



RABBEN KONSULT

Rempro

Bird Net Poles- User Manual

Rev. May 2018



Brackets for bird net poles- available for square and round stanchions

Thank you for choosing Rempro AS!

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We wish to be a supplier of durable high quality products.

This manual is created to provide our customers with information on how to assemble, use and maintain our products in a safe manner.

All products are developed by Rempro AS and Rabben Konsult AS.

Please do not hesitate to contact us for further information.

Best Regards

Rempro AS

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ABOUT THE PRODUCT

The product consists of compact glass fiber tubes and steel enhanced assemble brackets made of polyurethane.

When combining glass fiber and polyester, the tubes become extremely flexible, making take the cage system follow the movement of the ocean. The tubes have been tested with heavy load, remaining strong and flexible.

The tubes are delivered with ropes and pulley in the following dimensions: Ø46, Ø50 and Ø54mm. Our bestseller is Ø46mm in 6 meters' length, which is also the optimal dimension when it comes to strength and flexibility.

The tubes are assembled to the cages with brackets, and can easily be removed for better access to the cages.

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Example bracket round stanchions

The brackets can be delivered in several versions and dimensions, to both round and square stanchions. (See front page).

REMPRO COMPOSITE PROFILES

Composite tubes \varnothing 46/28mm

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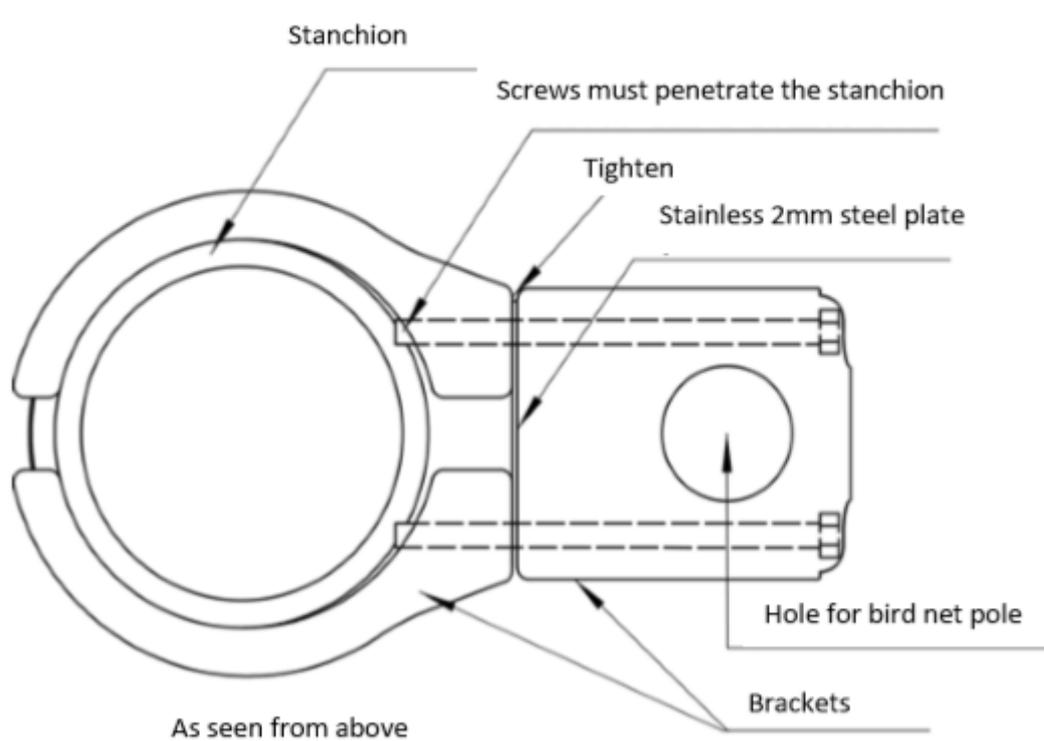
Description	Pultruded composite poles produced in glass fiber armed polyester. Pultrusion is a continuous lamination process where the glass is pulled through a mould and resin is injected to be annealed with heat.	
Specifications	Product:	Pultruded composite tube
	Dimension:	\varnothing 46/28mm
	Color:	Grey
	Length:	2-20 meters
	Weight:	1.830 g/m
	Resin:	Isoftalacidpolyester
	Reinforcement:	E- glass bulky roving 10.000 tex
	Reinforcement %:	55 %
	Density:	1,75g/cm ³
Area of application	Optimized as bird net poles in seawater using iso. polyester and texturized roving to make approx. 12 % cross laminated reinforcement.	
Handling	Use gloves when handling the product. When cutting or drilling, use a mask and goggles to avoid inhaling dust containing glass fiber particles, and to prevent skin irritation.	
Storing	No restrictions	

ASSEMBLY

Brackets for fence:

Brackets are usually assembled on every third stanchion, depending on the circumference of the cage and bird net. If in doubt, please contact the net producer.

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Make sure the brackets are placed as far down the stanchions as possible, to minimize the pressure on the fence. Tighten the screws to the point where they break through the fence post. This is to prevent the bracket from twisting. (illustrated below).



Make sure the screw penetrates the cage post

The bracket must be assembled as low as possible

Akvagroup has approved using this procedure on their fish farms. (Analysis report TR-30084-2830-1). Make sure to only use the screws provided by Rempro.

Assembly video on <https://www.youtube.com/watch?v=SkM4QISBYfs>

After assembling the brackets, put the tubes in the bracket. No screws needed.

The 8mm multicolored rope is to extract the net, and the black rope is to pull up the side skirt.

Wedge for Polarcirkel 500 mm farm with stanchions \varnothing 160 mm

When assembling brackets on Polarcirkel farms with round stanchions, we recommend using a wedge to level the post.

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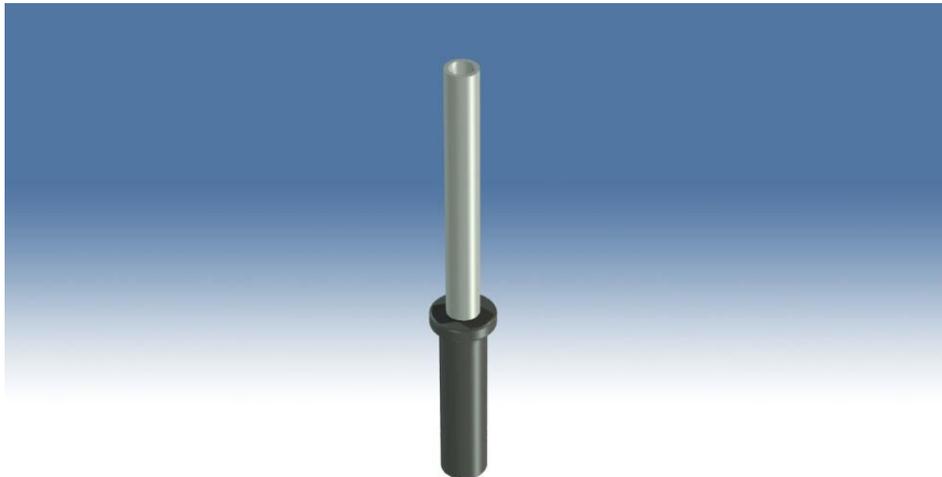


Brackets for chain holes:

Put the bracket right into the chain hole. The pole can now be placed in the hole. No screws needed.

The white silver line rope is to extract the net, and the black rope is to pull up the side skirt.

Please note that there are several chain hole dimensions, please make sure you order the right one. (\varnothing 65, \varnothing 72, \varnothing 76).



Bracket for chain holes

USE AND MAINTENANCE

When extracting the net, the poles will bend. This is normal. The flexibility of the tubes will ensure that the net continues to stay tight when there is considerable movement in the cage.

In cases of extreme load on the poles and the net (ex. extreme weather conditions, wind and icing), reduce the strain on the stanchions by reducing the tension on the ropes until conditions are stabilized.

Farmer should inspect the poles and the brackets on a regular basis, especially after extreme weather conditions, or unforeseen incidents that may have caused damage to the brackets, tubes or net.

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Brackets stanchion

Make sure the brackets are properly fastened to the stanchion, and that the bracket is placed at the bottom of the stanchion.

Brackets for chain holes

Make sure the bracket is properly fastened.

Fence post

Make sure the stanchion is not bending due to the load of the poles and the net. Be extra cautious if there is ice on the net.

Make sure the ropes are intact. To reduce the level of wear and tear on the ropes, the pulley is made of polyurethane with steel reinforcement.



Steel reinforced pulley made of polyurethane

HMS DATASHEET

- 1.1 PRODUCT: REMPRO COMPOSITE PROFILES
- 1.2 PRODUCER: REMPRO AS
LANGEMYRVEIEN 6
6212 LIABYGDA
- 1.3 AREAS OF USE: Construction material for industry
2. COMPOUND
Rempro Composite profiles is considered an inert massive material, and is compounded by matrix and fiber. The material does not consist of ingredients representing any form of health risk as per directive 67/548/EEC.
3. HEALTH RISK:
Rempro composite profiles does not represent any health risk as per directive 1999/45/EC. Dust from machine handling such as cutting, sawing, drilling, may cause irritation of eyes, skin and throat.
4. FIRST AID:
Inhaling:
If inhaling large amounts of dust from sawing, drilling etc. make sure the person get a lot of fresh air. If the symptoms persist, seek medical assistance.
Eyes:
Rinse thoroughly with plenty of water. If the symptoms persist seek medical assistance.
Skin:
Rinse thoroughly with cold water without rubbing, then wash with soap and water. Use lotion.
5. FIRE:
Extinguisher:
If fire, use water, powder, foam or CO₂.
Fire and explosion hazard:
In the event of fire the product will develop black fire consisting of carbon dioxide, carbon monoxide and particles of soot. This is normal, and is considered normal fire- gasses.
6. RANDOM SOLVENTS: Not applicable
7. HANDLING AND STORAGE:
Handling:
Use gloves when handling the products.
When cutting, sawing drilling etc., use a mask and goggles to prevent inhalation/irritation. Provide proper ventilation.
Storage:
No precautions.

8. SAFEGUARD CONTROL:

Precautions:

Make sure the area is properly ventilated. Dust limit: max 10 mg/m³.

Use goggles, mask and gloves.

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9. PHYSICAL AND CHEMICAL DATA:

Physical condition:	Massive
Flashpoint:	Not applicable
Density:	1,6-2,0 Kg/dm ³ .
Charring temperature:	380° C
Autoignition temperature:	480° C

10. TOXICOLOGICAL INFORMATION:

Inhaling: Dust may cause irritation of mucous and lungs.

Eyes: Dust may cause eye- irritation.

Skin: Dust may cause skin irritation, particularly around wrist and neck.

11. ENVIRONMENTAL HAZARD:

Products are soluble in water and very durable. They are not toxic and there is no environmental hazard.

12. DISPOSAL:

The product is considered neutral, and may be disposed at approved waste station.

13. TRANSPORTATION:

Transportation in compliance with national regulations.

14. LAWS AND REGULATIONS:

Product is not classified as dangerous. Directive 1999/45/EC.

15. ADDITIONAL INFORMATION:

The information provided in this Datasheet is based on our current knowledge and EU regulations and National laws.

The directions here given is reliant on correct use of the products as in section 1, and that information given is used in a responsible and correct manner. The work conditions of the user are beyond our control.

It is the user's responsibility to fulfill the criteria's set by national laws and regulations. The information in this datasheet should be perceived as a description of the security demands made for this product. The information is no guarantee for the characteristics of the product.