

Smeal 3T 4T 5T 6T Hydraulic Derricks



Smeal 3T

The Smeal 3T (above)-consists of a 32 ft. high telescoping mast with 10 ft. maximum layback. 6,000 lbs. capacity with a 3 part line.

Smeal 4T

The Smeal 4T (left) consists of a 35 ft. high telescoping mast with 10 ft. maximum layback. 6,000 lbs. capacity with a 3 part line. Shown with Smeal Wire Winder.

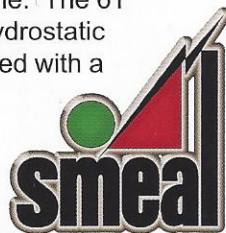


Smeal 5T

The Smeal 5T (right) consists of a 36 ft. high telescoping mast with 11 ft. maximum layback. 12,000 lbs. capacity with a 4 part line.

Smeal 6T

The Smeal 6T (below) consists of a 36 ft. high telescoping mast with 11 ft. maximum layback. 12,000 lbs. capacity with a 2 part line. The 6T features a variable displacement hydrostatic pump. Optionally the 6T can be fitted with a gear pump.



Standard features on 3T, 4T, 5T & 6T

- Fast and easy setup by means of a self supporting mast with two 3 1/2" X 48" double acting cylinders which eliminates the need for a guy cable in most situations.
- Designed to allow for easy access to hard-to-get-to pumps or pump houses and windmills.
- Open frame design allows for full use of the utility body bed or deck area.
- Hydraulic rear outriggers.
- Automatic engine speed control.
- PTO for standard transmission. (PTO is available for an automatic transmission at additional cost.)
- The derrick may be mounted in a utility body (Min. inside dimensions 48" wide X 100" long) or on a flat bed with or without a headache rack.

3T DERRICK: The 3T is the most economical all-around pump hoist. It is low in cost and simple in construction making it one of the best small machines available. The 3T is designed to mount on 3/4 ton or larger truck. Weight is approximately 1,800 lbs.

Mast: 32 ft. high telescoping mast with 10 ft. maximum layback.

Capacity: 2,000 lbs. single line, 6,000 lbs. with 3 part line.

Main Line Speed: 45 feet per minute.

Mainline Cable: 3/8" X 125' with open swedge socket.

Line Block: Block for reeving a 2 part or 3 part line.

Hook: 3 ton safety hook.

4T DERRICK: The 4T is designed for fast line speed while maintaining 3 ton capacity. The 4T is designed to mount on 3/4 ton or larger truck. Weight is approximately 2,200 lbs.

Mast: 35 ft. high telescoping mast with 10 ft. maximum layback.

Capacity: 2,000 lbs. single line, 6,000 lbs. with 3 part line.

Main Line Speed: 150 feet per minute.

Mainline Cable: 3/8" X 150' with open swedge socket.

Line Block: Block for reeving a 2 part or 3 part line.

Hook: 3 ton safety hook.

5T DERRICK: The 5T is the most popular all-around pump hoist. It is extremely versatile with capabilities ranging from small submersible pumps all the way up to line shaft turbines. The 5T is designed to mount on 1 ton or larger truck. Weight is approximately 2,400 lbs.

Mast: 36 ft. high telescoping mast with 11 ft. maximum layback.

Capacity: 3,000 lbs. single line, 12,000 lbs. with 4 part line.

Main Line Speed: 120 feet per minute.

Mainline Cable: 7/16" X 220' with open spelter socket.

Line Blocks: Blocks for reeving a 2 part, 3 part or 4 part line.

Hook: 5 ton safety hook.

6T DERRICK: The 6T is also extremely versatile with the same capabilities as the 5T. The main difference on the 6T is the load sensing hydraulic system which features a variable axial piston pump. The pump automatically regulates and delivers the amount of pressure and flow required which provides infinite control on the load being lifted at high or low RPM. If no operation is required the pump de-strokes which eliminates power usage and overheating of the hydraulic oil. A gear pump may also be used on this machine. The 6T is designed to mount on 1 ton or larger truck. Weight is approximately 3,000 lbs.

Mast: 36 ft. high telescoping mast with 11 ft. maximum layback.

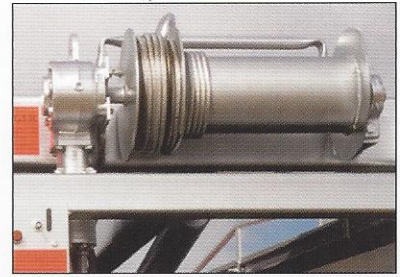
Capacity: 6,000 lbs. single line, 12,000 lbs. with 2 part line.

Main Line Speed: 100 feet per minute.

Mainline Cable: 1/2" X 175' with open spelter socket.

Line Block: Block for reeving a 2 part line.

Hook: 7 ton safety hook.



3T Mainline Winch

The mainline spool is directly assembled to a hydraulically driven worm gear box. This worm gear design eliminates the need for a brake. These features make the 3T winch completely fail safe.



4T, 5T & 6T Mainline Winch

The mainline spool is driven by a heavy duty pinion gear with the pinion shaft direct coupled to the hydraulic motor. Braking is accomplished with a Smeal automatic fail safe brake.

Sandline Winch

3T, 4T & 5T: The optional sandline winch for the 3T, 4T & 5T has a 1,000 lb. bare spool lifting capacity with a 325 feet per minute line speed. It is power-up and power-down and also incorporates a heavy duty clutch for free-fall. Level cable distribution on the spool is accomplished by means of a level wind located at the rear of the derrick frame. Spool capacity: 1,650 ft. of 1/4" cable, 1,050 ft. of 5/16" cable or 740 ft. of 3/8" cable.

6T: The optional sandline winch for the 6T has a 2,300 lb. bare spool lifting capacity with a 325 feet per minute line speed. The 6T sandreel is power-up and power-down. Level cable distribution on the spool is accomplished by means of a level wind located at the rear of the derrick frame.

Spool capacity: 1,200 ft. of 5/16" cable, 850 ft. of 3/8" cable, or 600 ft. of 7/16" cable.



Cathead

The optional cathead is a hydraulically driven 6" diameter capstan mounted on the right rear corner. Pulling capacity is 1000 lbs. at 110 RPM.

Controls

The operating controls are conveniently located at the left rear corner of the rig and are accessible from ground level. Hydraulic bypass valves are incorporated to protect from overloading.

Pipe Racks

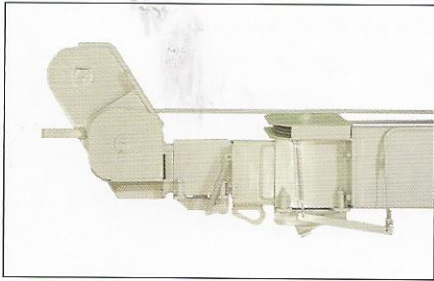
The 16 ft. long solid bottom pipe racks are equipped with ratchet straps and are mounted on each side of the derrick. They will carry approximately 700 ft. of 1" pipe on each rack.





Rear Outriggers - Tailgate

Rear hydraulic outriggers are standard equipment. They are independently controlled to afford easy leveling on uneven terrain. The optional tailgate is designed for heavy duty use and durability. Shown with Line-X spray on bed liner.



E-3 Mast Extension

The E-3 extension is designed for light work or windmills. With the E-3 option the mast can be telescoped an additional 10 ft. and layback distance is improved by about 4 1/2 ft. When the E-3 is extended load limits are approximately 800 lbs. on the 3T & 4T, 1,500 lbs. on the 5T, and 2,000 lbs. on the 6T. When the E-3 is not extended the machine load capacities are not affected.



Walking Beam

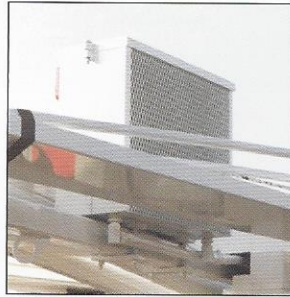
The **frame mounted walking beam** consists of a hydraulic motor driven spudding arm with a capacity of 1,000 lbs. and up to 50 cycles per minute. Stroke is adjustable from 24" to 36".

The **mast mounted walking beam** is powered by a 2.5" Dia. cylinder with a capacity of 1,000 lbs. and up to 60 cycles per minute. Stroke is adjustable up to 18".



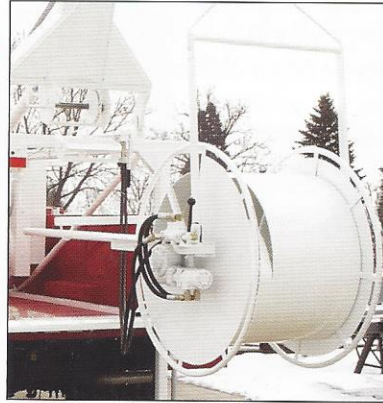
Front Outrigger

The optional front hydraulic outrigger aids in leveling the truck on uneven terrain and eliminates the truck spring reaction when the load is raised or lowered.



Oil Cooler

The optional oil cooler uses a heavy duty cooling coil and a 16" 10-blade DC fan which allows for continuous operation in most conditions.



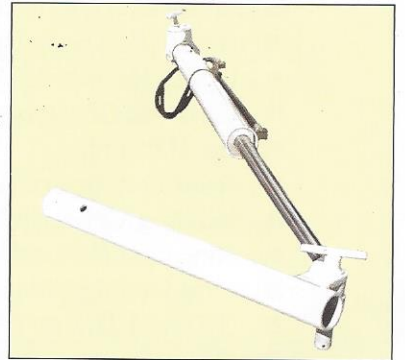
Plastic Pipe Reel

The plastic pipe reel is used to pull pumps hung on semi-rigid plastic pipe. It has a 700 lb. pulling capacity, 100 ft. per minute speed and will spool 300 ft. of 1 1/4" pipe.



Wire Winder

The variable speed wire winder mounts out of the way on the rear of the derrick frame.



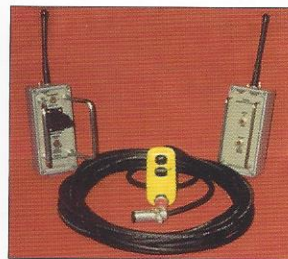
Breakout Wrench

The optional breakout wrench attaches to the rear frame of the rig and is designed to attach to conventional chain tongs.



Power to Rear

Power to the rear is optional. It is used to operate the cathode, plastic pipe reel, walking beam, or other hydraulic equipment. It is positioned on the upper right on the 3T, 4T & 5T. On the 6T it is positioned on the left.



Remote Control

The optional remote control is available in corded remote with a 30 ft. range and radio remote.



STANDARD SPECIFICATIONS

| Standard Specifications | 3T | 4T | 5T | 6T |
|-----------------------------------|-------------|-------------|--------------|---------------------|
| Maximum Mast Height | 32' | 35' | 36' | 36' |
| Maximum Layback | 10' | 10' | 11' | 11' |
| Lifting Capacity | 6,000 lbs | 6,000 lbs | 12,000 lbs | 12,000 lbs |
| Max. Lines For Multi-part Reeving | 3 | 3 | 4 | 2 |
| Lifting Capacity with single line | 2,000 lbs | 2,000 lbs | 3,000 lbs | 6,000 lbs |
| Mast Erection Cylinders | 2 | 2 | 2 | 2 |
| Mainline Winch Cable | 3/8" X 125' | 3/8" X 150' | 7/16" X 220' | 1/2" X 175' |
| Mainline Cable Speed | 45 FPM | 150 FPM | 120 FPM | 100 FPM |
| Hydraulic Pump Type | Gear Pump | Gear Pump | Gear Pump | Hydrostatic or Gear |

STANDARD FEATURES

- Smeal Fail Safe Brake System
- Direct Mounted PTO and Pump
- Controls Conveniently Mounted on the left rear corner of the rig
- Rear Outriggers With Holding Valves
- Holding Valve on Mast Cylinders
- Ring and Pinion Drive on Main Winch
- Line Parting Block
- 3 Ton, 5 Ton or 7 Ton Hook
- White Paint

OPTIONAL FEATURES

- Sandline Winch
- Oil Cooler
- Cathead
- Breakout Wrench
- Front Hydraulic Outrigger
- Extended Mast Height
- Corded Remote Control
- Wireless Remote Control
- Tailgate
- Rear Bumper
- Toolboxes
- Mast Lights
- Walking Beam
- Special Paint Colors
- Line-X Spray On Bed Liner
- Utility Body
- Flat Bed
- Headache Rack

All other options are available on request.

Complete line of hydraulic derricks to fill
all of your water well-service needs.

| Smeal Derrick | Single Line Pull (lbs.) | Lifting Capacity (lbs) | Standard Height (ft.) |
|---------------|-------------------------|------------------------|-----------------------|
| R2 | 1,000 | 2,000 | 30 |
| 3T | 2,000 | 6,000 | 32 |
| 4T | 2,000 | 6,000 | 35 |
| 5T | 3,000 | 12,000 | 36 |
| 6T | 6,000 | 12,000 | 36 |
| 8T | 7,000 | 21,000 | 40 |
| 10T | 9,000 | 27,000 | 36 |
| 11T | 11,000 | 33,000 | 36 |
| 12T | 11,000 | 33,000 | 36 |
| R12 | 11,000 | 44,000 | 44 |
| R36 | 14,000 | 72,000 | 44 |
| 50T | 14,000 | 100,000 | 40 |

Designed to be mounted on virtually any make of truck.



1966 Smeal Derrick

Tested and proven
generation after
generation.

Old fashioned values and service with computer aided design and manufacturing to provide solid engineering, quality construction and personal service.

Smeal Manufacturing Company

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