



# Marine Life Support Systems

# H&S

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## Owner's manual for Protein Skimmer placed inside the filtration tank

The H&S protein skimmers are dispergator skimmers with design and production based upon high quality standard, maximum effect in spite of the very low height. This skimmer type has to be placed inside the filtration plant. Very fine bubbles are obtained through the special pins and the air intake which works through the water flow. The skimmers are available in different sizes, suitable for all tanks. Special skimmer sizes can be ordered at marginally higher prices.

### **WARNING:**

**The pumps have to be completely under water while they are running!**

**An incorrect use is when the pumps are running dry which could result in the damaging of the pumps!**

**Do not use the protein skimmer with new saltwater. Due to danger of overflowing!**

For more comfortable usage and tighten up the O-rings please use the attached silicon grease for the O-rings. **!**



110-F2000

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### WORKING MANUAL

H&S Protein Skimmer can be adjusted by regulating the output and the air.

**Attention:** if the water level is high there is due to danger of overflowing!

There are two different types of skimming:

**Wet skimming:** the water level is very high in the pipe.

**Dry skimming:** cut flow to the output-pipe.

The more it is cut, the more the foam becomes dry.

The heart of this skimmer is (are) the Aqua Bee pump(s) which are modified and finished with special impeller wing wheels. The pump(s) are regulated by the air intake(s). When the air intake is turned down, the passing water in the skimmer is raising up.

The air intake should not be turned down too much, because the pipe has to be filled with fine bubbles. The skimmer is working best without regulating the air intake.

Some fine bubbles may possibly pass into the water that flows out of the skimmer.

This can be easily stopped, if the outcoming water is de-bubbled with suitable filter material like filter balls. It is easy to clean the top of the skimmer with the foam, because of an easy and secure connection between the skimmer and the pot. The body must be cleaned 1-2 times a week so that the transport of the foam will not be blocked. The running unit (pins and magnet) must be cleaned every 3-4 months.

#### Suction Nozzle

In the possible event of a decrease in performance the main cause could be foreign objects in the fly-wheel or salt formation in the air intake - both parts should be thoroughly cleaned at regular intervals.



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