



## Conversion

Many shipowners and operators are looking to convert existing tonnage, either to handle changing capacities or more specialised operations, or to upgrade due to class requirements. Conversion and modernisation has become a fast growing industry for which TTS has developed a specialist crane conversion unit. Based in Kristiansand, Norway, the unit is staffed by experienced personnel including those from the former Hydralift company. The team has over 40 years of experience in marine technology, with a full practical knowledge of working environments and classification regulations.



## Shipboard crane conversion

TTS specialises in a wide range of crane conversions, often involving structural changes, to offshore support vessels and tankers. Our comprehensive knowledge of classification rules and regulations enables us to provide solutions to suit the exact requirements of your crane. Typical projects include:

### For offshore support vessels

#### Radio remote control

Make it possible to control the crane from a distance.

#### Logging/monitoring

Allows you to monitor the crane's usage and efficiency.

#### Ship to ship/subsea handling

Permitting the crane to be used between supply vessel and other vessel or installation.

#### Structural changes

Alter crane utilisation and usage:

- Jib extension – expanding the reach of the crane
- Heavy lift arrangement – increasing the crane's lifting capacity
- Parking cradle – reducing the wear and tear of the slew ring and pinion
- Slew limit – reducing the slew sector of the crane.

#### Cardan shaft flexible coupling

Upgrade the flexible coupling between the electric motor and the hydraulic pump.



### For tankers

#### Personnel handling

Prepare the crane for personnel handling.

#### Structural changes

Alter crane utilisation and usage:

- Jib extension – expanding the reach of the crane
- Heavy lift arrangement – increasing lifting capacity
- Parking cradle – reducing the wear and tear of the slew bearing and slew gear
- Slew limit – reducing the slew sector of the crane.

#### Safety equipment

Increase safety by upgrading the crane with:

- Hook stop up and down – protecting the equipment with an automatic winch stop
- Rails/access – equipping the jib with rails and a ladder for safety during maintenance
- Cabin – equipping the crane with a cabin or upgrading the existing cabin
- Oil Cooler – preventing the crane from overheating.



## Personnel handling kits



In addition to our tailor-made conversions, TTS offers conversion kits to facilitate the installation of safe and legal personnel handling equipment for use in ship-to-ship transfer.



Our conversions department is dedicated to serving customers with quick response times, deploying engineers that specialise in conversion technologies and project management. This gives our customers competitive advantage in daily operations.

With complete understanding of the environments and conditions in which our equipment is used, our engineers are able to reduce downtime, make the most of weather windows, and ensure that you operate at maximum efficiency at all times.





## Knowledge and experience

TTS has extensive know-how and proven experience in the upgrade of cranes, in particular their steel structure, hydraulics and electrical control systems.

To the benefit of shipyards and shipowners, our skill is in preparing existing equipment for a viable and competitive future. This includes adapting equipment for new uses and for compliance with new rules and regulations.



As guardians of the names of Hydralift, Maritime Hydraulic, Hydralift Marine, MH Hydralift, Norlift as well as TTS, we are fully qualified to carry out full conversions on equipment originally manufactured by any of these brands. TTS owns the documentation, drawings, certificates, calculations and product details for all units delivered.

We also have close relationship with class societies such as LRS, DNV, ABS and RINA.

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