### 1. Scope

This specification is for Corner-less bathtub type trailer that will be utilised for the handling of ISO standard 20 and 40 foot containers, as well as damaged and out of gauge containers.

The trailer shall be supplied complete and fully assembled in all respects, including standard equipment supplied by the manufacturer and shall comply with the South Africa Occupational Health and Safety Act, Act 85 of 1993/as amended or equivalent international standards such as ISO, DIN.

## 2. Trailer Details

- 2.1. The trailer shall be utilized to transport one 40ft, one or two 20ft ISO Containers or one 20ft tank container. These can be empty or fully laden up to a maximum load as per ISO standard.
- 2.2 The tank container can have a total mass of 38 000 kg and will be placed halfway between the front and back of trailer.
- 2.3 In the case of 20ft ISO or similar containers, the total mass shall be 30 480kg.
- 2.4 The trailer will be subjected to shock impact loads of fully loaded containers being loaded by container handling equipment and must therefore be factored in the design calculation.
- 2.5 Trailer will travel average 2 km per trip at maximum 40 km/h and subjected to intermitted stops. The trailer must be able to negotiate tight corners around container stacks.
- 2.6 The king pin shall be bolted type and must contain both SAE 3,5 inch as well as SAE 2,0 inch invertible pins.
- 2.7 Stoppers to retain the movement of containers in different loading configurations must be fitted to the trailer. When the trailer is empty, the stoppers must be in the open position.
- 2.8 The fixed landing legs must be capable to support the trailer with a full load and while fully laden container is being loaded.



- 2.9 Tyres and rims provided must be interchangeable and must be standard tyres which are readily available in South Africa.
- 2.10 The electrical system on the trailer shall be suitable for operation from a 24V supply from a hauler.
- 2.11 The break system shall enable the trailer to comply with SANS 1447- Part 2, SANS 107 and SANS SV1051, as well as the South African Road Traffic Act.

## 3. Technical Requirements

- 3.1 The trailer should have the following specifications:
- 3.1.1 Gross kingpin mass load = minimum 22 000 kg.
- 3.1.2 Gross rear axle unit mass load = minimum 42 000 kg.
- 3.1.3 Overall payload = minimum 61 000 kg.
- 3.2 The inner width of the trailer i.e., the width whereupon the containers will be placed must be between 2430-2450 mm.
- 3.3 The inner length of the trailer i.e., the length whereupon the containers will be placed must be between 12000-12600 mm.

## 4. Specification

The hauler must, in the minimum, comply to the below specification, as well as any other South African Regulations.

SANS 135	ISO matric bolts, screws and nuts (hexagon and square)
	(Coarse threads, free fit series)
SANS 136	ISO metric precision hexagon-head bolts and screws and
	hexagon nuts (coarse threads medium fit series)
SANS 064	Preparation steel surfaces for coatings
SANS 763	Hot-dip (galvanized) zinc coatings
SANS 1431	Weldable structural steels
SANS 1376 Parts 1, 2, & 4	Lights for motor vehicles



# Transnet Specification: Short-Term Rental Specification for Container Terminal Trailer

SABS 1327:1981 Electrical connectors for towing and towed vehicles

SABS ISO 12098: 1994 7-Pole connectors between towing vehicles and trailers

SANS 1447 – Part 2 Pneumatic braking systems

SANS 1207 & SANS SV 1051 Braking

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