



## Car decks and ramps

The RoRo shipping industry demands optimum efficiency as the mix of cargo can vary from voyage to voyage or, in the case of ferries, according to season. Maximum operational flexibility for RoRos can be ensured by the installation of TTS car decks that can be quickly deployed or stowed as cargo requirements dictate.

**TTS**



## Car deck ramps

The TTS car deck ramp provides access for cars between a car deck, to which it is hinged, and the deck below. In most cases, this type of ramp is arranged as a single section with flaps to give vehicles a smooth transition between ramp and deck.

The car deck ramp can act as a car deck, when raised fully loaded with cars, to the level of the surrounding car deck panels and it can also be hoisted and stowed below the deck above, giving increased headroom below for the carriage of commercial vehicles.

Operation of a car deck ramp is usually achieved by a wire and sheave arrangement, connected to hydraulic cylinders or a jigger winch or by direct acting cylinders. Alternatively, the ramp can be electrically operated by wire and electric winch.



## Hoistable car decks

TTS car decks are arranged as a number of individually operated panels, giving outstanding flexibility as only the exact number of panels necessary for any specific vehicle mix need be deployed.

TTS offers hoistable car decks with a range of operating systems, top plate coverings, total load and axle load capabilities, and in sizes to suit each particular

installation. Any combination of these variables is possible, providing an ideal system for RoRo vessels.

### Operation

Various hoistable car deck operating systems are available, involving either a hydraulic jigger winch and wire system or alternative operation by wire and electric winches.



Photo: A. Maresca



## Liftable car decks

The operational flexibility of pure car/truck carriers (PCTCs) and some RoRos is greatly enhanced by the installation of TTS liftable car decks. Unlike hoistable car decks, liftable car decks have no integral lifting mechanism but are deployed by a mobile scissor lift.



When not required, the panels are stowed against the deck head above and locked in place by semi-automatic locking devices. This gives maximum headroom on the vehicle deck allowing access for

high and heavy vehicles. When the panels are required for carrying cars, a mobile scissor lift is moved under each panel in turn and lowers it to one, two, or more working positions.

The layout of the liftable car deck panels is arranged to provide optimum flexibility and the panel's structure optimized for the specified vehicle load, taking into account specified clear heights requirements.