

### MODULAR 20/40FT CONTAINER TOP SAFETY – WORK CAGE (CTS-WC)

#### PRODUCT FEATURES

- Designed to safely carry lashing personnel from ground level to container vessel allowing them to work safely from within the confines of the cage.
- The cages are designed to be lifted by crane spreaders at ISO-standard 20ft and 40ft twistlock centres and are thus compatible with almost all types of crane and vessels.
- With the modular lift design, the easily detachable 20ft cage enables individual use of the 20ft or 40ft cages based on operational requirements.
- Equipped with cell guides for faster operation and replacement of the 20ft cage inside the 40ft structure
- The 40ft cage is equipped with the Over-Height (Hi-lift) facility, providing the ability to lift the 40ft cage from lower lifting points thus reducing the resulting height loss by 2.2m. A particularly useful feature for smaller cranes working newer ships such as the Triple-E class with high deck stows.
- Hand-railing is installed on all sides inside the cage as per EU statutory regulations.
- The working area is protected all around with anti-slip floor plates, steel mesh boundaries, kick plates, and even against falling objects
- The cages are installed with mandatory certified secondary attachment slings with screw-pin bow shackles for 'locking' onto the crane spreader in addition to the conventional spreader twistlock attachment for additional personnel safety.
- Each cage includes galvanized personnel safety lines running along the length of the cage for increased occupational safety. Safety lines are utilized for work restraint and positioning via a safety harness with retractable reel, fall arrestor or fixed lanyard, allowing up to 4 lashers per cage unit.
- Two floor cut outs with fold-out access hatches are supplied on the ends of each cage for easy access to container tops from inside the cages.
- Twistlock and tool housing bins are included inside all the cages for storage of tools and equipment by lashers.
- Robust spring-loaded self closing gates are installed in each cage. Safety notice signs on



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aluminium plates are installed on each access gate with SWL and relevant safety information.

- Sturdy and stable construction, designed for rough quayside operating conditions.
- Painting: Commercial abrasive sand-blasting of all metal surfaces to achieve clean bare steel per SA-2.5 (ISO8501-1:1998) and then painted with rust inhibiting primer. Double top coating with a minimum thickness of 325 µm.
- Standard Paint Colour: Yellow RAL 1003, finished with safety patterns and contrast colours for better visibility of corner pockets.
- Every cage is subjected to comprehensive testing to ensure safety in accordance with EU statutory regulations to meet EU safety legislation for man-carrying equipment.
- The cages are designed for fully assembled containerized transport as 40ft S.O.C., direct to most terminals around the world.
- The cages can be stored anywhere on flat ground or inside the optional sill beam brackets available for easy storage<sup>#</sup>
- No modifications required on existing equipment to utilize the cages.



### MODULAR 20/40FT CTS-WC

#### OPTIONS

- OP1 – Wall mounted Stainless steel enclosures for safety harness storage
- OP2 – Sill beam storage brackets for easy storage and retrieval.
- OP3 – Lashing pole storage brackets
- OP4 – EN 795 Class A1 fall-arrest anchor points for harness attachment whilst working outside the cage
- OP5 – 5m/10m/15m fall arrestor blocks

<sup>1</sup> Dependent on crane design and sill beam capacity

<sup>2</sup> SWL: Safe Working Load includes tools, equipment and personnel

### TECHNICAL DATA

#### WEIGHT DETAILS

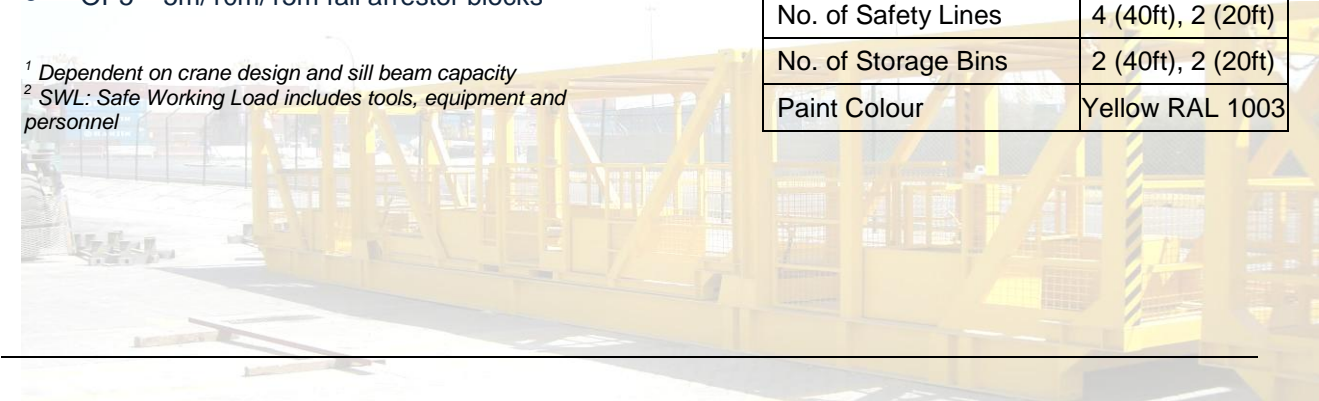
Tare Weight (20ft)	2500 kg
SWL <sup>2</sup> (20ft)	2500 kg
Tare Weight (40ft)	4800 kg
SWL <sup>2</sup> (40ft)	2500 kg
Tare Wt. (20/40ft combined)	7300 kg
SWL <sup>2</sup> (20ft/40ft combined)	5000 kg

#### DIMENSIONAL DETAILS

20ft Overall Length	6058 mm
20ft Overall Height	2195 mm
20ft Overall Width	2438 mm
40ft Overall Length	12192 mm
40ft Overall Height	2585 mm
40ft Overall Width	2438 mm

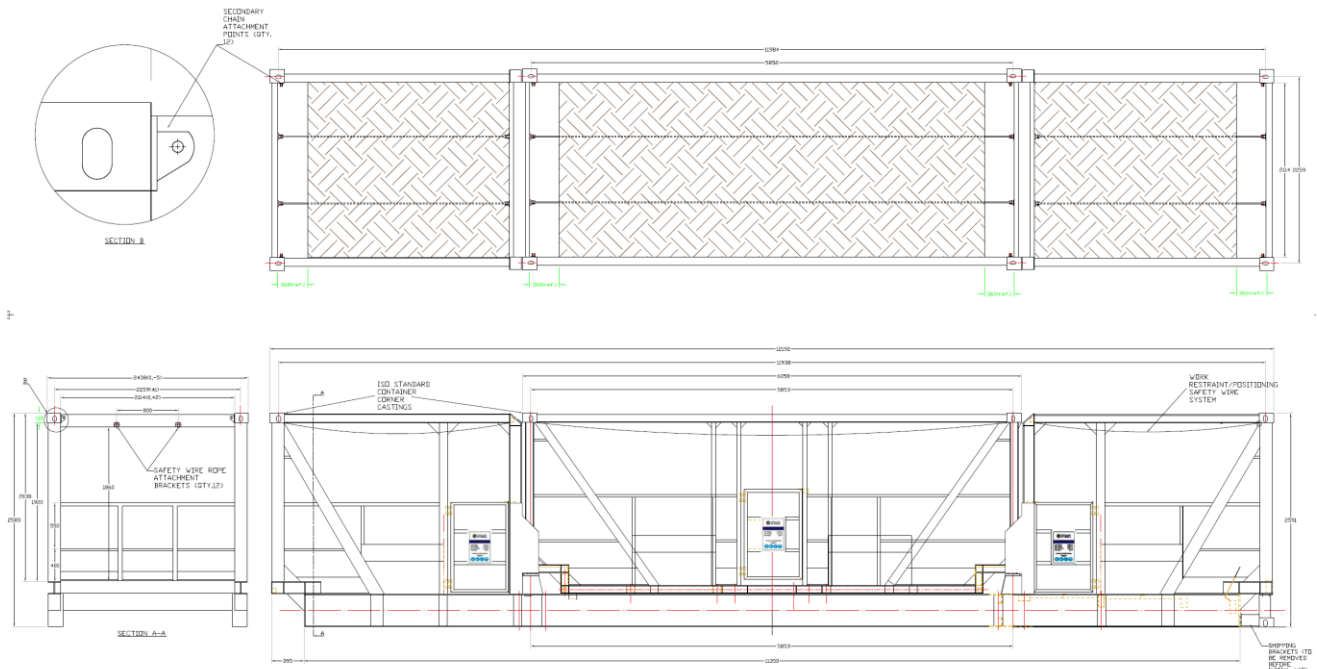
#### DESIGN DETAILS

Max. No. of Passengers	4 (40ft), 4 (20ft)
No. of External Gates	4 (40ft), 2 (20ft)
No. of Internal Gates	2 (40ft/20ft)
Safety Wire Lines	S.S./Galv. Steel
No. of Safety Lines	4 (40ft), 2 (20ft)
No. of Storage Bins	2 (40ft), 2 (20ft)
Paint Colour	Yellow RAL 1003





### PRODUCT DIMENSIONS



### REQUIREMENTS

- The spreader twistlocks should be equipped with mechanical/electrical safety locks, preventing unintentional unlocking of the twistlocks.
- The mother spreader should be equipped with safety lifting lugs on all four corners for secondary chain attachment.
- Suitable means of radio communications must be available between the lashers and crane operator.
- BS 7121-2:2003 – COP for safe use of cranes and lifting equipment
- EC machinery guidelines
- American Welding Society – AWS D1.1 – Latest Edition or approved equivalent.
- FEM 1.001 – Rules for design of hoisting appliances
- ISO 668:1995 - Series 1 Freight Containers- Classification, dimensions and ratings
- ISO 1161:1984 Damd 1 – Series 1 Freight Containers – Corner Fittings
- ISO 1496-1:1996 - Series 1 freight containers- Specification and testing- Part 1: General cargo containers for general purposes

### REGULATIONS

- EN 14502-1: 2005 – Cranes – Equipment for lifting persons, Part 1: Suspended baskets
- BS EN 795:1997 for safety lines
- BS 7883:2005 – COP for design, selection, installation, use and maintenance of anchor devices
- ISO 3874:1997 Damd 4 – Series 1 Freight Containers – Handling and Securing
- ISO8501-1:1998 – Preparation of steel substrates before application of paints
- BS 5493:1977 – Code of Practice for Protective Coating of Iron and Steel Structures Against Corrosion