

Marine

SERO
PumpSystems



Driving Energy Transition

Reliable Fuel Supply with Side Channel Pump Technology

High Pressure | Low Viscosity

Inspiring Technology. Meeting Your Needs.

LPG

NH₃

MeOH

Navigating Change

Shaping the Future of Marine Fuel Solutions

The marine industry is at a turning point. New regulations, alternative fuels and rising sustainability demands are reshaping global shipping faster than ever before. For shipyards, system integrators and fleet operators, one question matters most:

How can you stay competitive in this new era of energy?



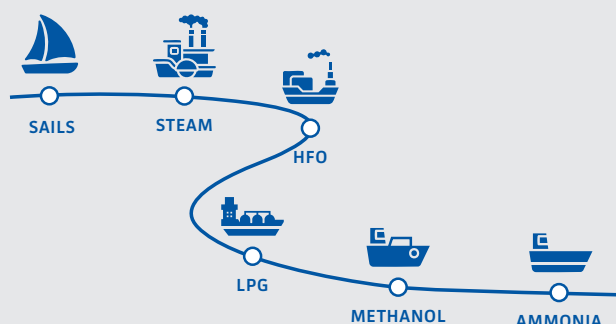
IMO Targets: The Drivers of Change

The International Maritime Organization (IMO) has set clear goals for decarbonization:

-20% GHG emissions by 2030

-70% GHG emissions by 2040

Net-zero emissions by 2050



SERO – Your Partner for Future-Ready Solutions

With decades of engineering expertise, SERO supports shipyards, system builders and operators worldwide in achieving these ambitious goals.

Our pump solutions are designed for maximum system efficiency, modularity and flexibility to operate alternative fuels with low viscosity such as LPG, Methanol or Ammonia.

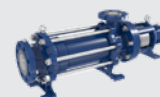
Discover how SERO enables you to navigate tomorrow's fuel challenges with confidence.



LPG



NH₃



MeOH

SHP[®] 110

Proven Benchmark for LPG Dual Fuel Applications

LPG



Launched in 2019, the SHP*marine* High-Pressure Side Channel Pump set a new industry standard for LPG dual fuel propulsion. Today, the SHP110 series powers a majority of LPG carriers worldwide – a proven solution trusted by shipyards, engine manufacturers, and fleet operators.

Industry Benchmark

The SHP110 is the market standard for high pressure LPG fuel supply.

Trusted Worldwide

More than 400 pump units will be in service for HP fuel supply by the end of the decade.

Optimized Performance

Stable fuel flow and pulsation-free pressure under all load conditions.

Technical Highlights

High-pressure LPG supply » Safe, reliable performance

Class approved » Accepted by all major maritime class societies

API610-compliant » Built for endurance under harsh conditions



SHP[®] 220

Advanced NH₃ Dual Fuel Technology for 2-Stroke Engines

NH₃



The SHP220 High-Pressure Side Channel Pump is SERO's consistent continuation in development from LPG to ammonia dual fuel propulsion. Scaled hydraulics and adapted pump bodies makes it purpose-built to handle the unique challenges of NH₃ fuel systems – combining performance, reliability and especially safety.

Enabling NH₃ Propulsion

Matching engine requirements with NH₃ fuel characteristics (energy density & flashpoint).

Safety by Design

Double containment for hydraulics and drive-end ensures maximum operational safety.

DNV Approval in Principle

Verified for compliance with relevant class rules and IMO Interim guidelines (MSC.1/Circ.1687).

Technical Highlights

Built for NH₃ dual fuel » Optimized flow & stable pressure

Double containment » Maximum safety and operational control

DNV-AiP certified » Verified & approved design



SLP® Series

High-Performance Methanol Fuel Supply Solutions

MeOH



The SLP High-Performance Side Channel Pump is SERO's latest innovation and the ideal solution for methanol fuel supply especially on medium-speed 4-stroke engines. Designed for power generation and hybrid-electric propulsion, it delivers unmatched efficiency and flexibility for emerging fuel applications.

Platform-Based Design

Shared hydraulics, components and structures ensure maximum flexibility and cost efficiency.

Future-Proof Performance

Designed for methanol dual fuel and ready for next-generation hybrid applications.

Unmatched Stability

Delivers stable flow and high pressure even on low viscosity fuels.

Technical Highlights

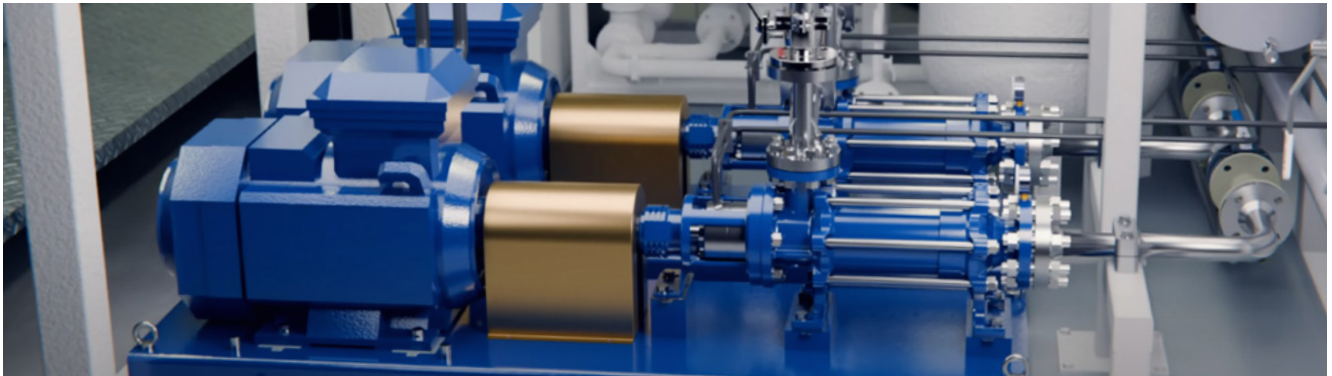
Platform architecture » Standardized quality & easy maintenance

High-pressure capability » Ensures smooth MeOH fuel injection

ANSI & ISO rating » Global industry compliance



Powering the Future of Marine Pump Solutions



Who We Are

For over 130 years, SERO PumpSystems has pioneered the side channel pump technology. As the only company worldwide exclusively dedicated to this field, we combine German engineering precision with innovative spirit to deliver reliable, tailor-made solutions for meeting the needs of the global maritime industry.

Our Vision

The maritime industry is shifting to new, environmentally friendly fuels. At SERO, we enable this transition by providing innovative pump configurations designed for the alternative fuels applications – from conventional fuels to LPG to emerging alternatives.

SERO PumpSystems GmbH
Industriestraße 31
74909 Meckesheim, Germany

seroweb.com
sales@seroweb.de

Discover how SERO helps the maritime industry navigate change with innovative fuel solutions.



Our Technology Leadership

Our pumps are designed to handle the most challenging marine environments, including hazardous, low flashpoint fuels or low viscosity liquids.

Key strengths of SERO's technology:



Low flow / high head capability for maximum flexibility



Pulsation free pressure supply for smooth engine system operation



Extremely low NPSH requirements for reliable performance under extreme conditions

SERO in Numbers

Founded:	1894
Market Presence:	60+ countries
Certifications:	ISO 9001, ATEX
Class releases:	ABS, BV, CCS, ClassNK, DNV, KR, LR