



Car deck ramps

The purpose of the TTS car deck ramp is to provide access for cars between the 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 unit can either be integrated into a fixed or hoistable car deck panel, or hinged or connected to the car deck edge. In addition to its ramp functions, as the name implies, the TTS car deck ramp can act as a car deck when raised to the level of the surrounding car deck panels. In common with these, it can be hoisted and stowed below the deck above, giving increased headroom below for the carriage of commercial vehicles.

Operation of the car deck ramp is usually achieved by a wire and sheave arrangement, connected to hydraulic cylinders or a jigger winch. It can also be achieved by direct-acting hydraulic cylinders. The ramp can be raised or lowered even when carrying its full load of cars.

The ramp angle is determined by the type of cars/vans that will use the ramp and is normally from 8–9.5 deg. In order to meet the required slope angle, the maximum vertical distance between deck levels has to be taken into consideration, and the length of the ramp dimensioned in proportion to this. The design of TTS Ships Equipment car deck ramps ensures that they are able to meet these length requirements.

To smooth the passage of cars/vans on and off the ramp, and to prevent vehicles from 'grounding', the ramp ends are provided with knuckles, or are radiused.



TTS car deck ramp features

In its upper, stowed, horizontal position, the ramp fits flush with the surrounding car deck and is hydraulically locked integral with it, or independently hydraulically locked, employing hull support or suspensions.

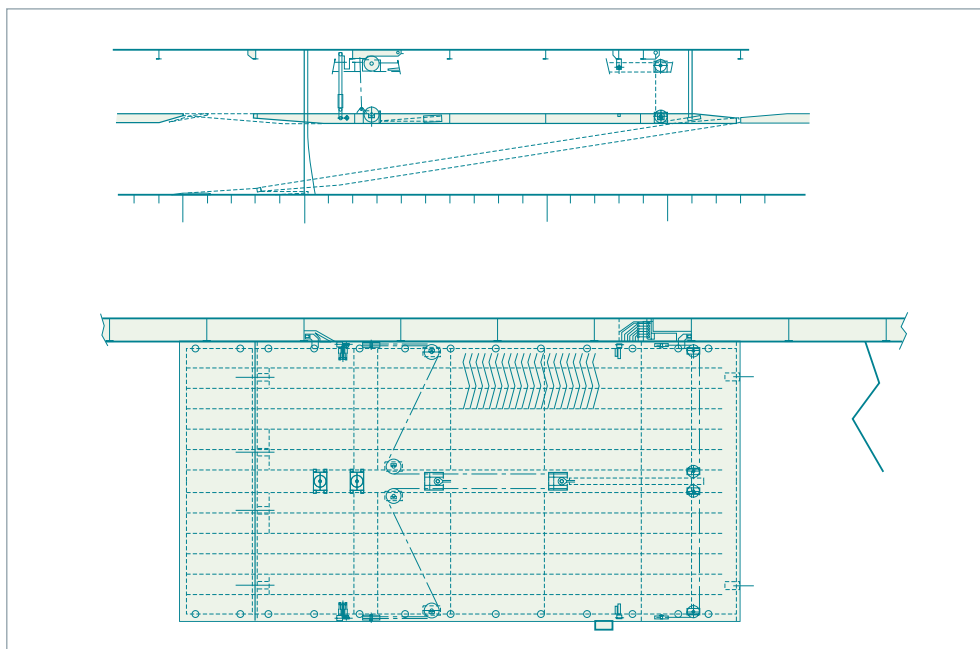
When in its working horizontal

position, the ramp becomes a car deck extension of the adjacent car decks. It has been structurally dimensioned to permit it to perform this role in seagoing conditions.

The ramp can be raised from its ramp position to horizontal car deck position even when

carrying a full load of cars and is normally dimensioned for this operation to be carried out under harbour conditions. For the safe movement of cars and personnel on the ramp it is provided with guides, supports/suspension and an anti-skid surface on the driveway. It also

has kerbs with railings that may be of fixed, foldable or detachable type according to requirements



◀ General arrangement of the car deck ramp, showing raised and lowered positions