



**TSE INTERNATIONAL, INC. / OK CHAMPION
MODEL OK990 CABLE PULLING DUCT RODDER**

Basic Unit Description

Truck mounted on approved chassis (supplied by customer) and to be hydraulically driven through a PTO

Performance

- * 5,000 lbs. rod pulling force @ 200 fpm
- * 10,000 lbs. rod pulling force @ 100 fpm
- * 0 to 150 rpm rotation speed at 12 gpm
- * Capacity for 2,300' of .461" diameter rod

Drive and Hydraulic System

- * Fully hydraulically driven with no chains or other mechanical power transmission devices.
- * 110 US gallon reservoir design is incorporated into tubing of Rodder structural frame to maximize heat dissipation and includes sight level gauge and manual shut off valves.
- * Rod drive head includes four (4) pair of drive rollers directly driven through pinion gears of two hydraulic motors with drive rolls mounted on stationary shafts and four (4) opposing drive rollers mounted on adjustable shafts for wear compensation.
- * Clamping force on the rod through the drive rolls is applied hydraulically with pressure proportional to the pulling or pushing force to eliminate excess wear in light rodding conditions and allow maximum torque during heavy load conditions.
- * Drive rolls rotate on radial and thrust bearings and can be replaced without removing or disassembling the drive head.
- * Two speed shift on the fly drive motors are plumbed directly from lateral valve through hydraulic swivel barrel with steel tubing type fittings and without the use of black pipe or flexible hoses.
- * Includes hydraulic torqueing

Controls

- * All controls and instruments are located in a single control panel at the rear of the machine
- * All instruments included in one rugged electronic HMI
- * CAN based sealed switches for interface to chassis and controls
- * Controls and instrumentation include:
 - Single unitized control handle for controlling all rod movements
 - Throttle control
 - Pressure gauges: lateral and rotation
 - Pressure controls: lateral rod control
 - Electronic rod footage meter, self-canceling
 - Engine tachometer and hour meter
 - E-stop
 - Drive head Preload/Freewheel enable switch
 - Two speed Shift-on-the-Fly selector switch

Rodder Mechanism

- * Main frame is welded steel constructed from rectangular structural steel tubing and is adequately stiffened to reduce deflection under load.
- * Reel cage housing is welded steel constructed from rectangular structural steel tubing. All corners are mitered and gusseted with 1/2" hot rolled steel plate.
- * Housing is mounted on main frame by heavy duty pillow block bearing at two points with welded stop blocks for rigidity.
- * Housing incorporates a fixed guide to direct the rod from the drive head to the rod reel. Guide is spiral type to allow dirt on the rod to escape and is constructed from heavy duty spring steel wire for maximum wear resistance.
- * Guide includes an adjustable roller to reduce stress on the rod. The roller can be adjusted by a mechanic to guide the rod into the reel or to assist re-threading the rod in the event of breakage in the reel.
- * Rod reel is constructed of heavy duty hot rolled round stock with diagonally braced spokes. Reel is approximately 74" diameter to prevent deformation from occurring in the .461" duct rod.
- * A flat band is incorporated around the circumference of the rod reel to reinforce the spokes and add support the rod while also facilitating ease of rod installation.
- * Flange bearings are mounted with wedge spacers to align bearings with angle of the reel.
- * A retaining ring fixed to the reel cage housing insures safe containment of the rod in the reel.

Shroud and Other Features

- * Includes 1800' of .461" Timberland factory tested and inspected high performance, oil tempered, spring steel continuous rod which is custom manufactured to TSE specifications.
- * Entire rodder assembly is enclosed with a metal shroud which is removable in sections for ease of maintenance and with screened access openings on both sides of the reel cage.
- * Amber beacons mounted with HD branch guards
- * Rod oiler and wiper
- * Integrated support frame for optional 3500 lb. Crane

Truck Bed and Mounting

- * Heavy duty truck body with integrated tool storage and compartments
- * 12 gauge galvanealed steel construction
- * Treadplate construction for horizontal surfaces in storage and work areas
- * Spray on bedliner on walkways and storage trays
- * Integrated wheel chock holders with (4) rubber chocks
- * (6) Flush mount "d" rings for load securement
- * Slide out access step at right rear
- * Integrated mounting for body and rodder
- * DOT approved LED lighting
- * (2) mudflaps at rear axle
- * SAE side mount PTO with direct mount pump when space allows - (relocation of chassis components or remote mount pump may be additional charge)
- * Remote engine throttle integrated in chassis electronic control
- * Includes installation of above items plus hydraulic hook up.

Accessories

- * Hand tools for rod cutting and pulling eye installation
- * Handline
- * Drive head adjustment feeler gauge

Options Included

Auxiliary Tool Circuit

- * Includes hose reel with 40' x 1/2" twin hydraulic hose
- * Quick connect dripless hose couplers
- * 12GPM – 2000PSI

PR124: Electric / Hydraulic Crane for Set-up

- * The crane has a 3500 lb. capacity at a 12' radius.
- * It is able to lower and support roller quadrants in manhole during operation.
- * Ideal for handling guide sets.
- * Includes mounting, sub-frame and full function wireless control

CP66015: 4" Aluminum Guide Set

- * Includes various length straight aluminum guides, roller quadrants, duct adapters and rod tools needed to place up to 3-1/2" diameter underground cable in 3-4" conduit.

PR32: LED Flood light

- * Adjustable bases for aiming
- * On/Off switch at controls panels

1500w 12v/120v Inverter

- * Mounted in underbody compartment closest to vehicle batteries
- * Two (2) 120v GFI outlets on inverter
- * One (10 rear duplex outlet at operator station

15 Ton Hitch Package

- * Spring loaded and swiveling pintle hitch
- * Relocated chassis trailer connections to rear
- * D-Rings and cruciform safety chain connections
- * (Hitch plate and sub-frame with bracing standard on OK9900

LED Arrow Board with Shroud Mount

- * Able 2 "Sho-Me" Model 02.6052 10 light arrow board
- * Custom fabricated bracket to position arrow board on rodder shroud
- * Directional control panel located on dash in cab

Chassis

2022 International MV607 4x2

Wheelbase: 211.00, CA: 143.90

Cummins L9 300, 300HP @ 2200 RPM, 860 lb-ft Torque @ 1200 RPM

Allison 3500 RDS Automatic

12,000-lb Capacity front axle, 21,000-lb Capacity rear axle

Driver Control Locking Differential