



# Twist lock system

Fully Automatic





# Remote-controlled, fully automatic, retractable twist lock system.

## Rethinking conventional twist lock sea fastening

Conventional manual and semi-automatic twist locks are widely used for sea fastening of containers around the world. However, manual operation of the twist locks can be time-consuming and sometimes it even poses a risk to the crew.

SH Defence's remote-controlled, fully automatic, retractable twist lock system sets a new standard for easy and reliable sea fastening of The Cube™ Multi-Mission Modules as well as standard containers with ISO corner castings. The twist lock system is remote-controlled, eliminating the need for manual operation of twist locks and reducing the risk of human error.

# **Increased safety**

An adapter plate for each twist lock will be welded into the deck structure. Deck penetration is sealed and watertight. When not in use, the individual twist locks are lowered to be flush with the deck, providing a clear deck without any trip hazards.

#### Intuitive control interface

The Automatic Twist Lock System comprises a centralized hydraulic power unit (HPU), a number of hydraulically activated twist locks with individual feedback on all functions. The number of twist locks depends on the size of the mission bay: a 20' mission bay has 8 fully automatic twist locks and a 40' mission bay has 16 fully automatic twist locks. Each twist lock comes with built-in sensors enabling fully automatic remote control and monitoring.

The twist locks can be controlled, from the intuitive control panel, in independent groups of 4 that equals a 20' container footprint.

The control panel has a 9" colour touch display showing the status of each individual twist lock. The control is sequential to ensure that it is, for example, not possible to lock the twist locks before the system confirms that all of the required twist locks have been extended above deck level. The control is provided with a manual override function.

### **Durable and reliable design**

The twist lock housing is of mild steel grade S355 and painted to corrosion class C4. Twist lock piston and cone are made of duplex stainless steel.

The Automatic Twist Lock System is type-approved according to DNV GL ST-0068 on certification of container securing devices and ISO 1161.

Description	Value
Tension max	250 kN
Compression	250 kN
Shear max	210 kN
Deck height minimum	450 mm