

USER MANUAL

AIR HOSE

REVISION 4



AKVAGROUP™
EGERSUND NET

THANK YOU FOR CHOOSING EGERSUND NET

Our mission is to deliver solutions and services that optimise production and contribute to sustainable, cost-effective and safe fish farms. We place great emphasis on fish welfare, operational performance and profitability for our customers in everything that we do.

Air hose is equipment used to reduce the volume in a net, mainly in accordance with harvesting (slaughter), sorting or treatment of fish.

Egersund Net is committed to producing high-quality, durable air hoses, and we describe how they should be used in this user manual.

We keep our manuals as user-friendly as possible. To achieve this, we rely on your feedback and on our collaboration with you as a user of our products. We highly value every suggestion we receive, as it helps us deliver more effective and safer equipment. You are most welcome to contact us if you have any comments or suggestions for improvement.

Together, we can help ensure that fish farming is an eco-friendly, sustainable and growing industry that produces safe and healthy seafood for the global market.

This user manual is designed to meet the requirements of Norwegian Standard 9415:2009 and the NYTEK regulations.

Egersund Net reserves all rights to this user manual and its contents. Reproduction and distribution to third parties without our clearly expressed prior approval is not permitted. We reserve the right to correct any errors in the text or illustrations.

The user manual for Air hose is available on our website www.egersundnet.no, and on our online equipment log Net-Reg at www.net-reg.no.

Best regards,
Egersund Net

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1 INTRODUCTION

1.1 About the product

Air hose is equipment used to reduce the volume in a net, mainly when harvesting (slaughter), sorting or treating fish.

The air hose is a hose in TPU-material. It is equipped with end pieces in each end of the hose, where both ends has a valve for air filling. Eyebolt with swivel is installed in each end, here you can attach a rope when you pull the hose.

The air hose is pulled under the net, until the volume is sufficiently reduced. The fish is then caught in a smaller area which makes it easier to pump the fish up from the net.

1.2 Symbol definitions



REQUIREMENT: The symbol is placed next to text describing requirements



NOTE: The symbol is placed next to text describing potential incidents and other aspects that you should be aware of



TIP: This symbol describes tips and advice in connection with the installation and handling of an air hose



ESCAPE RISK: This symbol is placed next to text describing events and/or operations that may increase the risk of fish escaping

1.3 Contact information

If you have any questions about the air hose, please contact us.

Delivery- and visiting address:

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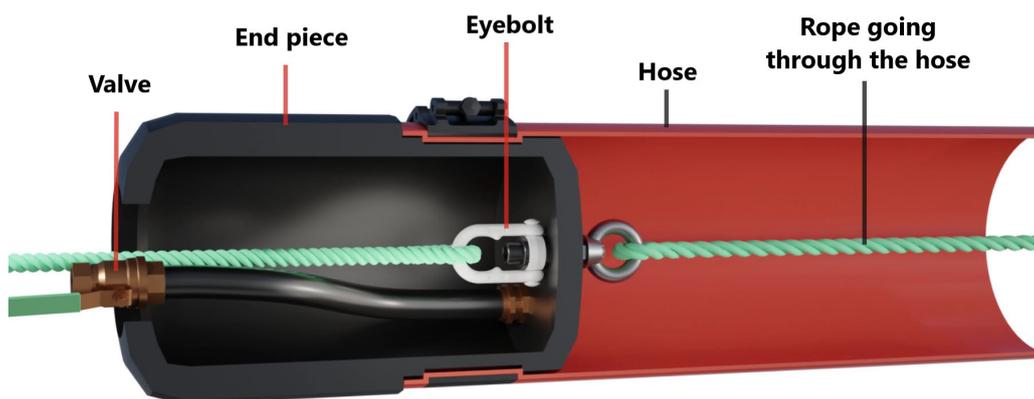
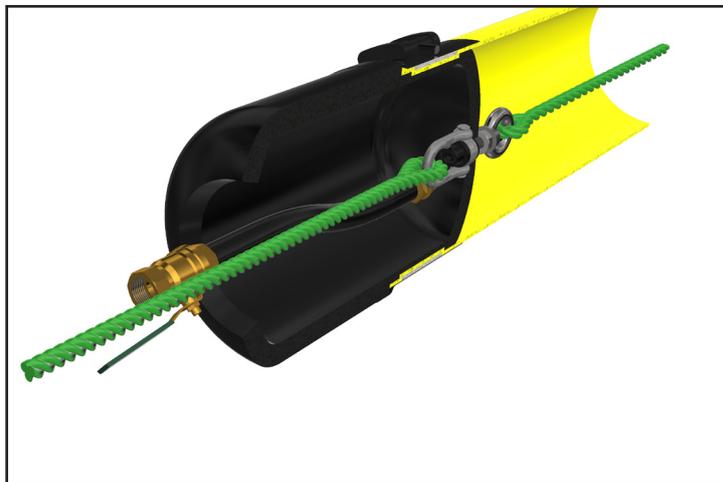
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1.4 Revision changes

Rev. no	Date	Scope	Ref.
4	30.09.2022	Updated informatin about buoyancy and recommended length	Chapter 2
4	30.09.2022	Updated information about air pressure in a hose	Chapter 3.1
4	30.09.2022	Updated information about use of strap/roundslings	Chapter 3.1

2 CONSTRUCTION



The picture below shows technical specifications for the hose.

INTERNAL DIAMETER		WALL THICKNESS		WEIGHT		BURST PRESSURE		TENSILE STRENGTH	
Inch	mm	Inch	mm	Lbs / Ft	Kg / m	Psi	Bar	x 1000 Lbs	Tons
5	127 + 2.5	0.14	3.5	1.07	1.60	650	45	34.8	15.8
6	152 + 3.0	0.15	3.7	1.34	2.00	650	45	44.0	21.0
7	178 + 3.0	0.16	4.0	1.61	2.40	650	45	70.0	31.8
8	203 + 3.0	0.17	4.2	2.15	3.20	610	42	81.5	37.0
10	254 + 5.0	0.17	4.3	2.73	4.10	520	36	101.2	46.0
12	305 + 5.0	0.18	4.5	3.38	5.05	435	30	120.0	54.5

• NOTE: MINIMUM SAFETY FACTOR BP/WP IS 2:1 (50%) FOR ALL NON-HAZARD AND/OR NON-FLAMMABLE LIQUIDS.

Example:

A 10" hose which is 60-80 meters long, has a buoyancy of about 3.500 kg. The buoyancy is then 50 kg per meter.

Recommended length of air hose, is 65-80 meters if a pen has a circumference of 160 meters. If circumference on pen is 200 meters, it is recommended that the air hose is 80-100 meters long.



3 MAINTENANCE

3.1 Use of air hose

 Before the operation starts, fish farmer must review the current procedures. Operation manager/person with experience and correct competence must be in charge of the operation, and the various tasks must be distributed. The right kind of safety equipment must be used, and when using crane the right kind of lifting equipment must be used. Additional equipment must be removed or moved, for example cleaner fish hides.

Make sure that the hose is intact, and that it has no damages. If weight under net is to be removed, this must be done before the operation starts.

The operation must be monitored.

 ■ Cut ropes can be attached to the railing on the pen (loops to put the hose through). Put the hose through these, it will then slide along the pen (on the outside of the net) instead of going into the pen.

■ A rope is attached to the end piece, and the air hose is lifted out of the work boat.

 ■ The air hose is towed around the pen. Make sure it does not hook up in anything. It can be a good idea to wait with air filling until it is towed into place - it then slides easier around the pen.

■ If cut ropes are used, these are cut continuously.

■ The air hose is connected to compressor, and it is filled with air.

 ■ Pay close attention to the air pressure, there is not much air needed before the hose has enough buoyancy. The hose must not be filled with too much air, it must be soft and flexible before being used. On a 60-80 meter long 10" hose, an air pressure of 0,5 bar is sufficient.

Close the compressor when there is sufficient air in the hose.





- The process with reducing volume in the net starts now.
- Strap/round slings is fastened around the hose, and the hose can be lifted towards the boat. This is repeated, until the volume in the net is small enough. **It is important to fasten the strap/round slings in a way that can not cause damage to the hose - see picture below.**
- The other end of the hose can be loosened from the compressor, and this can now be moved closer to work boat/well boat.

The air hose can also be filled with air in advance - make sure it is not completely filled. The air hose can also be slid around the net in two directions, before you start reducing the volume.

When the operation is finished, the air hose is drained of air. Then you take it back in the boat for storage.



3.2 Risk assessment/special environmental conditions



The air hose must only be used when weather- and current conditions allow it. Person with correct competence must be in charge of the operation. Fishfarmer must review the current procedures before using the air hose - everyone involved in the operation must take part in this.

Approved lifting equipment and safety equipment must be used.

Check the air hose before use. Make sure it is intact, and is not leaking air. If there are signs of damage to the air hose, supplier must be contacted.

Compressor must have a pressure gauge, so that the air pressure can be observed along the way.

3.3 Maintenance

When the air hose is not in use, it should be stored properly to avoid any damage to the hose.

Air hose which will no longer be used, can be returned to one of Egersund Net`s service facilities. It will then be handled in accordance with their waste management program.

Air hoses must be disinfected if it is moved to a different fish farming location.

3.4 Check list

Before air hose is used, it must be checked to ensure that it has no damage that may cause damage or holes in the net.

the following points must be checked by fish farmer before use:



Check list item	What to inspect
Wear and tear	Check that there are no wear and tear on hose, end pieces or ropes used to pull the hose.
End pieces	Check that end pieces are tight, and that they do not leak air.
Sharpe edges	Check that the air hose has no damage in any components that may cause hole in the net, for example nicks in the end piece.



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