



## Side rolling hatch covers for OBO vessels

TTS side rolling hatch covers for OBO, ore, oil or similar types of ship are designed to ensure that all requirements of owners and regulatory authorities in respect of the manoeuvring, cleating and tightening of the hatch cover panels are met in full.



These hatch covers are designed to fulfil both the UR 521A rules from the International Association of Classification Societies (IACS), and class requirements of flooded holds considering head pressures from liquid cargo for restricted or unrestricted filling from internal load and sloshing forces for holds in such vessels.

Side rolling hatch covers require that double lip seals are used on OBO and ore/oil ships carrying liquid cargoes. This type of seal has been designed by TTS to suit the specific requirements of this ship type. To prevent excess weight being carried by the seals, the hatch cover panels are supported on adjustable and replaceable pads all around the periphery of the coaming.

The hatch covers are usually operated with a rack and pinion drive on OBO vessels where a rack is located transversely in the centre of the underside of each panel. A hydraulically operated pinion drive is positioned on the outside of the side coaming where it engages in the rack. When two panels are fitted, each has its own rack and pinion drive system, allowing completely independent operation.

Hydraulic cleating is available on request.

Below: Heavy duty cleats for manual operation from deck when high coamings are required. This detail shows the hydraulic wheel lifter, heavy duty cleat and longitudinal sealing joint.

Below: 3-way corner of a double lip seal

