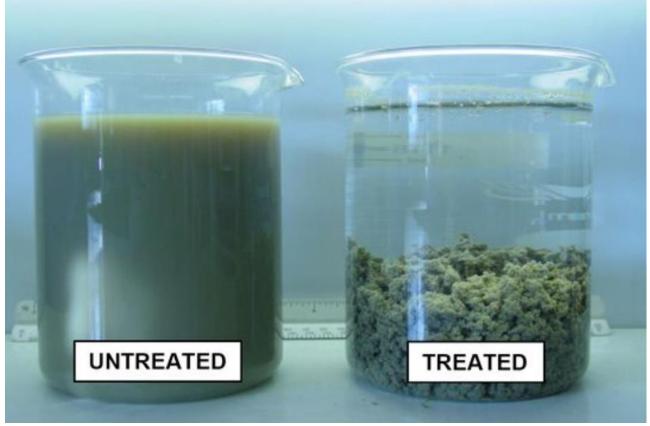




# **SLUDGE PREPARATION**



The following is an explanation how we make our preparation:

We dose the pure emulsion into the tank with low speed agitator (max 80-90 rpm), to obtain what we call "SOLUTION".

Solution has a proportion of 1/7,5 with sludge

For example: 600 lt/h of sludge are conditionned with 80 lt/h of solution at 0,2% (0,2% means every 100 parts of water, there are 0,2 parts of polymer emulsion)

### FLUITECO S.r.l.



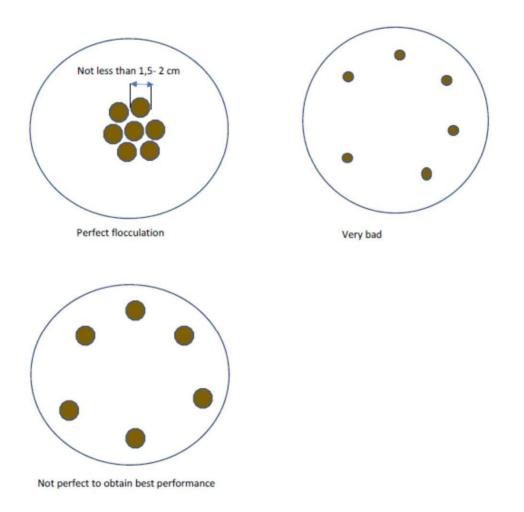


The reaction between the sludge and the polymer solution can be obtained or in the mixing reaction tank or in alternative in a piping with static mixer having a minimum length of 8 mt.

How to detect if flocculation is good:

It is necessary to introduce sludge and pure emulsion into a test small tank (1lt capacity is enough). To mix by hand for almost 1 minute and to see which is the result:

Good flocculation is when the size of the flakes is not less than 1,5 cm and after stopping the mixing by hand all the flakes start to concentrate in the middle of the tank (see hereunder sample flocculation)



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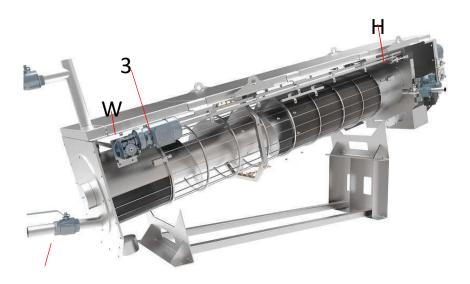
## **SLUDGE SCREW PRESS WORKING PRINCIPLE**

Sludge screw press SD can be loaded by gravity or pumped. Using the inlet -A- screw press gives a better performance in term of capacity. In case of pumped flow we suggest to avoid to feed the screw press with a pressure more than 1,2 Bar

Electric motor -1- must start together with feeding device (in case of sludge feeding pump, it must start at the same time) and it must stop 1 minute after the feeding device stops

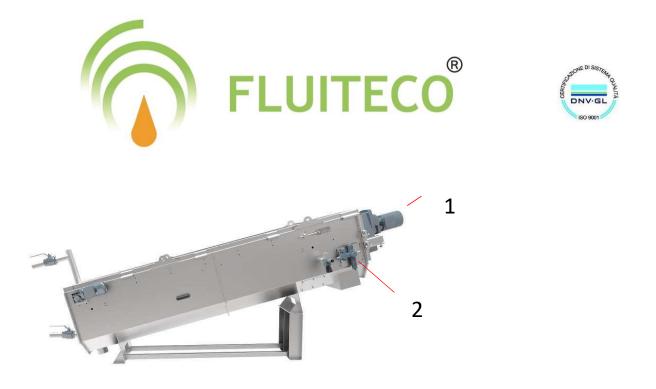
During startup, pneumatic actuator-2- must be setted at 5-6 Bar pressure. When sludge starts to come out from the outlet, it is necessary to reduce the pressure at not more than 2 Bar. All these operations can be executed directly on the screw press adjusting the pressure with the valve.

Washing system motor -3- Washing system motor must start every 10-15 minutes just to make one cycle. For one complete cycle we intend the following: the external ring with nozzles starts from the position -W- reaches the endswitch – H- and return back in the original position -W-



Α

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-VFD Screw motor -1- can work under VFD. Frequncy can be adjusted depending from dryness necessity (if it is necessary to increase the dryness it is necessary to reduce the speed), or from capacity necessity (if it is necessary to increase the capacity it is necessary to increase the speed).

### FLUITECO S.r.I.