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PROTEIN PLANT



**Compact on-site
fishmeal and fish
oil production**



Mobility in a turnkey plug-and-play protein plant

The Hedinn Protein Plant (HPP) is a groundbreaking approach to turning fish offal, guts, trimmings, shrimp waste and whole fish into fish-meal and fish oil.

The Hedinn Protein Plant is a fully transportable turnkey plant for protein production. The HPP is available in three size configurations, with a 24-hour capacity respectively of 7, 25 and 50 tons of raw material. The plant is ready to be transported in standard sized shipping containers. Plant installation is basically a plug and- play operation, requiring a short time for setup. The plant runs on electricity and steam, providing for a clean, efficient and highly adjustable operation.

Key benefits:

- Engineered for maximum energy efficiency.
- Fully automated operation.
- Remote observation of plant status.
- Automatic shutdown in event of failure.
- Service interruption notifications by e-mail and text message.
- Powered by steam and electricity.
- Smallest plant version (HPP-300) optionally powered solely by electricity.
- Pre-assembled and tested before delivery.

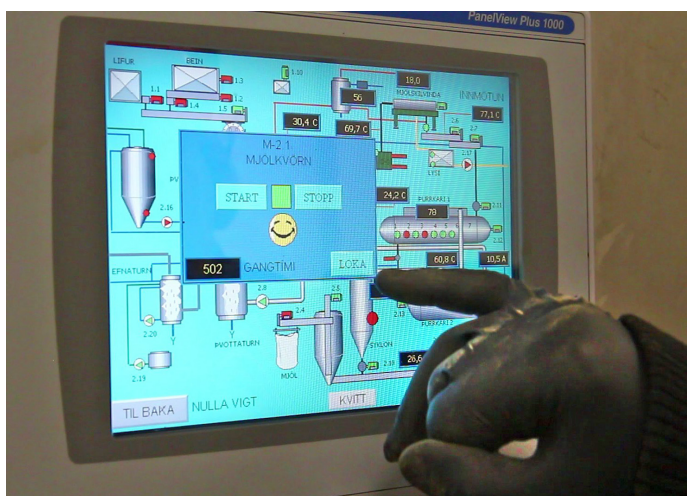


High-grade production with excellent protein composition

The plant's convenient size makes it a sensible option wherever fresh raw material is available (fish farming, fish processing, fishing vessels), even on a small scale, ensuring high-grade production with excellent protein composition.

Containers for fish meal and fish oil are large enough to hold a 24 hour production run.





The Hedinn Protein Plant is engineered for maximum energy efficiency, with full automatic controls and minimum staffing requirements. Operators can at any time remotely access detailed online information about plant status, and will get instant e-mail or text-message notifications if service is interrupted. Plant will automatically shut down in the event of failure.

High-grade protein processing at your doorstep

Available in three different size configurations, The Hedinn Protein Plant is suitable for a range of fisheries, fish farms and co-operatives.

The HPP delivers consistent LT meal output, due to low drying temperatures, resulting in high-grade production with excellent protein composition.

The plant allows for extremely efficient fishmeal and fish oil recovery.

The HPP makes production possible on a much smaller scale than before, making proximity to fresh raw material an added benefit.

The scalability and transportability of the HPP allows for flexibility and growth potential; add or relocate plants as needed.



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Typical production capacity

HPP-300 - 7 ton/24 hour raw material capacity

*Fish meal containing 65-75% protein, hour:	45-60 kg
24-hours	1.1-1.5 t
**Fish oil production, hour:	3-30 kg
24-hours	72-720 kg

*Production capacity meal: Assuming dry matter of 15%-20%.

**Production capacity fish oil: Assuming fat content of 1-10%

Energy consumption

400 kWh/t raw material.

Dimensions

Intake unit

(L x W x H; metres):

6 x 2.3 x 2.3

Processing unit

(L x W x H; metres):

11 x 2.3 x 2.4



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The Hedinn Protein Plant is developed and constructed by Hedinn Mechanical Engineering, Iceland.

Established in 1922, Hedinn is one of Iceland's largest and most dynamic mechanical-engineering companies. Hedinn builds on its long standing relationship with Icelandic fish producers. Hedinn is a key partner in the recent modernization of the majority of Iceland's fishmeal and fish oil processing plants.

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