

45' EX Tandem - EX452P5DF00 (Hutch)

Specifications

1. Function

Carries one (1) 40' or one (1) 45' ISO container

Meets all TOFC, AAR, DOT, FMVSS, ISO, ANSI, SAE and TTMA specifications

2. General

Main Beam:

Suspension:

Overall Length: 40'-8 1/2" (Close position. Excluded rear bumper)

45'-8 1/2" (Open position. Excluded rear bumper)

 Overall Width:
 96"

 Fifth Wheel Height:
 48"±1"

 Rear Deck Height:
 48"±1"

Kingpin Location: 30 1/2" (From rear face of front bolster)

Axle Spread: 49

Tandem Location: 54 1/2" (From rear face of rear bolster)

Tare Weight: 7,300 Lbs. (±2%)
Gross Vehicle Weight Rating: 74,500 Lbs.

3. Steel Structure & Components

Material: High strength low alloy steel with yield strength not less than 50,000 psi used for the main rail hot rolled I-beams and

other fabricated parts

Painting: E-coat primer (min. 20μm) and Powder coating topcoat (approx. 60μm). 7 years warranty

Topcoat color: Black RAL9005

Four (4) corner portions on front and rear bolster, touching corner casting of container, shall be painted as Yellow RAL

1018

Metal preparation: Commercial abrasive blast of all metal surfaces to achieve clean bare steel.

12" deep x 4" wide x 19 lbs./ft hot rolled I-section main beams. ASTM-A572 Grade 50 or equivalent

Extension Beam: I-beam. The locking pin released by handle can be auto trip

The bolt-on type stop blocks are set on the front of main beams

Crossmember: 3/16" thick x 3" wide x 9" deep channel with integral gussets on top

GN Beam: 5-1/4" deep x 4" wide I-beam, 1/2" thick flange and 1/4" thick web

1/2" thick x 5" wide reinforcement strap is welded to the bottom flange of each gooseneck rail, starting at end of

pickup plate and continuing behind the landing gear centerline

Upper Coupler: 5/16" thick w/ 2" dia. drain holes, reinforced by 1/4" thick channel type kingpin supports

SAF-Holland, Jost or Wallace Forge 2" AAR certificated kingpin

Option: Use 1/4" thick pick up plate if the kingpin suppliers cannot deliver the kingpins for 5/16" thick pick up plate in

time.

Front Bolster: 8" wide x 10" high, 1/4" thick open section

with 3-1/2" chamfer in full length for gathering container in operation $% \left(1\right) =\left(1\right) \left(1\right) \left($

Front bolster provides full recessing of lights, and air and electrical connectors with 1 1/2" drain hole

One piece corner casting welded on both ends

Option: Use fabricated end cap if cast piece cannot be delivered on time

 $A flat \ triangular \ steel \ reinforcement \ plate \ welded \ on \ each \ side \ between \ the \ main \ rail \ and \ front \ bolster \ to \ reinforce$

the bolster. Reinforcement plate is 1/4" \times 18.5" \times 18.5"

Gladhand and 7-way receptacle will be located in the center of front bolster

Rear Bolster:

8" wide x 3/8" thick top plate with 6-7/8" wide x 8" deep x 1/4" thick "U" channel

The triangular reinforcement plate is to be 1/4" x 18" x 18" with a 1-1/2" turned down lip

vith 1 1/2" drain hole

Rear Bumper: Steel type rear bumper welded to the bottom of the rear bolster and rear of main rails, the vertical beam is "H"

section type with $3/8^{\prime\prime}$ thick steel flange and $1/4^{\prime\prime}$ thick web

The step guard is 3/16" x 4" x 4" square

The bumper step is designed so that the legally mandated reflective tape is mounted in a recessed area, to prevent

reflective tape damage

Front Locking Pin: Schulz FB99HL-A or Buffers equivalent

The front locking pin can be operated expediently. Either engaged or retracted, the handle will be retained at position

by the latching device, insuring the locking pin will not move accidentally

Rear Twist Lock: Schulz F77ANS or Buffers equivalent

Landing Gear: JOST A440 series landing gear, 62,500 lbs. lift capacity with 100 ft-lbs. input torque, 170,000 lbs. maximum static load

rating, 33,000 lbs. side load capacity. 2-speed 17" Travel. Square leg 10" x 10" square low-profile sand shoes and solid

axles

The centerline of the landing gear shall be located 98" from the centerline of king pin.

Landing Gear Support Bracket: 50.7874" mounting distance (distance between mounting surface of landing gear support brackets)

1/4" thick high tensile steel "deep" channel type bracket with two gussets each side Supported by angle brace and C channel brace

Hutch H9700T overslung mechanical suspension with fabricated hangers - Huck Bolts

3/4" spring seat height, 49" axle spread, 36" spring center SAF-Holland, Reyco Model 88 equivalent

Standens 354-00 3 leaf high arch spring or Dayton equivalent

Axles: Meritor 5" round axle with 22,500 Lbs. capacity

71 1/2" track with intermediate long 28 spline cam shaft

Cam forward & Rod over axle orientation

16 1/2" X 7" Q+ Brake



Wheel End: Meritor Axlepak 5 wheel end package

Fumaq ferrous hub, Automated/Frum/CIMC cast drum or equivalent

Meritor branded bearing (Manufactured by C&U) HM212049/HM212011 HM218248/HM218210

National - 5 star gold 380025TX seal

Hub Cap: National - 5 star gold HWGOP-609 vented grease hub cap or Stemco equivalent

Chevron DELO SF Grease or Shell Gadus S5 V460C 00

Rims: Jingu 8.25 x 22.5 steel, hub-pilot disc wheels with 5 hand holes or Accuride equivalent, White Tires: Westlake 11R22.5 tubeless type, 14 ply, CR915 Double Coin, Goodyear, Ling Long equivalent

Brake System: Wabco 2S/1M ABS brake system

Sealco Spring Valve 110800

Haldex 3030 2.5" stroke brake chamber Haldex 5.5" ASA 28 spline 409-20002 Hoosier air tank HT-1249 or Sanborn equivalent

Phillips Gladhand 12-0061 & 12-0081

Tremac Sloan fitting

Electrical: Phillips harness with integrated Phillips 16-724 receptacle

Phillips 3/4" marker light and ABS light with 2" flange Phillips 4" Stop/Turn LED tail lamp with anti-theft plate

Phillips 2.5" Rectangular LED license lamp

MISC: CIE standard marking includes: 1 FHWA decal, 1 Vin Plate,

1 suspension torque decal, 1 BIT decal (if applicable), 1 ABS warning decal, 1 "Do not weld" decal,

2 tare weight decals, 1 ABS decal, 1 Axle maintenance decal, 1 Grease decal, 2 40/45FT decal side, 1 40/45FT decal

front, 2 CIE logo side, 2 CIE logo front and rear, 2 Pioneer logo

Avery conspicuity tape

Phillips 16-802 document holder Gorilla 24" x 30" CIE Logo mud flap

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Revision Log: Rev. 1 - First Release apply to CS45EX2P5DF04/CE45EX2P5DF04

Checked and Approved (CIE):

Zhicheng Feng 03/16/2023

Checked and Approved (Customer):