

Norse Aqua **Nødgripen**




NorseAqua

A Bluegrove Company

User Manual version: 1.0

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1.0 Introduction

This User Guide describes how the ndgrip from Norse Aqua should be installed, inspected, and maintained to get maximum utilization and lifetime.

There are no knowledge requirements for reading and understanding this document. Please contact us if further explanation is needed, we will gladly give more guidance.

1.1 About NorseAqua

NorseAqua was founded in 2014.

The company's vision is to develop innovative solutions for the aquaculture industry with local value creation in focus. If you have any feedback on our products, positive or negative, we want to hear from you, so do not hesitate to contact us.

NorseAqua is 100% owned by Bluegrove - a global aquatech company headquartered in Oslo.

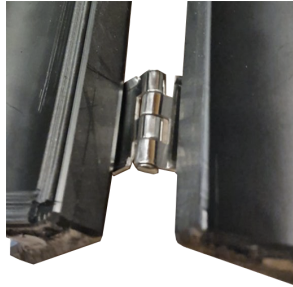
1.2 Contact information

Address	Street and number:	Srfjordveien 5
	Postal code:	7980 Terrk
E-mail		post@norseaqua.no
Sales team lead	Name:	Haakon A. Lund
	Phone.:	975 00 008
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Key Account Manager	Name:	Simon N. Kveinaa
	Phone:	+47 480 48 314
South Norway, UK, Chile	E-mail:	simon@norseaqua.no
Key Account Manager	Name:	Ole A. Kristoffersen
	Phone:	+47 975 03 131
North Norway, Iceland, Faroe Island	E-mail:	ole.kristoffersen@bluegrove.com
Product developer	Name:	Jerrard Willis
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International	E-mail:	jerrard@norseaqua.no

2.0 Operation and maintenance

2.1 Components

Nødgripen is a product meant to reduce feeding downtime due to holes in feed pipes



Hinge mechanism



Latches



Open



Closed

2.2 Identification of product

The logo and serial number is located on the opposite side of the latches on the Nødgrip.

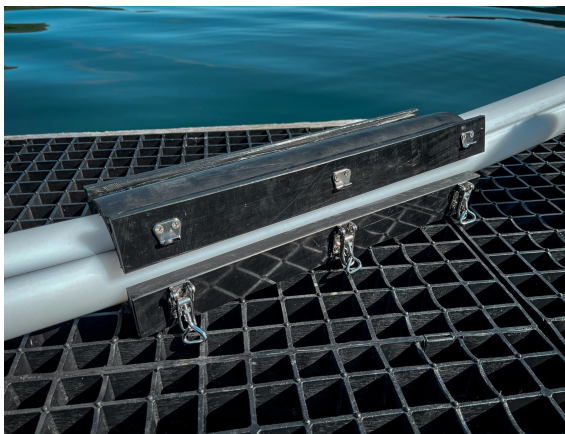
2.3 How to use Nødgripen



1. Locate the hole on the feeding pipe



2. Place the nødgrip around the hole



3. Adjust latches



4. Close the latches

2.4 General maintenance

When	What
Before and after use	Check plastic and latches for damage - if any damage is detected contact Norse Aqua
Winter	Keep the nødgrip easily accessible

2.5 Storage

Store preferably in a dark cool place, keep easily accessible.

3.0 Safety evaluation and risk assessment

3.1 Requirements and restrictions in use

Mount according to the description in this manual.

When weather or timing is right, remove Nødgripen and fix hole in pipe.

3.2 Deviation and handling of errors

See attachments.

3.3 Technical information and limitations

The nødgripen is made out of PE plastic

	Dimensions	Description
Size	260 cm (120 cm in the sea)	Folded
Weight	12,5 kg	

3.4 Requirements for usage

Use of Nødgripen does not require any prior knowledge or training other than what is written in this user manual

3.5 Estimated lifetime

This product has an estimated lifetime of 60 months if recommended maintenance is done

3.6 Limit values

	Value	Comment
Significant wave height (H_s)	5	
Current (m/s)	3	
Wind (m/s)	40	
User weight	150 kg (330lbs)	

These limit values require a proper installation

3.7 How to determine escape risk

Point	How likely is the accident to occur?	Example	How serious will the consequences be if the accident occurs?	Example
5	Extremely likely	Monthly	Extremely serious	Escapes at facility level can occur
4	Very likely	Once a year or more often	Serious	Escapes at cage level can happen in special cases
3	Likely	Once every 5 years	Moderate	Individual escapes can happen
2	Less likely	Once every 10 years or more often	Potential	Individual escapes can happen in extremely special cases
1	Unlikely	Rarer than every 10 years	Insignificant	Insignificant risk

3.8 Risk matrix – Risk of escapes

P o i n t	Danger	Reason for danger	L i k e l i h o o d	P o t e n t i a l d a m a g e	R i s k	How to prevent
1	Chafing on net	The nødgripen is in contact with net while in use	1	2	2	Do NOT mount nødgripen in a way that makes contact with the net, adjust spreader in/out and have a safe distance
2	Production defects, fatigue	Production defects can cause breakage in special cases.	3	2	6	Welding inspection in production and inspection before use
3	Different practices for installation and operation	Increases likelihood of the dangers mentioned above	3	1	3	Attach user manual to any shipped product

4.0 Attachments

4.1 Inspection form

Product/Service	Supplier	Serial nr	Year of purchase

	Daily	Weekly	Monthly	Quarterly
Inspect nødgripen for any damages			X	
Test out the nødgripen and make sure it works as it should				X
Date	Your name			

4.2 Attachment: Deviation report

Copy this form before you complete it. Deliver it according to your deviation reporting routine and/or send it to NorseAqua at post@norseaqua.no

Product/Service	Supplier	Product nr / Serial nr	Year of purchase
Problem experienced			

What has happened? Which problem do you experience because of it?

--

Your proposal for corrective measures

(Reduce the harmful effects when the problem first appears.)

--

Your proposal for preventive measures

(Reduce the chance that it happens again later.)

--

Date

Your name

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