



Trailer lifts

TTS trailer lifts provide the only solution to the problem of transferring trailers between deck levels in areas of RoRo ships where longitudinal space is limited. The trailer lifts are available in a wide variety of configurations to suit individual applications. Examples include lifts for service between two or three deck levels and double-deck lifts with two platform levels, located one above the other, for service between three deck levels. The layout of the installation can be arranged to enable the lift platform to act as a watertight hatch cover when secured in its upper level position.

Several alternative methods of operation of the trailer lift are available, allowing the optimum system to be designed to meet specific requirements. The most usual means of operation is with the lift platform suspended by a four-point double-wire arrangement working in conjunction with a jigger winch. A similar system employing only a two-point double wire operating layout is also available.

The common dimensions of TTS trailer lifts, having a lifting capacity of 50 tonnes SWL, are in the range of 16–18m long and 3.5–4.2m wide. The time taken for a lift to move between deck levels is about one minute. An important factor taken into consideration in the design of the trailer lift is the method of vehicular access on to the platform. Where a lift is to operate upwards from the tank top, it is an easy matter for a recess for the platform to be



provided in the tank top. If the lower position of a lift is on the main RoRo deck, access flaps are required at the platform end(s) to facilitate movement of vehicles between deck and platform. These flaps may either be directly hinged to the platform as an integral part of it, or pivoted to the ship's structure

and raised or lowered 90 deg by hydraulic cylinders.

The safety aspects of trailer lifts are of vital importance to all, especially shipowners and the regulatory authorities. Throughout the design of TTS trailer lifts, safety has been the prime consideration. The necessary safety rails are provided and there are trip devices mounted under the platform and deck coaming at all four sides. When activated, these devices immediately stop the lift operation to prevent a person or object from becoming trapped and squashed between the platform and coaming.

Barriers are provided

on the ship's deck at the longitudinal openings of the lift while automatically-operated protection barriers are installed at the drive-on ends. Emergency stops of 'dead man' type are located at each deck level. Audible alarms and high-visibility rotating lights are automatically operated whenever the trailer lift is moving between decks.

Illustration shows the L-lift with jigger winch and guiding, installed in ship's hull and, right, the 4-point lift with jigger winch incorporated into the steel structured platform

