High Pressure Pump Units for Aquaculture Net Cleaning

At the heart of the unit is the Hammelmann pump, the pump of choice across many industrial sectors for its reliability and low maintenance requirements.

Introduction

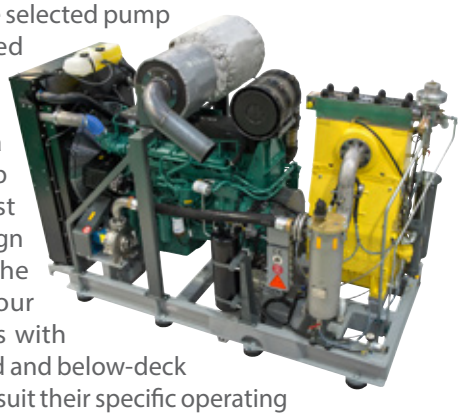
This innovative, high pressure pump unit is for use on-board ship in net cleaning applications. Developed for the aquaculture industry, it incorporates the proven, standard features of our MultiJet range, along with application-specific equipment and control technology.

Reliability

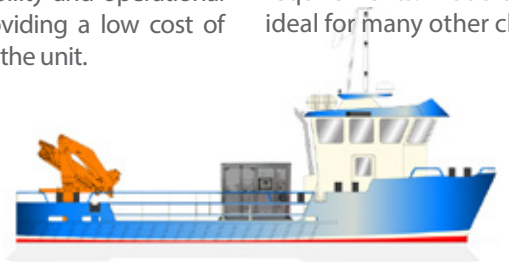
Rugged and remote locations provide excellent natural environments for the growing aquaculture sector. However, this remoteness brings with it added time and cost implications for machinery maintenance. Through sound principles of design and component selection, and the latest electronic control and monitoring capabilities, this pump unit will give many years of reliable service in some of the most inhospitable environments. At the heart of the unit is a Hammelmann vertical reciprocating plunger pump which offers unrivalled reliability and operational time between scheduled maintenance, providing a low cost of ownership throughout the operational life of the unit.

Flexible

The Hammelmann range of pumps covers pressures from 100 bar up to 4,000 bar. Pump conversion kits are available so the pressure and flow of the selected pump can easily be changed between applications. With a variety of optional equipment, a large selection of pump models, and the latest in-house, adaptive design capability we have the flexibility to supply our aquaculture customers with portable, deck-mounted and below-deck pumping equipment to suit their specific operating requirements. In addition to net cleaning, these pump units are ideal for many other cleaning and maintenance duties.



Whether you require a basic pump and motor skid, or a complete system with integral controls, please call to discuss our solutions in more detail or email for more information. +44 (0) 1905 751790
sales@calder.co.uk



Calder supply on-deck and below-deck pump units with pressures up to 4,000 bar.

INNOVATION THROUGH EXPERIENCE

CALDER

Standard Features

Pump - recognized worldwide for its reliability and incorporated into Calder pump packages for over three decades, the Hammelmann pump benefits from its unique high pressure sealing system which allows significantly improved service life and uptime over traditional sealing technologies. The space-saving vertical design generates minimal vibration, and with direct drive from the power unit, the Hammelmann pump offers greatly reduced weight and maintenance requirements.

- **Seawater lift pump** – to deliver seawater directly from the sea to feed the high pressure pump.
- **Suction filter** – an easy-to-clean filter to protect the pump's internal components, ensuring long life and enhanced reliability.
- **Adjustable pressure** – simple manual pressure adjustment within predefined limits to suit the application/cleaning performance requirements.
- **HMI control panel** –robust touchscreen control displaying operating parameters and alarms, and allowing easy operation of the unit. There is a range of control options available – simple start/stop control, flow and pressure setting, system monitoring and shutdown/fault indication, performance monitoring, and data logging . The control panel can be skid mounted, remote, or flush-mounted into an enclosure.
- **System monitoring** – suite of instrumentation to monitor system health and operation, and provide alarm and auto-shutdown functionality.
- **Fuel tank** – this fuel store is built into the base frame and enables uninterrupted operation for a minimum 8-hour shift.
- **Handling** – lifting eyes and forklift truck slots to give flexibility during lifting operations.
- **Material selection/coating** – to protect against the salt-rich environment the components are manufactured from stainless steel, or coated with a high quality, marine specification paint system.

HMI control panel

Adjustable pressure control

Winch control

Winch mounted inside unit

Options

- **Weather enclosure** – a high quality construction to give maximum protection from the elements. Manufactured from stainless steel or carbon steel the enclosure allows the external, recessed mounting of the main control panel and winch. Doors allow access for routine checks, whilst removable panels provide easy maintenance access.
- **Lockable doors** – stainless steel lockable handles for both access and control panel doors.
- **Noise attenuation** – the enclosure can be fitted with noise reducing material to provide a significant reduction in noise output.
- **Winch** – mounted inside the unit, this hydraulically driven, variable speed winch allows the cleaning head to be lowered and raised at a controlled rate. A fuel-saving feature is that the winch is powered from the unit's own engine so there is no need for the vessel's engine to be running. Standard winch controls are mounted to the unit and there is an option for remotely controlled winch operation.

nqa. ISO 9001 ISO 14001 ISO 45001 INTEGRATED MANAGEMENT
UKAS MANAGEMENT SYSTEMS 015
WJTA WaterJet Technology Association
WJA
Achilles JQS empowered by Achilles Qualified
FPAL empowered by Achilles Registered
bsi.
Calder Ltd reserve the right to alter specifications and data to incorporate improvements in design.

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