



## Sideloading side swinger system

The most efficient way to load or discharge unitised cargo, pallets and paper rolls is by the shortest possible path – through the ship's side – using a TTS side swinger system. SWLs for one lift range from 4 to 20 tonnes. Key benefits of a sideloading system are: low damage rates, operation independent of tidal variations, small demand on port facilities, and high loading capacity.

The TTS side swinger uses a rotating column for the lift and can be delivered with one, two, or several transport lines. The lift comprises a wheel frame with an L-shaped lever and a rotating platform. The platform's movement is kept parallel to the hull during the side swinging operation by means of a turning gear located on the slewing arm. Typical loading capacity of each lift is 4–20 tonnes SWL. The maximum outreach from the shell is about 2.1m.

The loading operation is controlled and monitored from a control cabin, normally located in the elevator tower. The system can be operated in manual mode, where the operator for each cycle selects the desired deck, or using a semi-automatic operation between quay and a predefined deck by using infrared light status from the forklift trucks.

The system requires only a small cut-out in the decks and is therefore ideal for conversion projects.

### The side door

The most commonly installed side door is the standard TTS single unit upward sliding and tilting door. Alternatively a top-hinged upward folding type can be deployed.

The sliding and tilting side door has been installed in a number of ships since 1987 and this proven and reliable hydraulically operated side door is supplied complete with hydraulic and mechanical equipment for easy and rapid installation. Opening is achieved by sliding the door upwards and then tilting it above the elevator tower to form a rain shelter above the loading area.

