



Leo Tide

DECEMBER 1975

SPECIFICATION

Model 72-DAW-250

Double-Drum Waterfall Towing/Anchor Handling Winch

DESCRIPTION-

Diesel Driven Double-Drum Waterfall Winch coupled to a 3-Stage Torque Converter/Reversing Power Shift Transmission Combination giving 300,000 lb. line pull.

POWER TRAIN-

G.M.12V-71-N65 Diesel Engine with oil/fuel filters, oil/temperature guages, 5-Sheave, A-Section Pulley, coupled to a Twin Disc 3-Stage Torque Converter, Model CF 11,500 with MS390 blading and Twin Disc reversing power shift transmission, Model 2800 Combination.

COOLING-

ENGINE

Self-Contained Heavy-Duty water to air radiator

3-STAGE TORQUE CONVERTER

*OPTIONAL*  
Self-contained heavy-duty Young fan-cooled oil to air radiator. Fan is driven by winch engine cam driven hydraulic pump/motor combination.

REVERSING TRANSMISSION

Engine oil to water heat exchanger  
Transmission oil circulated by winch engine cam driven pump.

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Cont'd

**SMATCO**

TBW INDUSTRIES  
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Office (504) 868-0630  
Cable SMATCO  
Telex 58-7311

BRAKE-

Band-Type Brake Actuated by Air Cylinders

CLUTCH-

2- Fawick 51-VC-1600 Air Friction Clutches with  
hi-coefficient shoes (150 PSI-Operating).

AIR EQUIPMENT-

Controls

- 1- A-2-H Actuator
- 4- H2-FX Control Air Valves
- 2- 2HA-2LY Pilot Air Valves
- 1- HD2-FX Control Air Valve

Cylinders

- 2- AOB 10" X 10" Air Cylinders with mounting kit
- 2- AOB 3" X 4" Air Cylinders with mounting kit
- 1- 2" X 3" Taskmaster Air Cylinder

Accessories

- 1- 30 Gallon Air Tank
- 1- 1-200 PSI Pop-Off Valve
- 1- Norgren Filter-Lub-Regulator

DRIVE TRAIN-

Chain Drive

- 1- 20 Tooth 1 $\frac{1}{4}$ " Pitch Triple Sprocket E100B20
- 1- 70 Tooth 1 $\frac{1}{4}$ " Pitch Sprocket E100C70
- 1- 30'-1 $\frac{1}{4}$ " Pitch Triple Chain RC100-C

Gear Drive

Drive to Intermediate Shaft:

- 1- 80 Tooth 2.5 D.P. Gear 71130
- 1- 20 Tooth 2.5 D.P. Gear 71131

Intermediate to Main Shaft:

- 2- 119 Tooth 1 $\frac{1}{2}$  D.P. Gear 71126
- 1- 17 Tooth 1 $\frac{1}{2}$  D.P. Gear 71127

BEARINGS-

Main Shaft

- 4- 220SD30 Spherical Roller Bearings

Intermediate Shaft

- 2- FCS22536 Flange Mounting Spherical Roller Bearings

Drive Shaft

- 2- FCS22528 Flange Mounting Spherical Roller Bearings

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SHAFT-

Drum

2- 11" O.D. 4140 HR Heat Treated Alloy Shafting

Intermediate

1- 7" O.D. 4140 HR Heat Treated Alloy Shafting

Drive

1- 5-3/4" O.D. 4140 HR Alloy Shafting

SKID-

Fabricated skid, sand blasted, zinc coated with epoxy top coat, color to be specified by customer.

DIMENSIONS-

Length 17'-4", Width 9'-7", Height 10'-8", Weight- 75,000 lbs.

OPERATOR'S  
CONSOLE-

- A) Can be centrally located on winch with safety guard.
- B) Can be remotely positioned maximum 40' from winch.

DRUM CAPACITY-

2380' of 2-1/2" Cable 75" O.D. Flange  
3000' of 2-1/4" Cable 30" O.D. Barrel  
3680' of 2" Cable 48" Width

CHARACTERISTICS-

First Wrap (16" Radius)

299,800 lb. line pull at stall  
246,800 lb. line pull at 17 FPM  
28,100 lb. line pull at 137 FPM

Mid Drum (26.5" Radius)

179,200 lb. line pull at stall  
148,000 lb. line pull at 48 FPM  
17,000 lb. line pull at 227 FPM

Full Drum (37.5" Radius)

126,000 lb. line pull at stall  
105,000 lb. line pull at 39 FPM  
12,000 lb. line pull at 352 FPM

Note: All line pulls based on 2" cable

Maximum Cathead Loading-30,000 lb. line pull