SPECIFICATIONS FOR ONE NEW 50-TON, TRI-AXLE, HYDRAULIC OPERATED FOLDING TAIL TRAILERS with a 10° LOAD ANGLE (TE100XT)

GENERAL: It is the intent of this specification to describe a 50 ton, tri-axle, hydraulically operated tail trailer. Trailer bid shall be of the manufacturer’s current design and production. Discontinued models or used trailers are not acceptable. All items normally furnished with this type of trailer shall be furnished whether or not they are specifically stated. This specification describes a Trail-EZE Model TE100XT Trailer.

BRAKES: Full air brakes shall be supplied with “S” Cam actuation on all axles to match the axle load rating. An individual power chamber will be provided for each brake. Unit will be equipped with slack adjusters and non-asbestos brake lining. Unit being bid must have spring actuated parking brakes with anti-lock brakes.

CAPACITY: 50 Ton distributed payload @ 60 MPH, 70,000 lbs in 10’ area.

PLATFORM: Length 53’, including tail section (11’ tail w/5’ flip under), 8’ upper deck with 45° slope, 43’ main deck length, 10’ wide and height loaded maximum 37”. A Full I-beam is used at the front of the upper deck.

UNLOADED FIFTH WHEEL HEIGHT: 48” from ground to face of king pin plate.

KING PIN SETTING: 18” from front of trailer to center of king pin.

SWING CLEARANCE: 82” from center of king pin to closest obstruction.

PLATFORM CONSTRUCTION: The main frame will be 3/4” x 6” wide flanges with 3/16” web I-beams, minimum of (22”) deep, MF-80 designed for rated capacity of trailer. Running the entire length of the load bed.

REAR TRUNION: Rear trunion should have a full bolster of 14 1/4” between axles.

CROSS-MEMBERS: The cross-member will be high tensile Jr. I-beams placed on 12” centers covered by 1- 7/16” apitong decking.

DECKING: Shall be furnished with apitong raised 1/4” – 3/8” maximum, laid lengthwise. Shall be attached to each cross-member by torque screws and intermediate locations attached with one (1) torque screws. 1/4” floor plate textured with a diamond pattern is placed over the wheel areas.

OPERATION: At the rear section of the trailer is a 11.5’ long tail, 5’ flip under approach ramp, 10’ wide hinged hydraulic ramp (wren-tail). The tail is operated by two (2) hydraulic cylinders 5”x17” stroke capable of lifting 20,000# centered 4’ from the hinge pin. The transport lock is also operated hydraulically and provides a positive lock when the trailer is traveling. The tail assembly utilizes the cylinder body to help support the load when in transit. The trailer must accomplish the 10° load angle without hydraulic sliding axles. The main tail is covered with apitong and steel, which provides a firm reliable floor and good traction for most equipment. The 5’ flip under approach ramp is covered with 1/4” diamond pattern steel. This section operates hydraulically by a hydraulic cylinder to provide a 16’ loading ramp and, when properly supported on the deck, will also allow dock loading to the main bed. The main tail hinge is constructed of 2 1/16” OD x 19/16” ID steel tubing welded to the main trailer frame. The 1.5” hardened steel pin runs the entire width of the trailer.

TIE DOWNS: D-rings on 2’ centers on outside of flange with 3 D-rings across front of trailer, rub rail where possible on lower bed and tail.

TOOL BOXES: 2 in upper deck –1/4” steel lid and one small box for remote control storage.

PARKING STANDS: Shall be equipped with a hydraulic landing gear that will support the trailer when empty.

SUSPENSION: The suspension is to be Hendrickson/Turner 75,000 lbs air ride with manual dump valve, this allows for approximate 10 degree load angle. (3)-25,000# Axles will be supplied. The axles are to be full 5” round type with heavy duty hubs. The hub bearings to be lubricated by oil captured in the oil seal hubs which provide easy to read oil levels. The 12 1/4” x 7 1/2” brakes are cam type activated by air pressure, with auto slack adjusters and ABS system (2S/1M). Both axles will also have spring parking brakes. The 12 –235/75R x 17.5 radial tires are rated @ 5675# per tire and mounted on 6.75 x 17.5 disc type wheels.

NOTE: Adequate wheel clearance must be maintained so that a fully loaded trailer will not bottom over bumps.

WINCH: Unit will be shipped with a 20,000 lbs hydraulic winch and 2 wireless remote control devices.

ELECTRICAL SYSTEM: All wiring will be sealed system type and mounted in rubber grommets. All wiring shall be 10, 12 and 14.

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gauge to provide adequate voltage to lights. All electrical per DOT/ICC standards. Lights shall be LED type with amber flashers built into the rear of the trailer.

**HYDRAULIC POWER SOURCE:** Set up to operate off PTO system with 2,000 PSI @ 2,000 RPM with 28 GPM (8 to 11 GMP @ idle).

**PAINT:** Entire trailer must be cleaned and sandblasted and prepared to accept a complete coat of primer and paint. All mill scale and welding slag must be removed prior to priming. Trailer shall be painted with 2-part polyurethane paint - Safety Yellow with black letters.

**WELDING:** There will be no sharp corners on the unit that will cause injury. All corners that could cause injury shall be slightly rounded and ground smooth. All welds shall be free of slag inclusions and under cut. Fillet weld sizes shall be equal to the thickness of the least of the joined plates. All material installed shall be new and free of rust. All welding must meet or exceed American Welding Society Standards.

**OTHER:** Build a ladder to access upper deck from driver’s side and have it store in a stake pocket on the upper deck. Also, put 2 stake pockets across rear of trailer for a wide load sign and add flag holders to each corner of the trailer. Placard holders.