



fluctus
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Feed barges
Feeding systems, sea and land
Software
Spreaders
Feed silos
Ensilage
Service



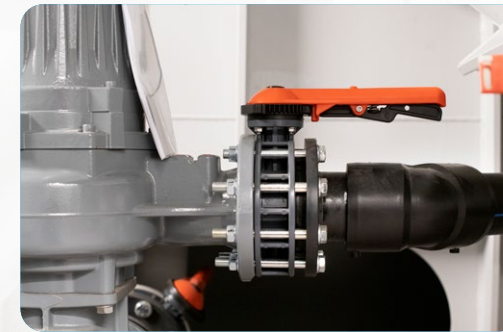
Equipment and service

 - your collaborative partner



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Service as a «religion»

Our customers are ensured that we will do whatever we can to assist when needs arise. Availability, competence and a our service technicians' "can do" mindset shall give the lowest operating costs over time. Our service hotline is free of charge.



Expertise and quality



Fluctus has the people you want to work with when it comes to equipment and service in the fish farming industry. Our employees are highly skilled and have extensive experience within their specialist fields. They have for decades been responsible for the development, production, installation and service of aquaculture products. Service is our "religion", and our customers are assured quality in relation to systems/design, project implementation and subsequent follow-up/service.

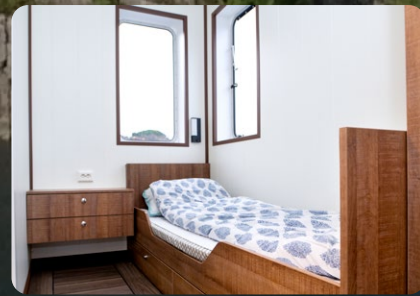
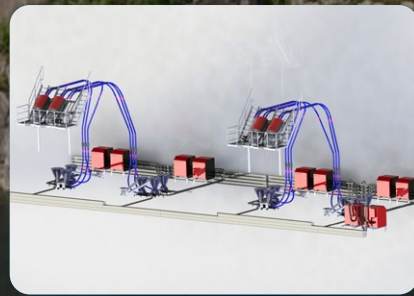
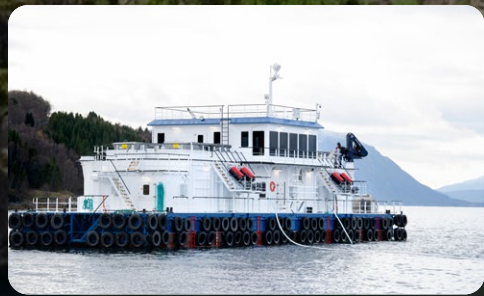
service@fluctus.no

Service / Software Support: +47 56123134



- Customisation
- Employees with an average of more than 15 years' experience
- Collaboration with end users
- Local subcontractors
- Multi-skilled technicians
- Short, market-oriented decision-making processes

Feed barges



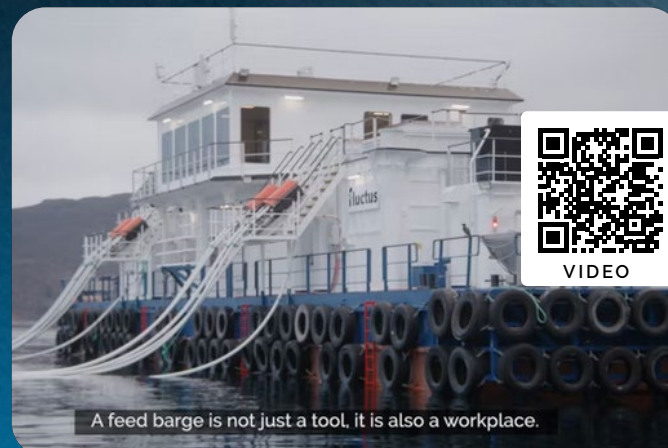
CONTACT: FEED BARGES



Runar Hatlevik
Product Manager
- Barges
E: runar.hatlevik@fluctus.no
T: +47-40091081

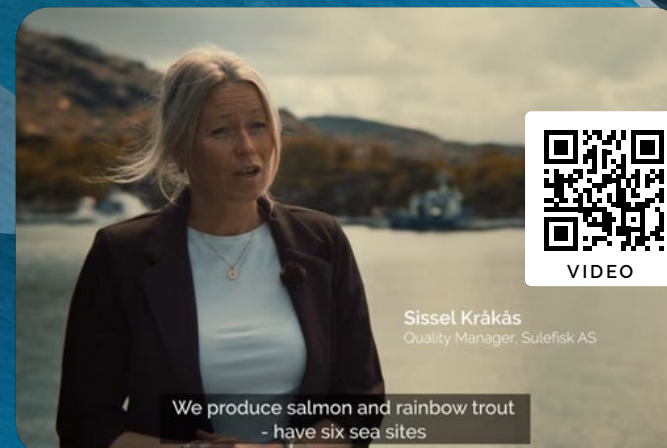


Knut Bjarte Otterlei
Sales
- South/Mid Norway
E: kbo@fluctus.no
T: +47-40099294



VIDEO

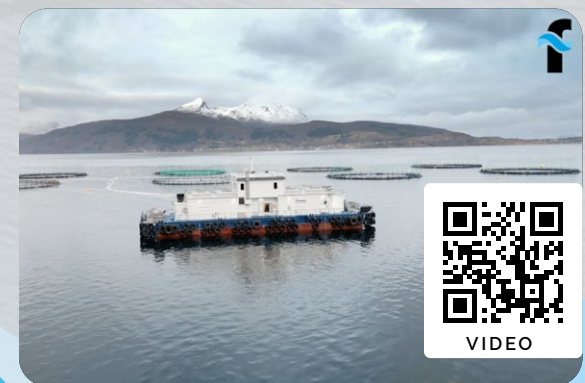
A feed barge is not just a tool, it is also a workplace.



VIDEO

Sissel Kråkås
Quality Manager, Sulefisk AS

We produce salmon and rainbow trout
- have six sea sites



VIDEO

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Feeding systems

- sea and land

Air feeding

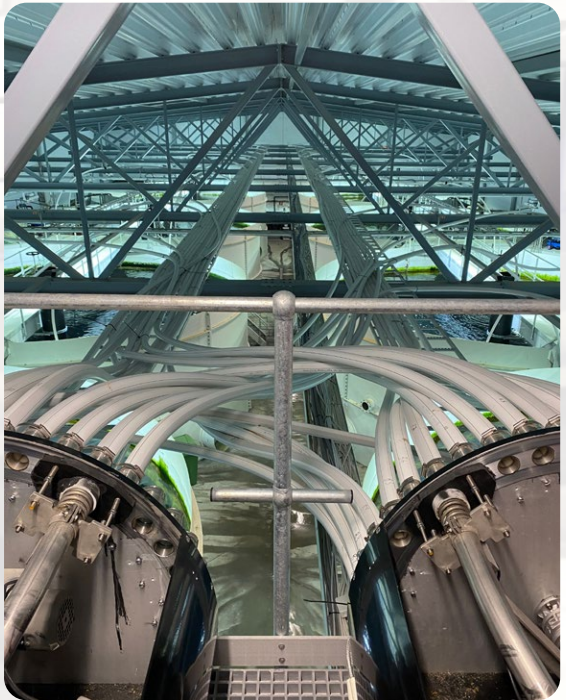


Our employees have experience from developing and supplying feeding solutions since the 1980s. They have delivered a total of more than 1000 feeding projects. We deliver both traditional feeding solutions and water feeding, both at sea and on land.

We want to support local experience and the knowledge built over decades by the marine industry. (avsnitt) The feeding software has been developed from scratch – focusing on stability and a user friendly front end. Read more about the software [here](#).

Feeding systems on land

We supply an increasing number of feeding systems to shorebased facilities. These are mainly farms for juvenile fish and post-smolt, as well as an increasing number of land-based ongrowing-sites - and facilities for species other than salmon and trout.



Specifications	Dimension
Size of feeding pipe outlet	90mm
	75mm
	63mm
	50mm
	20mm

CONTACT: FEEDING SYSTEMS



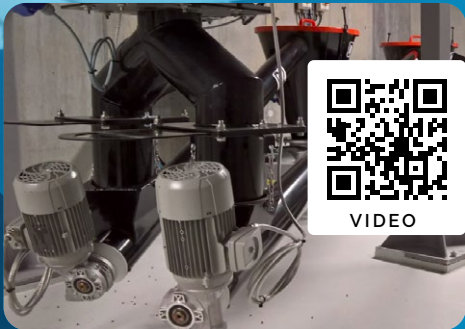
Rolf Hatlevik
Product Manager
E: rolf.hatlevik@fluctus.no
T: +47-40091061



Runar Hatlevik
Sales
E: runar.hatlevik@fluctus.no
T: +47-40091081



Knut Bjarte Otterlei
Sales
- South/Mid Norway
E: kbo@fluctus.no
T: +47-40099294



service@fluctus.no
Service / Software Support: +47 56123134

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Feeding systems

Water feeding



Water feeding is suitable for open or closed cages in the sea - as well as smolt or ongrowing facilities on land.

Waterborne feeding increasingly relevant

In addition to traditional airborne feeding systems, we supply a modern waterborne feeding solution. Among other things, this makes it possible to feed below the lice belt, save electricity and reduce microplastic emissions from the feeding hoses. Using water to transport feed has become increasingly relevant in the light of lice issues, an increased focus on the environment and high energy prices. A good waterborne feeding solution includes the opportunity to feed below the lice belt, save electricity and reduce microplastic discharges from the feed hoses. Furthermore, waterborne feeding reduces noise levels and there is an expectation of less crushed feed and dust.

Long experience

The equipment supplier, Fluctus, has experienced employees who have been involved in the development and delivery of feeding systems since the 1980s - and it has delivered a total of more than 1000 feeding projects. One of those who has been on this journey right from the start is Rolf Hatlevik, project manager at Fluctus. In recent years, he has worked with Raymond Horne and Trond Vassnes to develop Fluctus' waterborne feeding solution.

With good help from the Bergen-based company, Monmic, Fluctus has developed a system that contains a specially developed water sluice and the possibility to attach a new and unique distribution valve.

In water - and on land

The system has been developed for feeding in both marine and shore-based facilities.
- We are experiencing great interest from breeders with both marine and shore-based facilities. On shore-based fish farms, the reduction in noise achieved as a result of waterborne feeding is particularly important, Hatlevik continues.

Fluctus has already delivered several waterborne feeding solutions and has more under construction. It foresees a good level of activity in this segment in the future. However, Hatlevik does not expect airborne feeding systems to be phased out.



CONTACT: FEEDING SYSTEMS



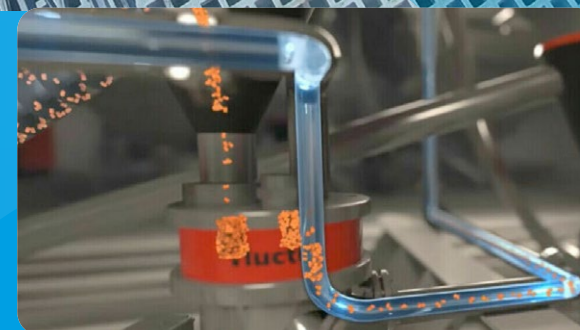
Rolf Hatlevik
Product Manager
E: rolf.hatlevik@fluctus.no
T: +47-40091061



Runar Hatlevik
Sales
E: runar.hatlevik@fluctus.no
T: +47-40091081



Knut Bjarte Otterlei
Sales
- South/Mid Norway
E: kbo@fluctus.no
T: +47-40099294



The water lock and pump system in one compact unit

service@fluctus.no
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Spreaders

Stable spreaders with intake above water level to prevent water entering the pipe. Choose between our motorised eSpreader™ and our classic standard (air) spreader.

Motorised spreader

User-controlled spreading – you decide where in the cage to feed, and the fish get better access to feed - with eSpreader™.

- ✓ 5–10% lower feed conversion ratio (FCR)
- ✓ 10–20% faster growth
- ✓ Approx. 30–40% lower energy consumption on the blowers
- ✓ Often paid back within a single feeding cycle

Customer experience

5–10 %

lower feed conversion ratio (FCR) through better access to feed

10–20 %

faster growth – the fish reach harvest weight sooner

Min. 30 %

less dust and pellet breakage

30–40 %

lower energy consumption on the blowers (approx.)

2x

estimated service life of the feed hoses

Focus

- Easy maintenance
- Acid-proof pipes
- Prevents water penetration
- Bearing without risk of contamination

The results show on the bottom line. Better fish welfare goes hand in hand with better economics – many customers find the investment pays for itself within a single feeding cycle, from smolt to harvest-ready fish.

Stop feed loss before it stops your profitability

Poor feed spreading is one of the biggest hidden costs in fish farming – uneven access to feed, stressed fish, injuries, high FCR, pellet breakage, dust and slower growth. It happens every single day, and most people accept it as “the way it has always been”. The question is whether they should.



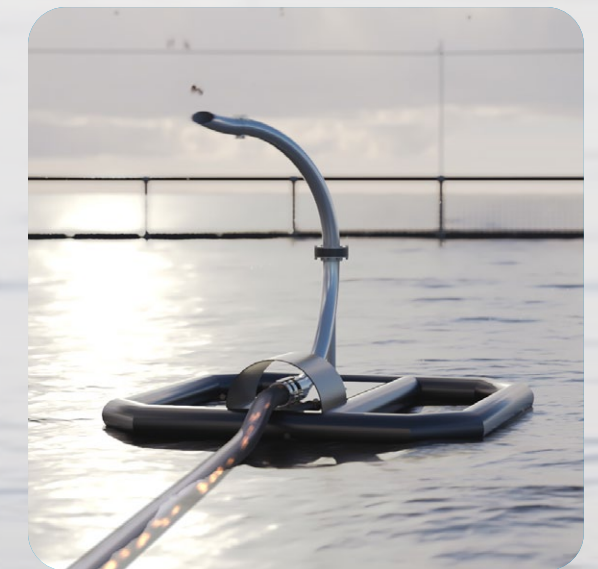
Motorised spreader from Fluctus™

Standard spreader

Our standard (air) spreader is robust and known for its stability and ease of use. All pipes are made of stainless steel, giving a very long service life.

Customers report long bearing life and gentle transport of the feed through the spreader.

- ✓ Intake above the water surface – prevents water entering the hose
- ✓ All pipes in stainless steel
- ✓ Gentle transport of the feed
- ✓ Long bearing life and affordable bearing replacement



Standard spreader from Fluctus™

CONTACT: SPREADERS



Frode Haugen
Project manager
E: frode.haugen@fluctus.no
T: +47-415 34 111



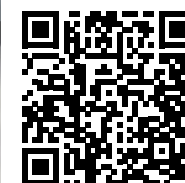
Rolf Hatlevik
Product Manager
E: rolf.hatlevik@fluctus.no
T: +47-40091061



Knut Bjarte Otterlei
Sales
E: kbo@fluctus.no
T: +47-40099294



Trond Vassnes
Service Leader
E: trond.vassnes@fluctus.no
T: +47-40091086



VIDEO

Get an offer

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Service / Software Support: +47 56123134

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Software - Feed 2.0



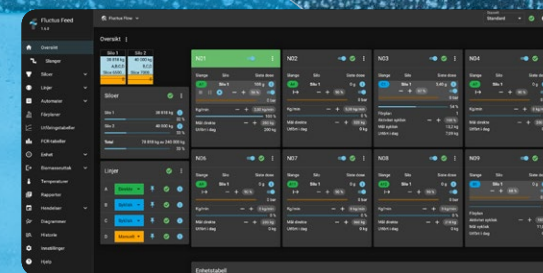
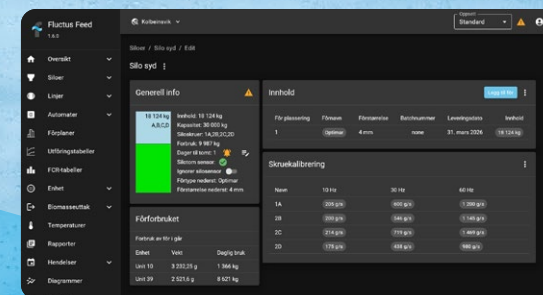
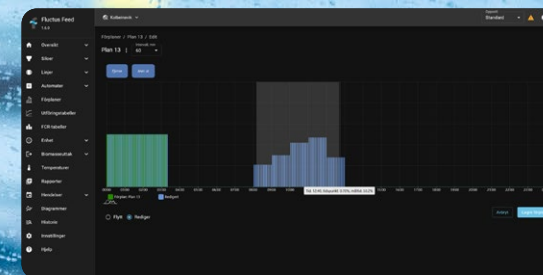
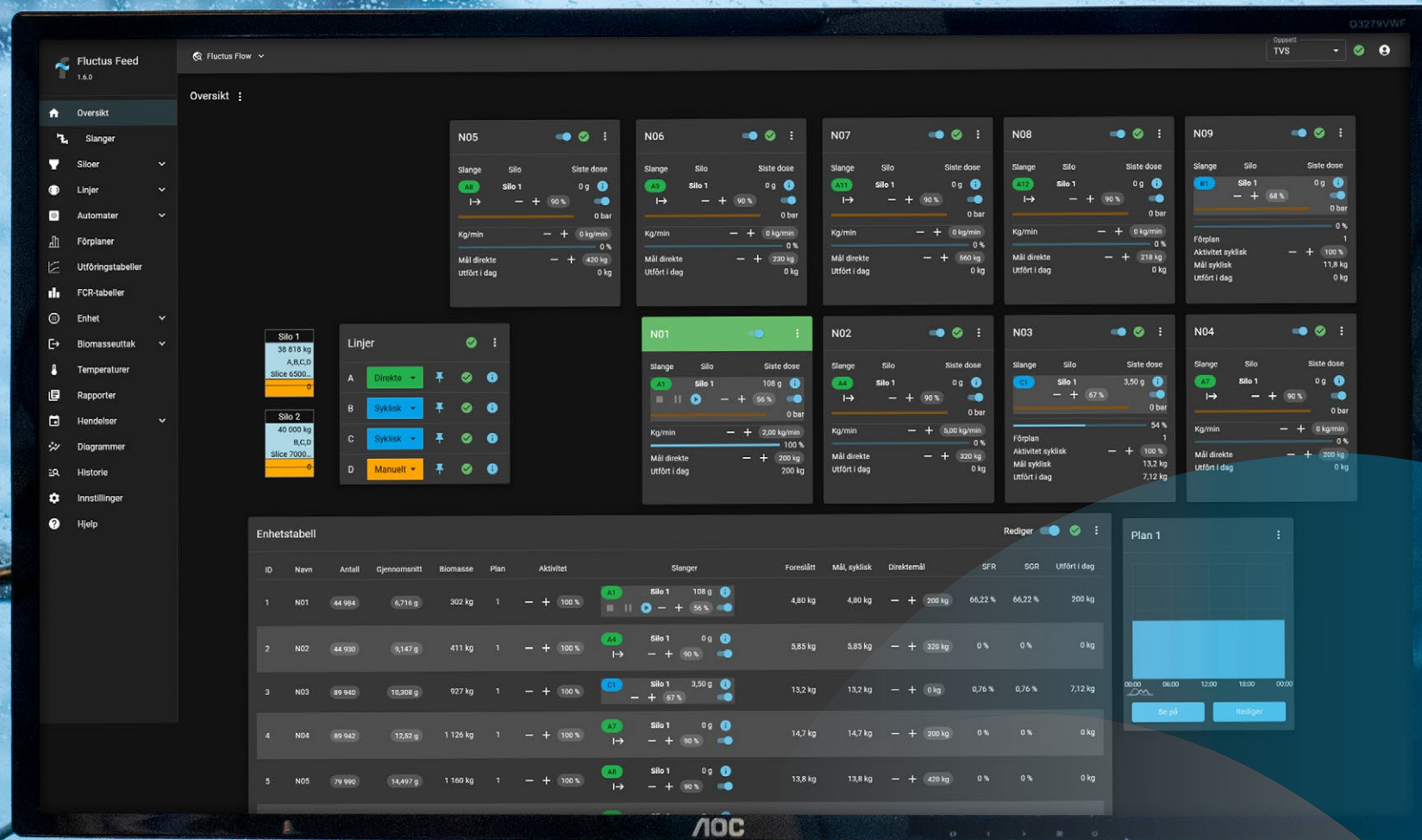
CONTACT: SOFTWARE



Raymond Horne
Service Technician
E: raymond.horne@fluctus.no
T: +47-94791058



Trond Vassnes
Service Leader
E: trond.vassnes@fluctus.no
T: +47-40091086

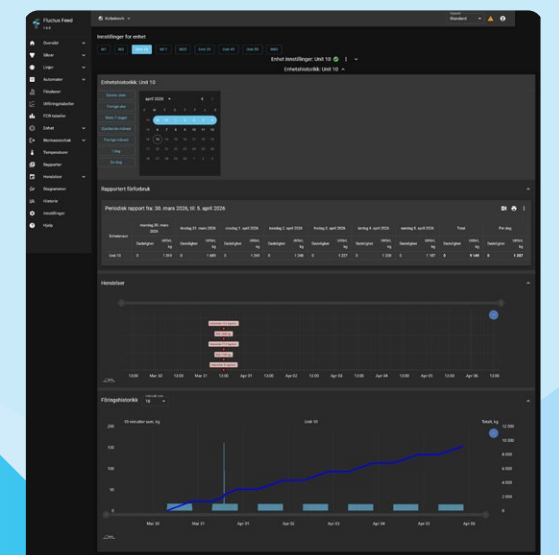


Feed 2.0 is the next generation feeding software from Fluctus. With the stability and robustness you are used to, only better.

- Web-based
- Improved user interface
- Extensive options for customised display
- Further enhanced security
- More efficient API for third parties (e.g. for displaying sensor data in the same view)
- Smart features, such as an overview of feed hoses

Most operations can be carried out directly from the PLS, ensuring feeding continues even if the computer system/ wifi is down. All data is stored on the PC and in the PLS, providing a stable, reliable solution.

We also supply software for silage management and barge control.



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Feed silos

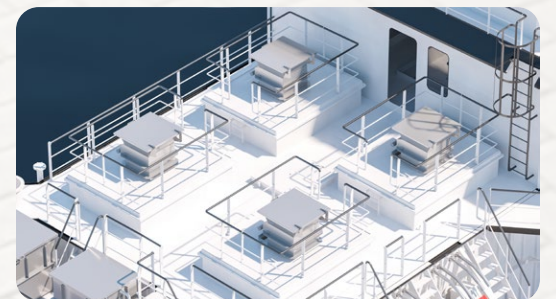
- for juvenile fish and table grade fish, standard and customised models in aluminium



Fluctus builds standard and customised feed silos for juvenile and table grade fish. They are made of aluminium and are extremely robust and durable.



Silo hatches



Fluctus supplies solid, waterproof, durable silo hatches for both onshore facilities and barges. The hatches are mechanical and adapted for unmanned feeding. They are available in tall and short models.

CONTACT: FEED SILOS



Rolf Hatlevik
Product Manager
E: rolf.hatlevik@fluctus.no
T: +47-40091061



Knut Bjarte Otterlei
Sales
E: kbo@fluctus.no
T: +47-40099294



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Ensilage



Fluctus supplies a variety of different ensilage tanks for use on barges or shore-based facilities.

The systems are robust, reliable - and thoroughly tested. The tanks are made of stainless steel (AISI 316).

We offer mobile or fixed solutions - adapted according to the needs of the customer.

They can be found along the entire coast of Norway, both at sea and on shore.



Specifications

Large capacity	Up to 10 tonnes/hour
Different sizes	From 2,5 m3 to 8 m3
Dry pumps	Up to 22kW engine
Sink pumps	Up to 13,5 kW
Sliding or tilting hatches	
The tanks are made of stainless steel (AISI 316)	

CONTACT: ENSILAGE



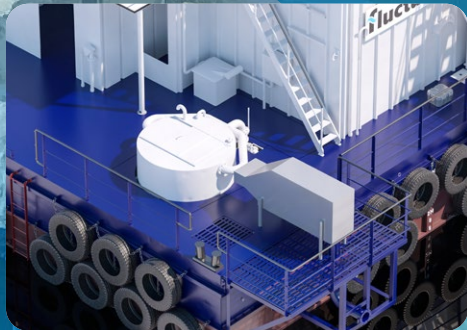
Knut Bjarte Otterlei
Sales
- South/Mid Norway
E: kbo@fluctus.no
T: +47-40099294



Runar Hatlevik
Sales
E: runar.hatlevik@fluctus.no
T: +47-40091081



Alf Helge Møgster
Support/Technical
E: ahm@fluctus.no
T: +47-40091909



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www.fluctus.no

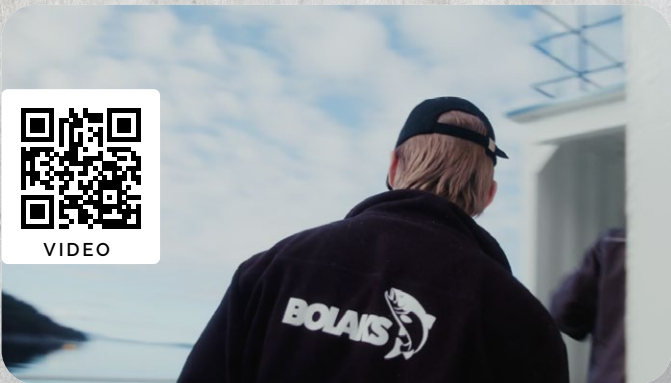
Get to know us better



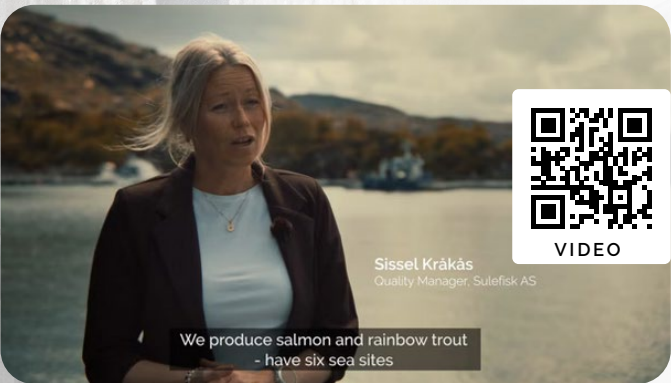
This is Fluctus



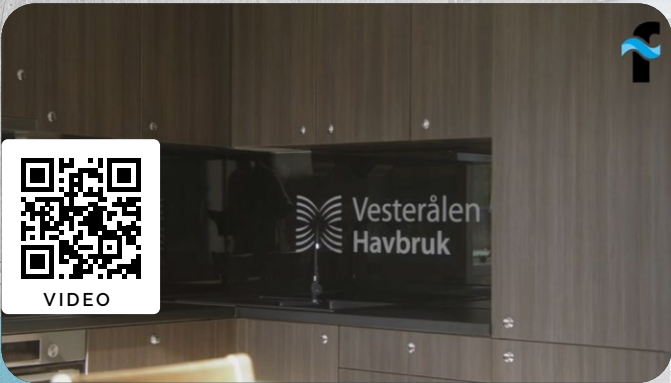
Feedbarges from Fluctus



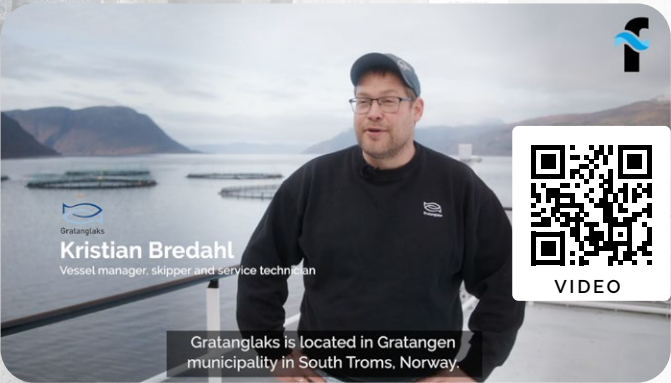
Customer: Bolaks



Customer: Sulefisk



Customer: Vesterålen Havbruk



Customer: Gratanglaks

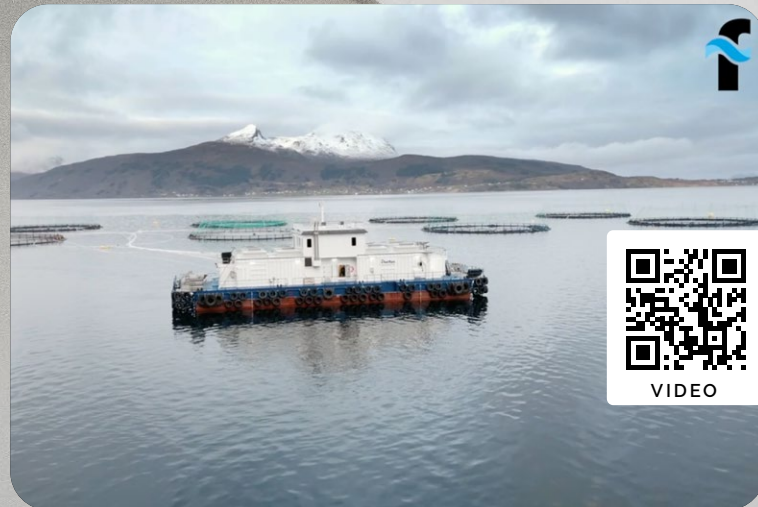


Fluctus on Vimeo



Motorised spreader

Service



Our customers must be sure that we do everything within our power to help when the need arises. Availability, expertise and fantastic service provided by our technicians will give our customers the lowest operating costs over time.



- Availability
- Multi-skilled technicians
- Low turnover of service technicians
- Excellent service
- Free service telephone

service@fluctus.no
Service / Software Support: +47 56123134

The Service Box is your local warehouse of spare parts, customised for your facility. We will replace parts that get used. Save time, money and frustration.



CONTACT: SERVICE



Trond Vassnes
Service Manager
E: trond.vassnes@fluctus.no
T: +47-40091086

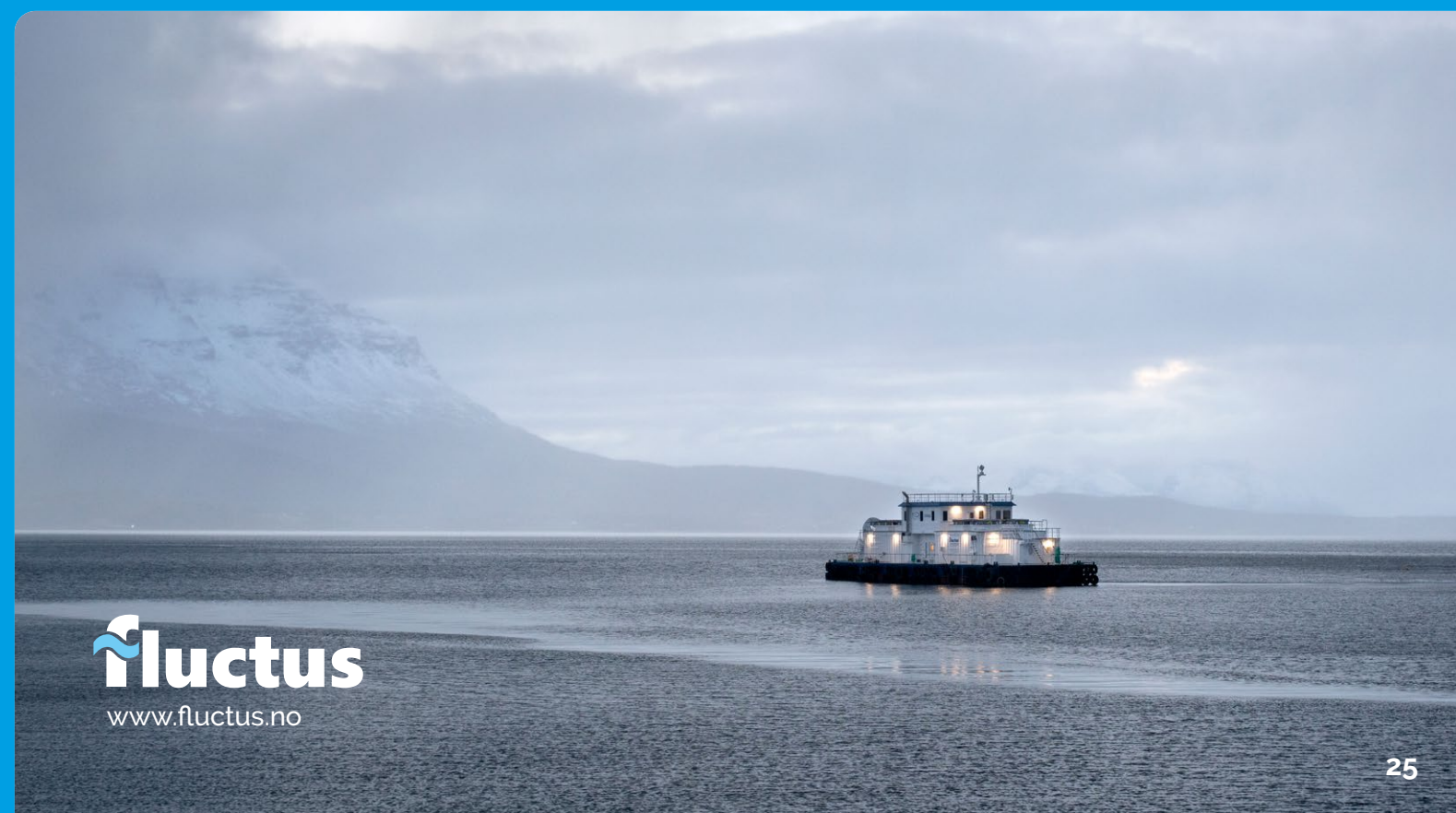
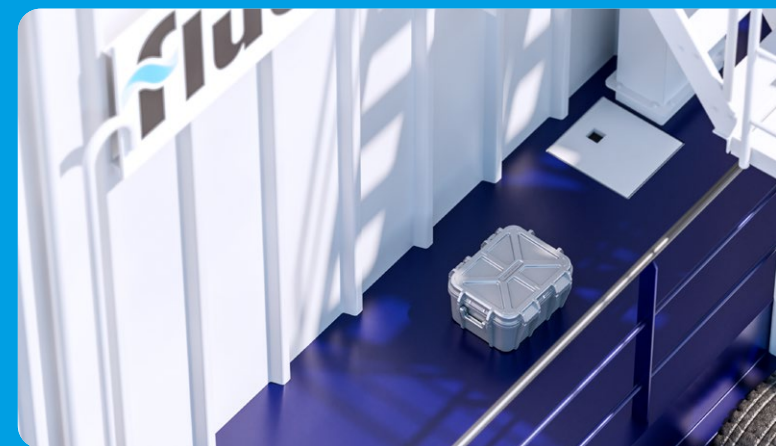
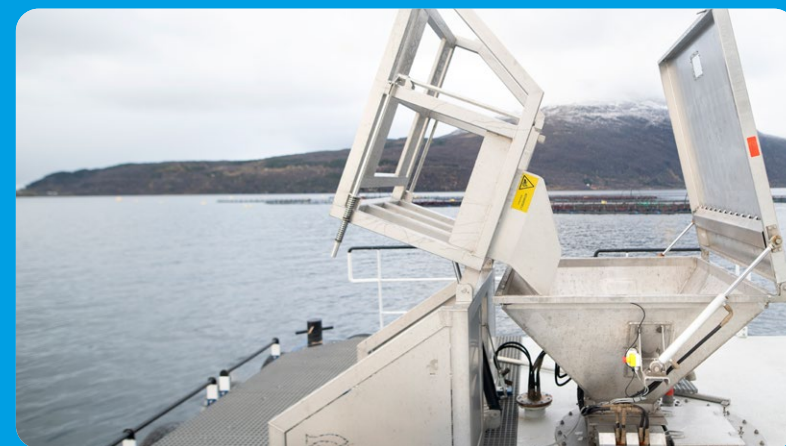
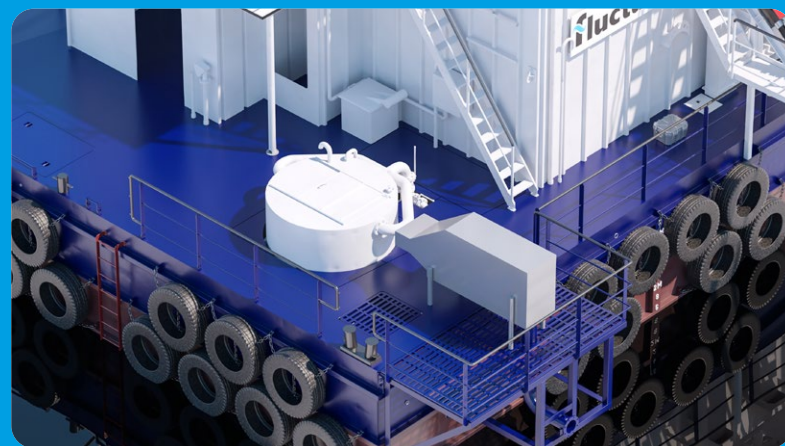


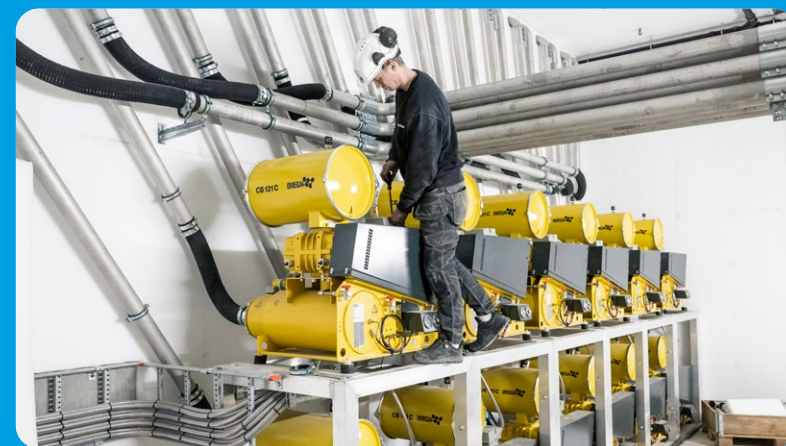
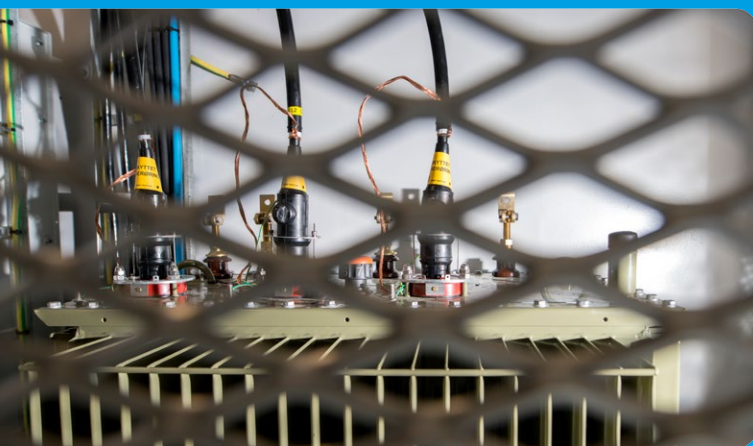
Raymond Horne
Service technician
E: raymond.horne@fluctus.no
T: +47-94791058



Alf Helge Møgster
Electro Support
E: ahm@fluctus.no
T: +47-40091909

fluctus
www.fluctus.no





We are Fluctus

Expertise and quality

A short response time is essential in an industry where operational reliability has enormous financial implications. Our employees have an average of over 15 years of experience. This experience is useful for our customers in the dialogue around solutions and in project implementation.



Raymond Horne
Service technician
M: raymond.horne@fluctus.no
T: +47 94791058



Trond Vassnes
Service manager
M: trond.vassnes@fluctus.no
T: +47 40091086



Nils Håvard Vassnes
Service technician
M: nhv@fluctus.no
T: +47 40091001



Ketil Martinussen
Service technician
M: ketil.martinussen@fluctus.no
T: +47 474 19 624



Kenneth Sele
Service technician
M: ks@fluctus.no
T: +47 91715949



Tommy Blix
Service technician
M: tommy.blix@fluctus.no
T: +47 401 90 220



Åsmund Aasebø
QHSE manager
M: aasmund.aaseboe@fluctus.no
T: +47 413 31 348



Tomas H. Vassnes
Service technician
M: tomas.vassnes@fluctus.no
T: +47 90063991



Aurimas Tamosiunas
Service technician
M: aurimas.tamosiunas@fluctus.no
T: +47 40049862



Vytautas Margevicius
Service technician
M: vytautas.margevicius@fluctus.no
T: +47 40049827



Rolf Hatlevik
Project manager
M: rolf.hatlevik@fluctus.no
T: +47 40091061



Runar Hatlevik
Project manager
M: runar.hatlevik@fluctus.no
T: +47 40091081



Frode Haugen
Project manager
E: frode.haugen@fluctus.no
T: +47 41534111



Mathias Njåstad
Project manager barges
M: mathias.njastad@fluctus.no
T: +47 91824211



Knut Bjarthe Otterlei
Project manager in central Norway
M: kbo@fluctus.no
T: +47 40099294



Alf Helge Møgster
Project manager
M: ahm@fluctus.no
T: +47 40091909



Øystein Bjånesøy
Project manager
M: ob@luctus.no
T: +47 40091064



Harald Lien
CEO / Chairman of the Board
M: harald.lien@fluctus.no
T: +47 45111146



Daniel Espedal
Service technician
M: daniel.espedal@fluctus.no
T: +47 41508437



Kjetil Sækvitne
Project manager
E: kjetil.sakvitne@fluctus.no
T: +47 94871024



Helge Frydenlund
Service technician
E: helge.frydenlund@fluctus.no
T: +47 90015986



Malvinus í Gong
Project manager software
M: malvinus@fluctus.no
T: +298 594033



Etienne Rouxel
Programmer
M: etienne.rouxel@fluctus.no
T: +47 400 91 070



Stian Karlsen
Sales, Northern Norway
M: stian.karlsen@fluctus.no
T: +47 908 33 196



Mats Storebø
Programmer
M: mats.storebo@fluctus.no
T: +47 952 96 085



Aleksei Kuleshov
Programmer
M: ak@fluctus.no



Tore Salthella
Service technician
M: ts@fluctus.no
T: +47 45887872

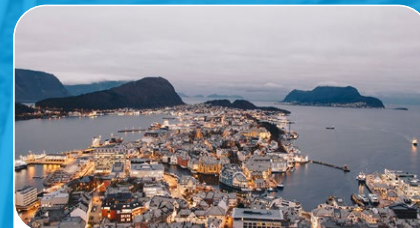
Our branch offices:



Austevoll (1)
Kolbeinsvik 109
5394 Kolbeinsvik
Norway
Email: rolf.hatlevik@fluctus.no
Tel.: +47 40091061



Bergen (1)
Kokstadflaten 21
5257 Kokstad
Norway
Email: runar.hatlevik@fluctus.no
Tel.: +47 40091081



Ålesund - Norway (2)
Email: kbo@fluctus.no
Tel.: +47 40099294



Northern Norway (3)
Email:
service@fluctus.no
Service phone +47 56123134



Faroe Islands (4)
Email: malvinus@fluctus.no
Tel.: +298 594033

We are Fluctus

Agents/partners



Chile ⁽⁶⁾

ITG

Oficina 5, Parque industrial Los Volcanes,
Parcela 4AE (Sector La Laja) Puerto Varas - Chile

Contact: Christian Stange
Phone: +56 9 68344790
Email: cstange@itgchile.com
www.itgchile.com



Faroe Islands ⁽⁵⁾

MP Teknik Spf.

Klaksvikvegur 12
700 Klaksvik - Faroe Islands

Contact: Olivur Petur í Gong
Phone: +298 459089
Email: mpt@mpt.fo
www.mpt.fo





Annerledeslandet | Design: Atgarden | 3D: Nagelid



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www.fluctus.no