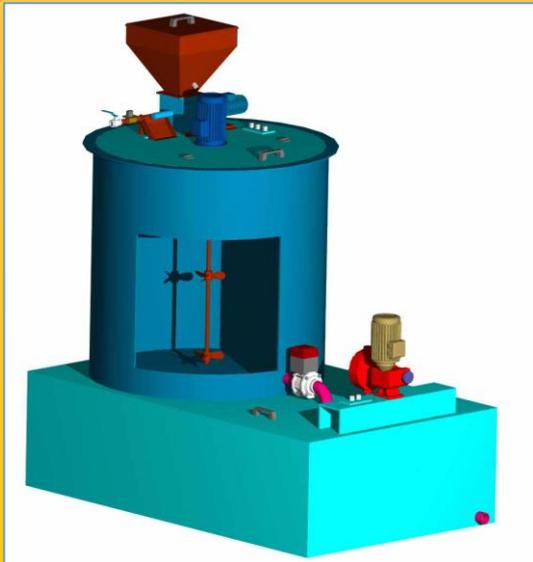


## CHEMICAL UNITS



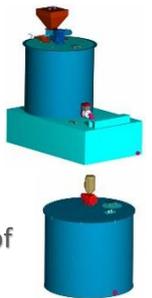
Chemical units are used for preparation and dosing of chemical agents to intensify the wastewater treatment.

In the wastewater treatment, as chemical treatment of the D.A.F. (coagulation + flocculation), in the sludge treatment (dewatering of the excess biological sludge) or in the chemical treatment of the water are used the chemical units for preparation and dosing of chemical agents.

Chemical units ensures the dosage of chemical agents (coagulant, flocculant or pH regulation) into the wastewater to intensify the removal of the diluted pollution and reduce the organic pollution - COD, BOD, etc. in subsequent wastewater treatment by flotation (DAF) in flotation unit.

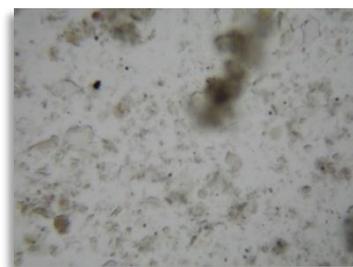
The chemical unit for a continuous dosing of flocculant solution (CHU-F) consist of two tanks:

- The upper tank is used for the dilution, mixing and ageing of the flocculant.
- The bottom tank one serves as a storage tank of the prepared flocculant solution.

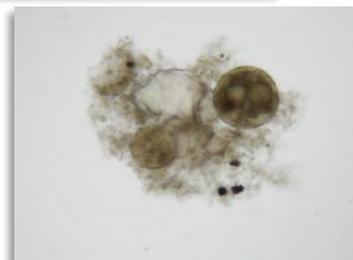


The chemical unit for dosing of coagulant (CHU-K) consists of one tank.

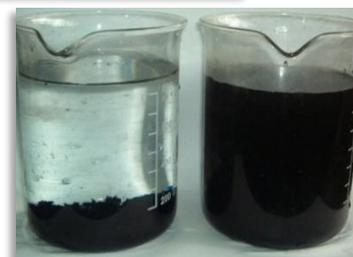
*Chemical units (CHU) are used for preparation and dosing of flocculant, coagulant or pH regulation. These chemical additives are used to intensify the process of flotation, i.e. causing precipitation of emulsified pollution, formation of flakes, which are easily separated by the dissolved air flotation (DAF) process in the flotation unit.*



Diluted pollution



Floccules



Pollution separated from water

## CHEMICAL UNITS

The main parts of the chemical units:

- feeder (screw dosing system)
- one or two blades mixers
- tanks
- level switches and dosing pumps

The chemical units are produced in stainless steel, polypropylene or polyethylene, accordingly to the process needs. The feeder, mixers, level switches are from stainless steel AISI 304/316.

The dosing pumps are designed accordingly to the needed flow, as well as the diaphragm and the screw pump, and also considering the aggressiveness of the used chemical agent.

*Typical technology scheme for effective wastewater pre-treatment - mechanical filtration by a rotary screen with integrated screening press, chemical treatment by chemical unit dosing coagulant and flocculant, and flotation process of fine treatment by the dissolved air flotation D.A.F – flotation unit.*



CHEMICAL UNITS - TECHNICAL PARAMETERS

TYPE	Volume m <sup>3</sup>	Input kW	Mixers	Capacity l	Basic dimensions mm		
					L	B	H
CHU-F flocculant							
CHU-F-0.5/0.5	0.5+0.5	0,68	1	1000	1500	1000	1950
CHU-F-0.5/1	0.5+1	0,68	1	1500	1500	1000	2200
CHU-F-1/1	1+1	1,05	2	2000	2000	1200	2200
CHU-F-1/2	1+2	1,48	2	3000	2100	1300	2700
CHU-K coagulant					D		H
CHU-K-1	1	0,43	1	1000	1400		1500

