ALFA LAVAL

Capital Markets Day

Marine Service

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Marine Separation & Heat
Transfer Equipment

Uptime and stable operations crucial

THE BACKGROUND

- Sailing ships are extremely exposed in their normal operations
- Alfa Laval’s equipment often critical to the operation of the ship => bottom line impact of the customer

Important to the customer - important to us

ALFA LAVAL SERVICE PROVIDES PEACE OF MIND

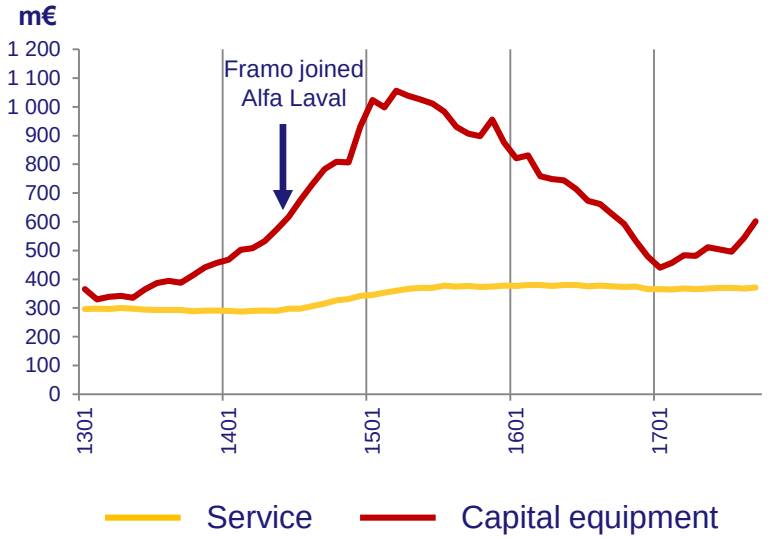
- 100 years in the industry = commitment, trust and reliability with an outstanding global service network
- Professional parts supply and service secure uptime and performance
- Large installed base to serve; on board more than ¾ of all ocean-going vessels

Service stable over business cycles

Limited correlation with shipowner earnings

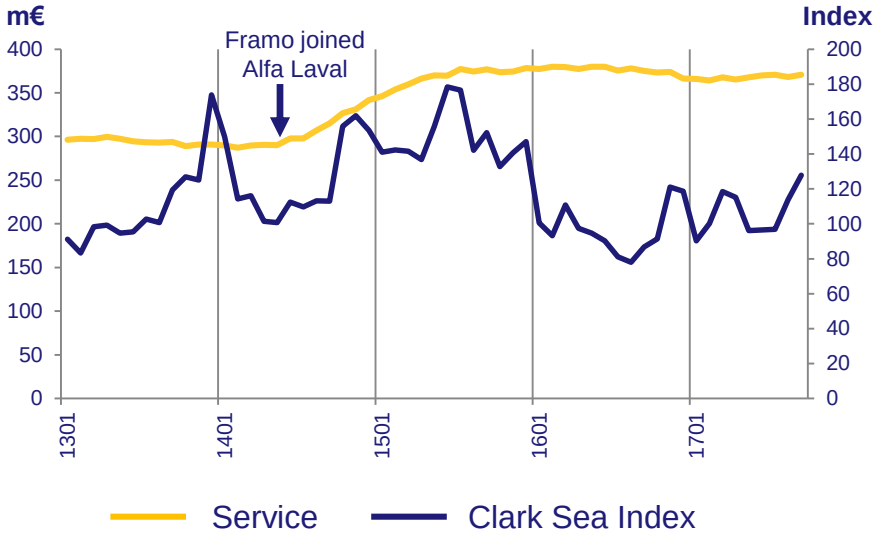
Orders received, service vs capital equipment*

Rolling 12 months average



Service* vs Clark Sea Index**

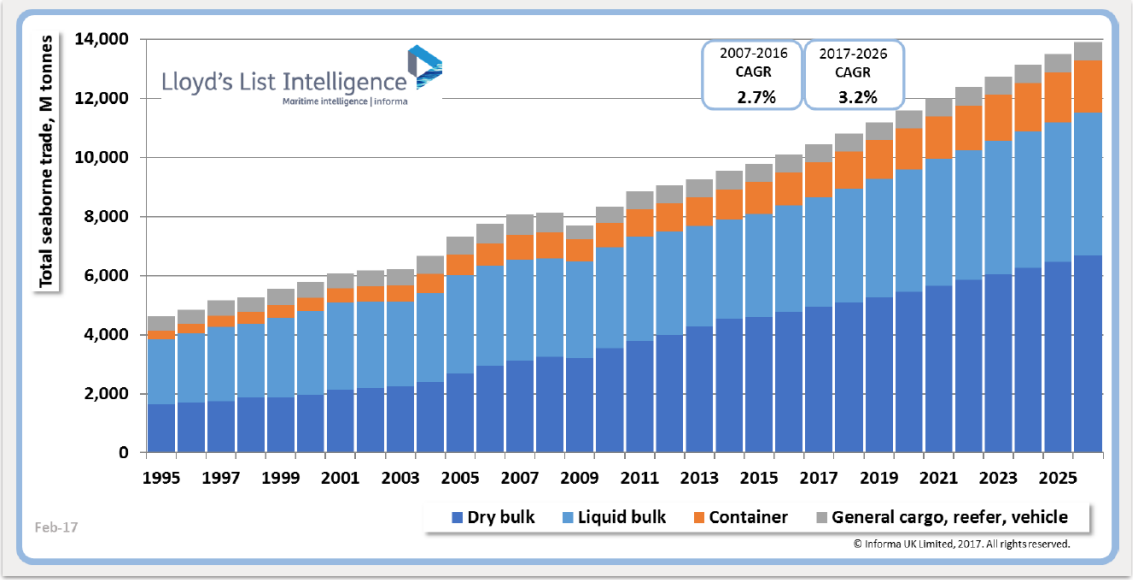
Order intake: Rolling 12 months average



*figures exclude oil & gas offshore

**Source: Clarkson

Macro drivers for Service



SEABORNE TRADE

- Growing ~3% per year

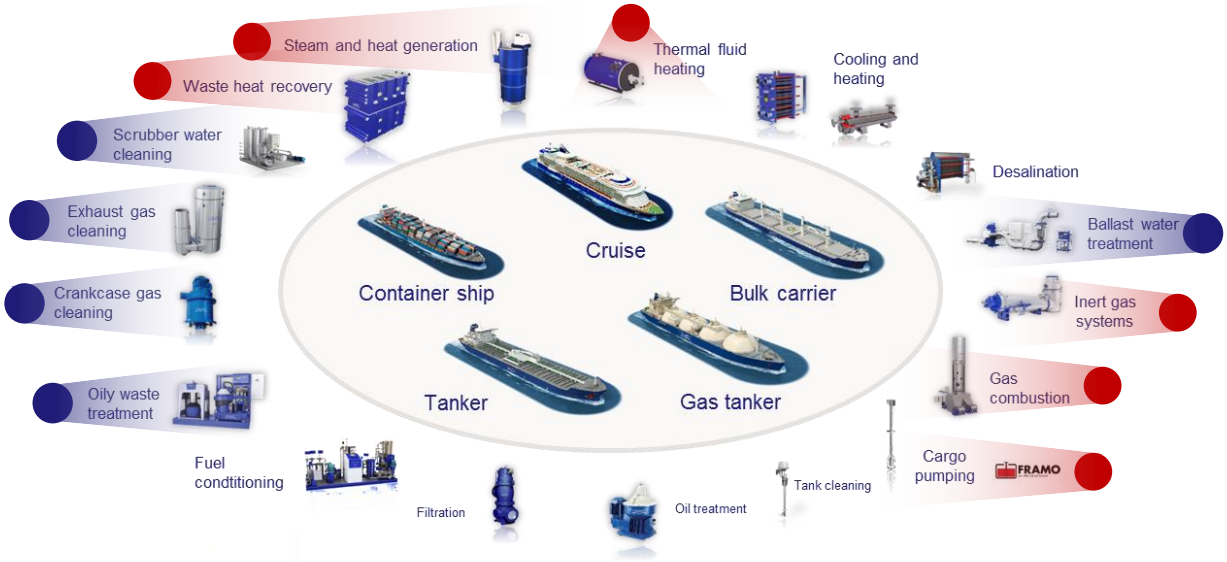
WORLD FLEET DEVELOPMENT

- Last 10 years the fleet has grown with*
  - ~70% in tonnage
  - ~30% in no of vessels

*Source: Clarkson, vessles > 2,000 DWT

Broader portfolio expands Service opportunities

Building a significantly larger installed base



Added by innovation

Added by acquisition

Over the last 10 years, 11 product groups added to the portfolio

- 6 by acquisition
- 5 by innovation

Synergies from serving more products in global network

The benefits of choosing Alfa Laval

Global marine service and sales network

WE PROVIDE AVAILABILITY

- Global 24/7 service network
  - Troubleshooting
  - Field service
  - Parts supply
- Investing in “service hubs” to provide increased service level and availability globally
- Global KAM for Service sales

The benefits of choosing Alfa Laval

Complete service offering for our customers

CUSTOMERS' OPERATIONS IS OUR PRIORITY

- Industry-leading portfolio
  - Parts, repair, field service and value-added services for 17 product groups
- We invest in
  - Line optimization
  - Digitalization/connectivity

Optimizing performance on board, example

ALFA LAVAL FUEL LINE

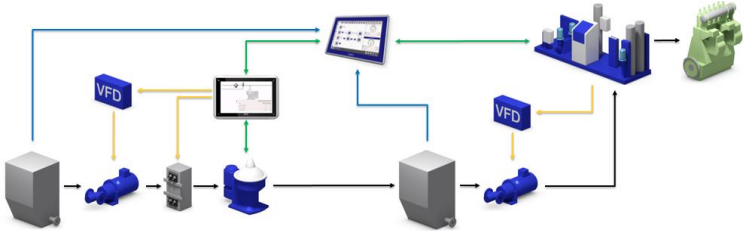
Oil cleaning

Fuel conditioning

Filtration

Oily waste treatment

Pumping



Example: Adaptive fuel line

LINE OPTIMIZATION

- Adaptive fuel line means
  - Saving fuel
  - Protecting the engine from catalytic fines (aluminum & silicon from refineries)
- Offered together with new equipment and as a service upgrading product

Connecting our equipment

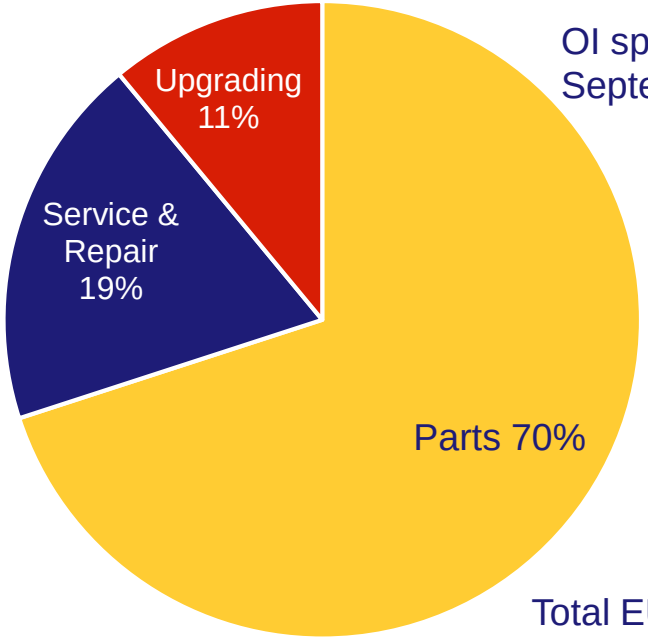
KEEPING AN EYE ON THINGS – CONNECTIVITY

Commercial and pilot installations running in 2017, exploring e.g.:

- Predictive maintenance
- Compliance monitoring
- Remote process optimization

Service order intake by category

Complete service offering for our customers



OI split LTM
September 2017*

Total EUR 371 million*

THE SPLIT

- Parts make up 70% of our service order intake
- Aalborg Industries and Framo have added a more service and repair intensive service business – now ~20%

*figures excludes oil & gas offshore

Summary

- Service is critical to our customers and stable for Alfa Laval over business cycles
- Solid growth drivers and broader portfolio foundation for growth
- Unique global network and a broad offering

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