



Two-way tiltable ramps

Greater flexibility of vehicular mobility between two different deck levels is provided by TTS tiltable ramps which are provided with flaps and hinge facilities at both ends. With this arrangement, the hinge, at either its forward or aft end, as required, can be secured to the upper of the two decks, allowing the opposite end to be lowered to the other deck. This capability allows loading and unloading to take place in either direction along the ramp according to operational requirements.

TWO-WAY TILTABLE RAMPS

This type of TTS internal ramp is arranged as a single section with flaps and is operated either by wire or direct-acting cylinder. Irrespective of which end it is hinged, the ramp can be raised or lowered while carrying its full load of vehicles.

Examples of normal maximum slope for different types of vehicles are:

- private cars 8–9.5 deg (1:6)
- trailers 7.1 deg (1:8)
- translifters 5.7 deg (1:10), etc.

and therefore the ramp angle must not be greater than that required for the type of vehicle(s) the vessel carries.

In meeting this slope angle requirement, the vertical distance between the two deck levels is taken into consideration when determining the ramp's length. TTS tiltable ramps can be constructed as a single panel of sufficient length to meet these requirements. In addition to the end flaps, the design also

features facilities at the ramp ends to smooth the passage of vehicles on and off the ramp, and to prevent grounding of long vehicles.

When stowed in its raised, horizontal position, the ramp fits flush with the surrounding deck, and is hydraulically locked and cleated. In this mode it acts as a hatch cover and can be watertight and gastight. The end flaps are stowed below the forward and after ends of the deck aperture, allowing watertightness of the ramp to be achieved by means of a sealing bar on the ramp section compressing a gasket located in the coaming. If required the flaps may be detached and stowed in recesses in the deck below. In common with the surrounding deck, the ramp is structurally dimensioned for seagoing conditions.

The ramp features a full outfit of safety equipment including



sensors to indicate when it is locked and cleated. Guides, supports and an anti-skid surface on the driveway, and kerbs with railings provide safe movement of vehicles and personnel on the ramp.

Typical arrangement showing two-way operation of the tiltable ramp

