



AIRFOSS[®]

AUTOMATIC SYSTEM FOR COLLECTION OF DEAD FISH

DEAD FISH COLLECTOR SYSTEM

Seafarm Systems supplies complete automatic solutions for collection of dead fish and feed control. In our assortment we offer 2 different collector systems, S-system which is a specially designed heavy duty system for collection of dead fish from large, deep net cages (120-160m circumference and 30m to 60m depth) and a more traditional A-system for collection of dead fish from net cages with small to medium sized nets (40m-120m circumference and depth down to 30 meters).

The benefits you get from using automatic dead fish collector systems are many, such e.g.:

- Creates healthier environment in the cages
- Assures fast, easy and safe removal of dead fish
- Reduces risk of net attacks from predators, like seals, sharks etc.
- Creates a safer and healthier work environment
- Gives better control upon feeding processes
- Easy to install and uninstall, without divers and with fish still in the nets
- Increases lifetime upon farm sites

Our systems are flexible and can be adapted to fit farm infrastructure, cage nets and local current conditions. All components are produced in thick heavy duty polyethylene plastic plates which are laser cut and following welded 100% together by hand by our experienced staff

Our systems are well designed, and tested out under extreme conditions at some of the most demanding and exposed fish farms in Norway, the individual components has a wide range of features which are either offered as standard or can be supplied as an option.

Our product range for automatic dead fish and feed control contain the following product groups;

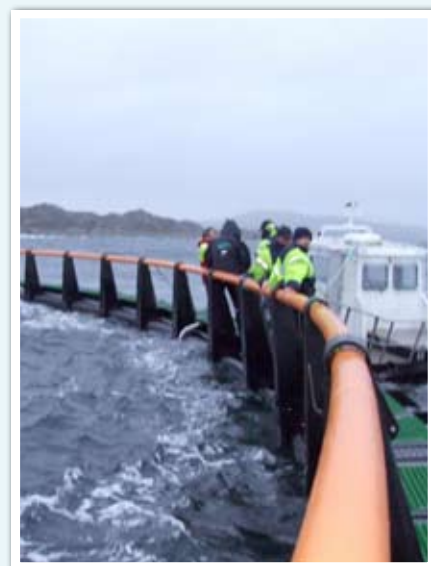
S-pumps for large/ deep nets
A-pumps for small to medium nets
Collector barrels for round cages
Collector barrels for square cages or for work boats
Filter canon for separation of water and dead fish and for loading dead fish
Hose systems, PVC armored hoses, flat hoses, air supply hoses
Snap connectors for hose system
Hose clips, polyethylene cuffs, tape, various fittings
Inspection sub-camera systems (S-pumps serial)

Have a look at the product sheets attached and contact us for further information



STRAINER CASE

- The strainer case is used to separate water, faecals and dead fish, collecting and inspection of dead fish, inspection and control of feeding by the automatic dead fish collector system. The SEAQ strainer cases are 100% manually welded in strong polyethylene plates. At all critical spots, e.g. water inlet and outlet together with the corners, the case is heavily reinforced to ensure a long lifetime.
- The strainer case is supplied in sizes from 100 litres up to 1200 litres. Size in width, height and length can be adjusted according to the customer's individual wishes.
- The grid / strainer in the strainer case can be supplied in several materials and sizes, e.g. in strong warm galvanized steel, stainless steel or in rotation moulded polyethylene or fibreglass.
- As an option, the strainer cases can for example be supplied with a water proof coloured or transparent lid with strong integrated rubber moulding and strong galvanized acid proof hinges. The lid is used to close the strainer hermetically and thus isolate infected water while the system is running, or the closed system can contribute to reduce salt silting at the plant which reduces corrosion at the plant.
- The strainer case can be supplied with different types of lids and / or slides – solutions to create an easy and quick transport of dead fish from the strainer case to e.g. bin, working boat or directly to the mill.
- While mounting on circular plastic cages the strainer case can be shaped according to the plastic cage in order to mount it optimally to the handrail and at the same time steal as little place as possible. If the strainer case is built slender, the crew can pass by the case while working on the cage.
- While mounting on steel cages the strainer case can be supplied with different types of clamps, e.g. the case can be mounted inside the frame in such a way that it doesn't steal place on the gangway.



S-PUMP

- The S-pump is designed for collecting dead fish in big plants (120 m – 160 m circumference) and / or with deep cage nets (20 m – 65 m).
- The S-pump is designed in close collaboration with several Norwegian farming companies, and the pump is today in operation at a number of Norwegian locations with documented successful effect.
- The pump head is at its widest Ø140 cm and the construction is altogether 1,80 m tall. The pump can be supplied with a gross weight from 400 kg up to 1200 kg.
- The pump can be prepared for mounting of 8", 10", 12" or 14" hose systems.
- The pump has a very big working capacity and can also be used as emergency preparedness.
- The high weight can completely replace the use of centre weights. The weight in the pump head can be adapted to the individual net depth, shape and the current conditions of the location.
- The pump has a height adjustable 14" inlet. The height of the inlet can be adjusted so that the pump can take fish with a size of up to 20 kg.
- The S-pump is 100% manually welded in laser cut polyethylene plastic plates.
- The cone, weight, lifting feet and inlet tube are mounted together inside the cone to ensure that all lifts happen in the weight itself.
- The edges on the construction are rounded with laser cutters in order to minimize abrasion on the cage net.
- Because of the high weight, the pump stands stable in the cage net, and this reduces abrasion on the net, at the same time minimizing loads on the hose system.
- The pump is supplied with lifting straps and SEAO has developed an easy way to mount the pump inside the cage, in order to be installed in the sea in less than ½ hour.



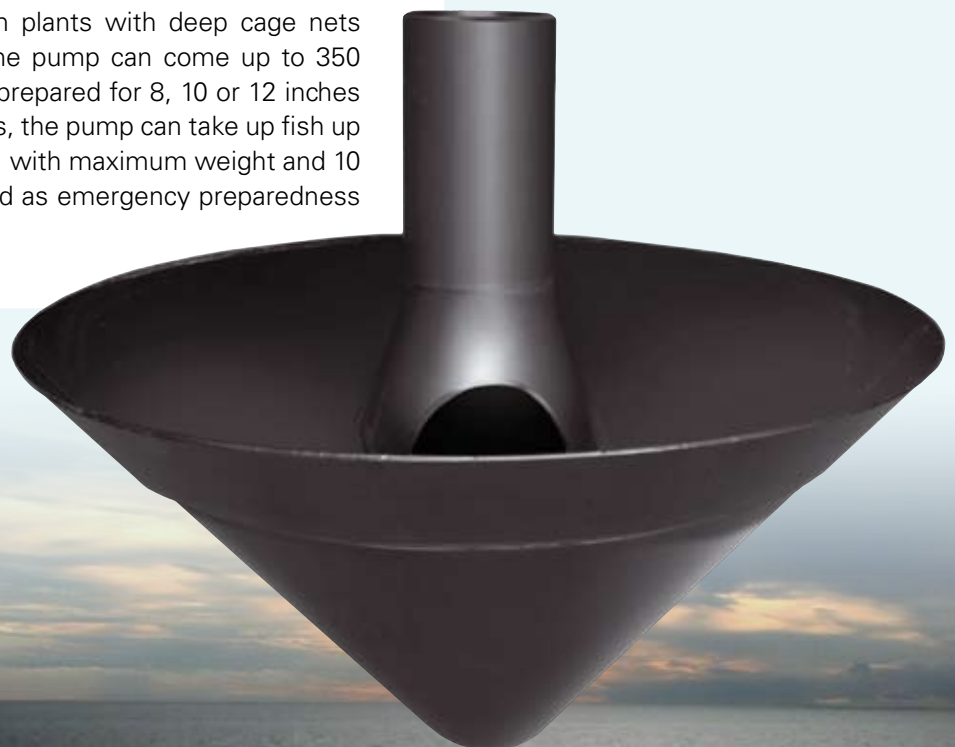
A-PUMP

- The A-pump is a traditionally designed pump head in strong materials in order to ensure a long lifetime. The A-pump is designed for quick, easy and safe collection of dead fish and can also be used for feed control.
- The A-series is used for small to medium size farming plants (40 m to 120 m circumference) and / or depths down to 30 metres. The A-pump is 100% manually welded in laser cut polyethylene plastic plates and is strongly reinforced in all joints, in sides and bottom. The edges on the A-pump are rounded with laser cutters in order to minimize abrasion on the cage net.
- The A-pump is provided in 3 sizes:
A150 (Ø 90 cm), A200 (Ø 120 cm) and A300 (Ø 150 cm)

A150 (Ø 90 cm) is suitable for operation in hatcheries. The pump can be prepared to 3 inch or 6 inch hose systems. With 3 inches hose, the pump can take up up to 0,5 kg fish, with 6 inch hose up to 4 kg fish. A150 can be supplied with weight up to 150 kg and can operate safely in depths down to 15 m.

A200 (Ø 120 cm) can be used both for fry and ordinary fish. The pump can be prepared to 3, 6 or 8 inch hose systems. With 3 inches hose, the pump can take up 0.5 kg fish, with 6 inch hose up to 4 kg fish and with 8 inch hose up to 8 kg fish. The pump can be supplied with weight up to 250 kg and can operate safely in depths down to 25m.

A300 (Ø 1500 cm) is mainly used in plants with deep cage nets (down to 55 m). The weight of the pump can come up to 350 kg gross. The A300 pump can be prepared for 8, 10 or 12 inches hose systems, with 10 or 12 inches, the pump can take up fish up to 20 kg. The A300 pump can also, with maximum weight and 10 or 12 inches hose system, be used as emergency preparedness in case of mass mortality.



STRAINER CANNON For dead fish collector

- Designed to separate water and dead fish from the dead fish pump.
- An extremely price strong product that is produced in strong materials and with a thoroughly tested design.
- Appointed in "Best in Test" at several Norwegian farming companies.
- Reduces expenses of dead fish removal, by filtering out water as much as possible from the dead fish.
- Ensures easy and safe loading of dead fish directly from the cage to the bin or mill.
- Comes along with several types of attaching clamps, so that it may be installed directly on the handrail for most of the plastic cages or handrails on ships.
- Can be adjusted in height and angle and rotated in order to get adjusted to the position of the collecting bin on the boat, or it can be adjusted in such a way that it takes less place when the strainer cannon isn't running.
- It has a very high working capacity and removes any need for heavy manual lifts of dead fish.
- Is supplied with grids in different sizes and can be adjusted to fish sizes at the plant.
- Restricts danger of infection and contamination; the strainer case is a closed unit and can be delivered with a drain hose that leads contaminated / infected water away from the plant, reduces thus salt silting and corrosion on the boat.
- Can be prepared for; 4, 6, 8 10 or 12 inches hose system at water inlet and water outlet.



POLYETHYLENE QUICK RELEASE COUPLING

- Can be supplied for: 6", 8", 10" or 12" hose systems

The quick release coupling is produced in a powerful polyethylene tube mounted with strong thread screws in acid resistant, stainless steel with polyethylene mounting handles. The quick release coupling is very light in weight and weighs only 5 kg altogether. One equivalent quick release coupling in e.g. galvanised steel weighs in 8 inches 15-20 kg.

The quick release coupling is mounted with two handles in order to twist the parts together. One handle is mounted on the female part and the other one is mounted on the male part, so 1 person alone can easily perform the coupling.

The quick release coupling can be used to hook up e.g. hose systems to the Airfoss separator, where the separator is mounted on a working boat. When ships come alongside, the hoses are easily hooked up. Owing to the light weight of the quick release coupling, the hose and the coupling can easily be lifted to the same height as the separator.

The quick release coupling can also be used to mount the hose system directly to the china hat / pump head. So saying, the hose system can be taken up for repair without moving the pump (just with the help of divers)

The coupling can also be used by hooking up the individual hose components, between spiral hose and flat hose. Hereby one avoids the use of hose stub, tape, hose clamps etc. The hose coupling is an extremely cost-efficient product compared to other types of quick release couplings in e.g. galvanised or stainless steel. Contact us for information about prices.



