



External top-hinged doors

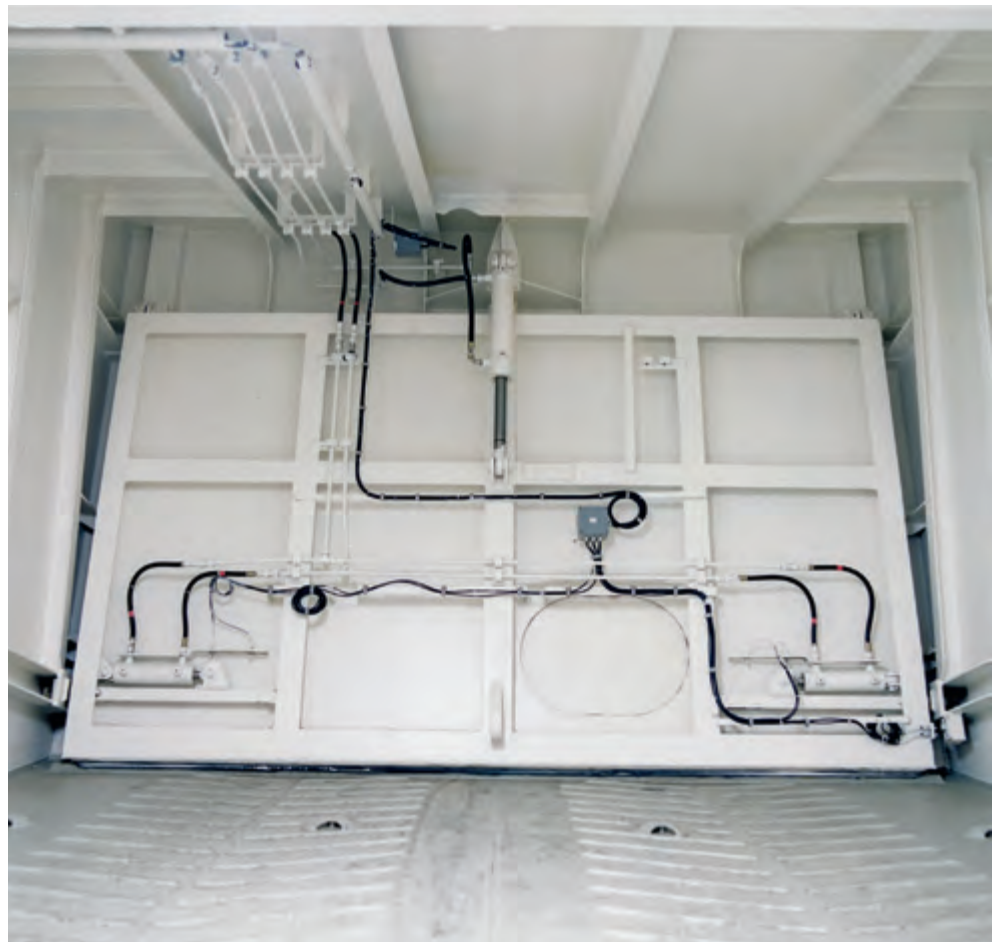
The short turnaround time schedules for today's RoRo ferries has led to an increasing number of vessels loading and unloading their cargoes on two deck levels simultaneously. Employed as a garage door on the upper car deck, the TTS top-hinged door provides an efficient and safe way for vehicles to enter the vessel. Similarly, smaller top-hinged doors are used as passenger doors on ferries and cruise ships.

EXTERNAL TOP-HINGED DOORS

A top-hinged door is used when there is no problem with free height and has the advantage over side-hinged doors in that it does not take up space at the side of the opening. When in its fully open position an external top-hinged door ensures that the full free height is always available under the door.

The top-hinged door of a size suitable for large vehicles is lifted to its open position by two hydraulic cylinders, located one on each side. One smaller door is operated by a single, centrally-placed, hydraulic cylinder. Locking of all sizes of door is ensured by hydraulic wedges mounted on the ship's structure, alternatively, the door can be provided with specially-designed hinges which lift it vertically before it opens enabling auto-cleats to be used for fastening it shut.

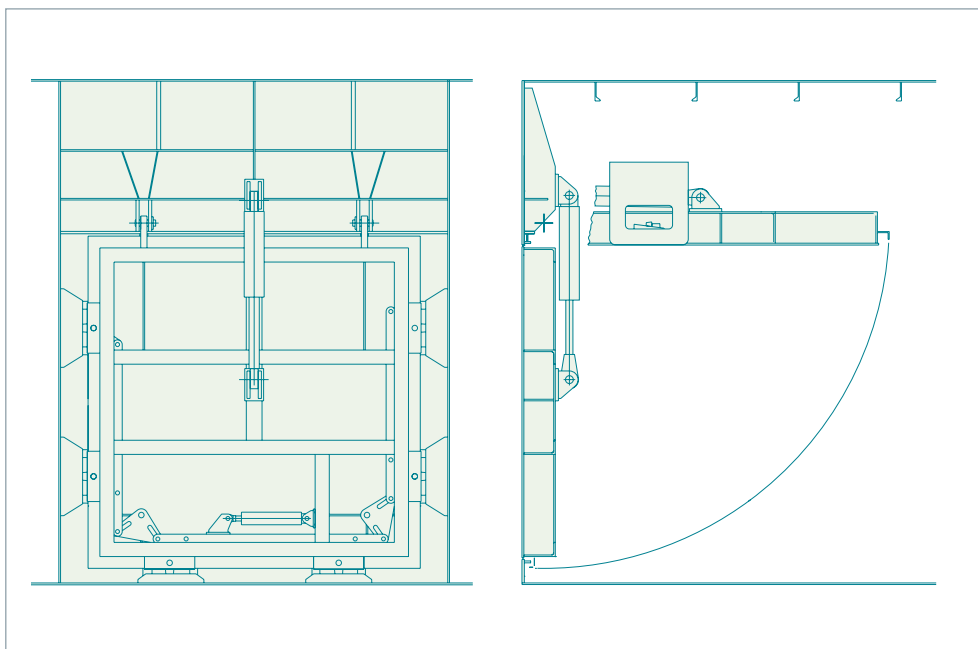
Units can be supplied either in steel or aluminium and each door is designed to fit flush with its surrounding structure irrespective of whether it is flat or curved. Generally small doors, such as passenger doors, are delivered as a complete unit, including the coaming, enabling the shipyard to rapidly and efficiently fit them into place in the hull.



The door is made weathertight by a steel flat bar compressing a rubber seal. If required, the doors can also be supplied with built-in fireproofing and insulation.

Control of a door's movement is carried out from a stand positioned close to it. The

control stand's equipment includes an LED display indicating the locked or unlocked status of the door. If required, a remote display can be installed on the bridge to indicate when the door is fully secured and cleated.



◀ TTS top-hinged doors are fabricated as a single open section