CITY OF HIGH POINT AGENDA ITEM



| TITLE: Purchase of Wire/Conductor Pullers for Ele | ctric Cabling |
|---|-----------------------------|
| FROM: Tyler Berrier, PE – Electric Utilities Director | MEETING DATE: April 1, 2024 |
| PUBLIC HEARING: n/a | ADVERTISED DATE/BY: n/a |
| ATTACHMENTS: PLW – 200X Specs Pilot Line Winder PT – 3000H Specs Puller Tensioner DDHXA – 7,500 Specs Underground | |

PURPOSE: To replace the wire/conductor pulling and tensioner equipment used by the Electric Department.

BACKGROUND: The Electric Department uses 3 different pulling and tensioning rigs to install overhead and underground cabling for various projects. The equipment that the department is currently using is 29 years old and has reached the end of its usable life. This purchase will encompass the following:

- PLW 200X Pilot Line Winder
- PT 3000H Puller Tensioner
- DDHXA 7,500lb Underground Puller

These new pieces of equipment have a greater capacity to pull in multiple phases at one time and will save crew time and money, creating more efficient operations for cable installation.

BUDGET IMPACT: Funds are available in the Electric capital budget to cover this purchase.

RECOMMENDATION/ACTION REQUESTED: City Staff has reviewed the contract submittal and evaluated the information provided. It is the recommendation of the Department that the City Council approve, and the department be given the ability to proceed with an award to WESCO Distribution, Inc. for \$624,600.



PLW-200X PILOT LINE WINDER

2,000 LB. FOUR DRUM TURRET PILOT LINE WINDER



- 1 Ergonomic operator's station with intuitive controls.
- 2 Braking system with electric over hydraulic activation.
- Tie off points rotate with turret for ease of use.
- 4 Adjustable leveling jacks.
- 5 6,000 ft. capacity for 7/16 in. rope.

FEATURES

- 2,000 lb. pulling capacity.
- Equipped with CANbus technology and real-time self-diagnostics.
- 360° continuous turret rotation for flexibility on the jobsite.

PLW-200X PILOT LINE WINDER 2,000 LB. FOUR DRUM TURRET PILOT LINE WINDER

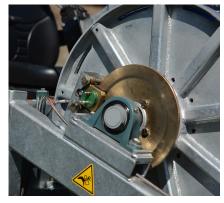
Sherman-Reilly.com

SPECIFICATIONS

| Pulling Capacity Max | 2,000 lb. rated at the top of drum |
|-----------------------------|---|
| Max Line Speed | 4 mph rated at top of drum |
| Payout Break | Hydraulic disc-caliper, electric over hydraulic with finite PSI control |
| Turret Rotation | 360°, continuous |
| Reel Capacity | 6,000 ft. of 7/16" PE-12 rope |
| Drive System | Hydraulic motor, chain and sprocket |
| Engine | Turbocharged, Tier-4 Final Diesel, 49 Hp, water-cooled Kubota® |
| Fuel Capacity | 13 Gallon |
| Hydraulic Fluid | ISO Grade 32 |
| Hydraulic Reservoir | 25 Gallon |
| Levelwind | Hydraulically controlled, joystick controlled (2) |
| Operator's Safety Enclosure | Safe-Zone® Cab, Open/Half cab, turret mounted |
| Frame Construction | Steel tubing, continuous weld |
| Length | 16 ft. 11 in. |
| Width | 8 ft. 1 in. |
| Height | 9 ft. 10 in. |
| Weight* | 11,990 lb. |
| GVWR | 12,500 lb. |
| Suspension | Leaf-spring |
| Axle Configuration | Single |
| Wheel Configuration & Tires | 235/75R 17.5 |
| Brakes (Trailer) | Electric, with break-away switch |
| Towing Attachment | 3 in. pintle eye, with two safety chains and hooks |
| Tie Downs | 5/8 in. dia. Steel D-Rings (4) |
| Tongue Jack | Hydraulic with galvanized shoe (1) |
| Stabilizing Jacks | Hydraulic with galvanized shoe (4) |
| Electrical System | 12 VDC |
| Battery | 12 Volt, group 27 |
| Lights / Navigation | US DOT, LED, 12 VDC |
| Grounding | 3/4 in. dia. Copper-clad steel loops (4) |
| Wheel Chocks | Standard |
| Fire Extinguisher | ABC |
| Color | S+R White |
| Drum Covers | Vinyl |
| Grips and Swivels | 1038 Kellems grip and B-40 Swivel |

OPTIONS

Solar Battery Charger **Galvanized Finish**



Braking system with electric over hydraulic activation



Ergonomic operator's station

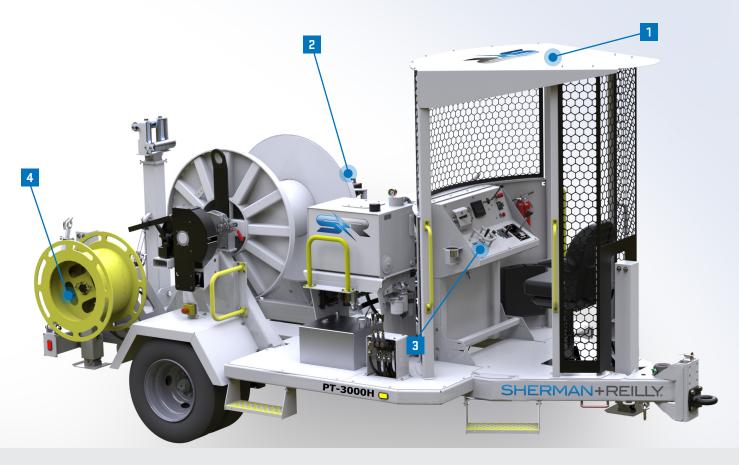


Ergonomic operator's station



PT-3000H PULLER TENSIONER

3,000 LBS. SINGLE DRUM PULLER TENSIONER



- Wrap-around SafeSheild™ with Ocu-View Honeycomb pattern.
- 2 Quick and easy X-change™ bolt-action drum coupling.
- 3 Ergonomic Heritage control panel with adjustable seat.
- 4 Spider® Pilot Line System with independent levelwind (optional).

FEATURES

- Provides unmatched versatility as a puller or tensioner.
- Capable of pulling 3,100 lbs. and tensioning 2,000 lbs.
- Underground package capable of pulling 7,500 lbs. (optional).
- Hydraulic low-force tension < 100lbs and manual brake tension < 50lbs.
- Compact footprint with a 16.6 ft. single axle, dual tire configuration
- Multiple options to configure the unit to specific needs.

3,000 LBS. SINGLE DRUM PULLER TENSIONER

SPECIFICATIONS*

| Sherman-Reilly.com | Sł | nerm | an-F | Reilly | .com |
|--------------------|----|------|------|--------|------|
|--------------------|----|------|------|--------|------|

| JECH ICATIONS | |
|--------------------------------|--|
| Pulling Capacity: | 3,100 lbs. |
| Max. Tensioning Capacity: | 2,000 lbs. |
| Min. Tensioning Capacity | Hydraulic Low force tension under 100lbs or manual pull off tension under 50lbs. |
| Line Speed: | Pulling: 3 mph, Tensioning 3 mph. |
| Max. Conductor Reel Size: | 66 in. diameter/38 in. width |
| Max. Conductor Reel Weight: | Dynamic - Over the Road 4,000 lbs. Static - Jacks Extended - 6,000 lbs. |
| Drum Dimensions: | Core Diameter: 18 in. Total Outside Width: 40 in. Flange Diameter: 46 in. |
| Drum Capacity: | Standard rope length: 6,000 ft. of 5/8 in. PE-12. |
| Drive System: | Direct Drive: single hydraulic motor. X-Change™ Coupling System |
| Drive System Engine: | Turbocharged, Tier-4 Final, diesel, 49 Hp, water-cooled Kubota™ |
| Fuel Capacity: | 13 Gallon |
| Hydraulic Fluid: | ISO Grade 32 |
| Hydraulic Reservoir: | 25 Gallon |
| Hydraulic Fluid Filtration: | 10 micron return filters |
| Levelwind: | Hydraulically driven, Steady-Rest™ controlled |
| Operator's Enclosure: | Safe-Zone™ Open-Air enclosure |
| Frame Construction: | Steel tubing, Steel plate, continuous weld |
| Length: (Overall, Nom.) | 199.4 in. |
| Width: (Overall, Nom.) | 102 in. |
| Height: (Overall, Nom.) | 109 in. |
| Weight*: | 6,110 lbs. without rope 8,860 lbs. with drum and rope |
| GVWR: | 11,000 lbs. |
| Suspension: | Leaf-spring |
| Axle Configuration: | Single |
| Wheel Config. & Tires: | Dual 235/85R 16 LRE; 8-6.5 |
| Brakes: (Trailer) | Electric, with break-away switch |
| Towing Attachment: | 3 in. pintle eye, with 2 safety chains & hooks |
| Tie Downs: | 5/8 in. dia. Steel D-Rings (2) |
| Tie Off Points: | Tie off point at bumper, 3000 lbs. working load limit |
| Bumper (R/L) Jacks: | Bumper (R/L) Jacks: (2) Manual, Drop and Pin |
| Tongue Jack: | Tongue Jack: Manual, 2 speed hand crank |
| Electrical System: | 12 VDC |
| Battery: | 12 V 840 CCA, BCI group 27 |
| Lights / Navigation: | US DOT, LED, 12 VDC |
| Grounding: | 3/4 in. dia. Copper-clad Steel ground loops (4) |
| Wheel Chocks: | Standard |

| Fire Extinguisher: | ABC |
|-----------------------|---|
| Color: | S+R White |
| Overhead Drum Core | 18 in. / Width 30 in. / Flange 46 in. |
| Underground Drum Core | 12.75 in. / Width 31.75 in. / Flange 24 in. |

OPTIONS

| Re-Conductoring Reel: RCR-60: Core: 24 in. to 18 in. tapered Total Outside Width: 39 in. (Flange Diameter: 60 in.) |
|--|
| Spider® Pilot Line System with independent levelwind S-75 or S-85 spider reels with 3,000 ft. or 6,000 ft. |
| Hydraulic Jacks |
| RDG-2100 Rotating Distribution Ground |
| DG-4100 Running Ground |
| Underground Package Levelwind UG Drum Hardline |
| Premium Rope (Uniline®) |
| Galvanized |
| Air Brakes |

TRIM LEVELS

Entry Level: Manual Jacks | No Spider | Rope

Mid-Tier: 3 Hydraulic Jacks | No Spider | Rope

Loaded: 3 Hydraulic Jacks | Spider | Rope



Heritage Style Ergonomic Control Panel



X-Change™ Coupling System



Spider® Pilot Line System with independent levelwind

independent levelwind © 2020 SHERMAN + REILLY, INC.



DUCT DAWG® AIR UNDERGROUND PULLER

DDHXA-75/100 - 7,500 OR 10,000 LB. PULLING CAPACITY



- 1 Equipped with an on-board air compressor to tackle multiple jobs with one piece of equipment.
- 2 Fully articulating, self-supported 3-axis boom
 - · 50 degree swing arc, left and right
 - 90 degree vertical arc, up and down
 - · 24 in. telescoping, in and out
 - 17 in. sheave with 60-degree swivel head
- Durable, battery-powered wireless remote control for safer operation.
- 4 Digital and manual hydraulic operation interface.
- 5 Single engine powering hydraulics and compressor.

FEATURES

- · Simplified underground jobsite setup.
- Optimized, compact design with a footprint under 17 ft.
- Full CANbus compatibility.
- Smooth operation with 3-speed gearbox on 75 and 2-speed on 100.
- Hydraulically driven, twin capstan bullwheels.
- Equipped with a digital recorder to continuously measure length of cable deployed and line tension.

DUCT DAWG® AIR UNDERGROUND PULLER

DDHXA-75/100 - 7,500 OR 10,000 LB. PULLING CAPACITY

Sherman-Reilly.com

SPECIFICATIONS

| | DDHXA-75 | DDHXA-100 | |
|-------------------------------|---|---|--|
| Pulling Capacity Max | 7,500 lb. | 10,000 lb. | |
| Bullwheels | Twin capstan, 6 in. dia., 5-groove followed by 6-groove | Twin capstan, 7 in. dia., 5-groove followed by 6-groove | |
| Gearbox and Line Speed | 1st gear 0-60 fpm at 7,500 lb. with demand payout 2nd gear 0-120 fpm at 3,500 lb. with demand payout 3rd gear 0-260 fpm at 1,500 lb. with demand payout | 1st gear 0-60 fpm at 10,000 lb. with demand payout 2nd gear 0-120 fpm at 5,000 lb. with demand payout | |
| Winch Gearbox Oil (Volume) | SAE 90 (4 liter or 4.2 quarts) | 6 liters or 6.2 quarts | |
| Drive System | Hydraulic | Hydraulic | |
| Hydraulic Fluid | ISO grade 32 | ISO grade 32 | |
| Hydraulic Reservoir | 40 Gallon with cold weather package optional | 40 Gallon with cold weather package optional | |
| Engine | 71 peak Hp, Diesel, water-cooled, electric start | 71 peak Hp, Diesel, water-cooled, electric start | |
| Fuel Capacity | 13 Gallons | 13 Gallons | |
| Pulling Rope | 3/8 in., 6 x 25 XIP IWRC steel wire rope, 2,000 ft. | 7/16 in., 6 x 25 XIP IWRC steel wire rope, 2,200 ft. | |
| Boom | Hydraulic, joystick controlled, 3-axis, 52° swing arc, 17 in. sheave with 60° swivel head. | • | |
| Levelwind | Dual automatic fairlead sheaves | Dual automatic fairlead sheaves | |
| Puller Mounted Controls | Manual hydraulic overrides and control panel backup operation. | Manual hydraulic overrides and control panel backup operation. | |
| Puller Wireless Controls | CANbus controller communicating with radio controlled remote (300 ft. max) | CANbus controller communicating with radio controlled remote (300 ft. max) | |
| Footage Counter | Electronic, actual footage, pay-in and pay-out with memory | Electronic, actual footage, pay-in and pay-out with memory | |
| Hydraulic Tool Circuit | Up to 3,000 PSI - 8 GPM at idle/16 GPM at 2700 RPM | Up to 3,000 PSI - 8 GPM at idle/16 GPM at 2700 RPM | |
| Pulling Connectors | Rotation-resistant: (1) E-35 rated at 3,000 lb.& (1) E-49 rated at 8,800 lb. | Rotation-resistant: (1) E-35 rated at 3,000 lb.& (1) E-49 rated at 8,800 lb. | |
| Frame Construction | Steel tubing, continuous-weld | Steel tubing, continuous-weld | |
| Length, overall, nominal | 15 ft. 5 in. | 15 ft. 5 in. | |
| Width, overall, nominal | 7 ft. 11 in. | 7 ft. 11 in. | |
| Height, overall, nominal | 9 ft. 8 in. (boom stored) | 9 ft. 8 in. (boom stored) | |
| Weight*, nominal | 8,900 lb. with rope | 9,210 lb. with rope | |
| GVWR | 9,500 lb. | 9,500 lb. | |
| Suspension | Leaf-spring | Leaf-spring | |
| Axel Configuration | Single | Single | |
| Wheel Configuration and Tires | Single, LT235/75R17.5 Load Rating J | Single, LT235/75R17.5 Load Rating J | |
| Brakes, trailer | Electric, with safety break-away switch | Electric, with safety break-away switch | |
| Towing Attachment | 3 in. adjustable pintle eye | 3 in. adjustable pintle eye | |
| Safety Chains | 2 ea. with hooks | 2 ea. with hooks | |
| Tie Downs | 5/8 in. dia. steel D-rings | 5/8 in. dia. steel D-rings | |
| Tongue Jack | Hydraulic, with shoe (1) | Hydraulic, with shoe (1) | |
| Stabilizing Jacks | Hydraulic, with shoe at bumper corners (2) | Hydraulic, with shoe at bumper corners (2) | |
| Electrical System | 12 VDC, 90 amp alternator | 12 VDC, 90 amp alternator | |
| Lights / Navigation | US DOT, LED, 12 VDC | US DOT, LED, 12 VDC | |
| Battery | 12 V | 12 V | |
| Grounding | 3/4 in. dia. copper-clad steel ground loops (4) | 3/4 in. dia. copper-clad steel ground loops (4) | |
| Fire Extinguisher | ABC | ABC | |
| Hose Reel | 1 in. by 50 ft. | 1 in. by 50 ft. | |
| Air Compressor | High flow: 160 cfm at 40 psi; Low flow: 90 cfm at 90 psi | Low flow: 160 cfm at 40 psi; High flow: 90 cfm at 90 psi | |

OPTIONS

| Strobe Light | |
|-----------------------|---|
| Solar Battery Charger | |
| Submersible Pumps | Self-priming, compact, high- impact trainer housing pump |
| | See utility tools |

| Air Adapter Kits | |
|------------------------------|--|
| Underground Blocks Available | |





Duct Dawg remote control

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