

PURPOSE/APPLICATION

To guide the safe operation of the transportation, set up, and utilization of self-loading product reel trailers.

PPE

- CPES Standard PPE

TRAINING

- CPES Orientation
- NSC Training (where required)

HAZARDS & CONCERNS

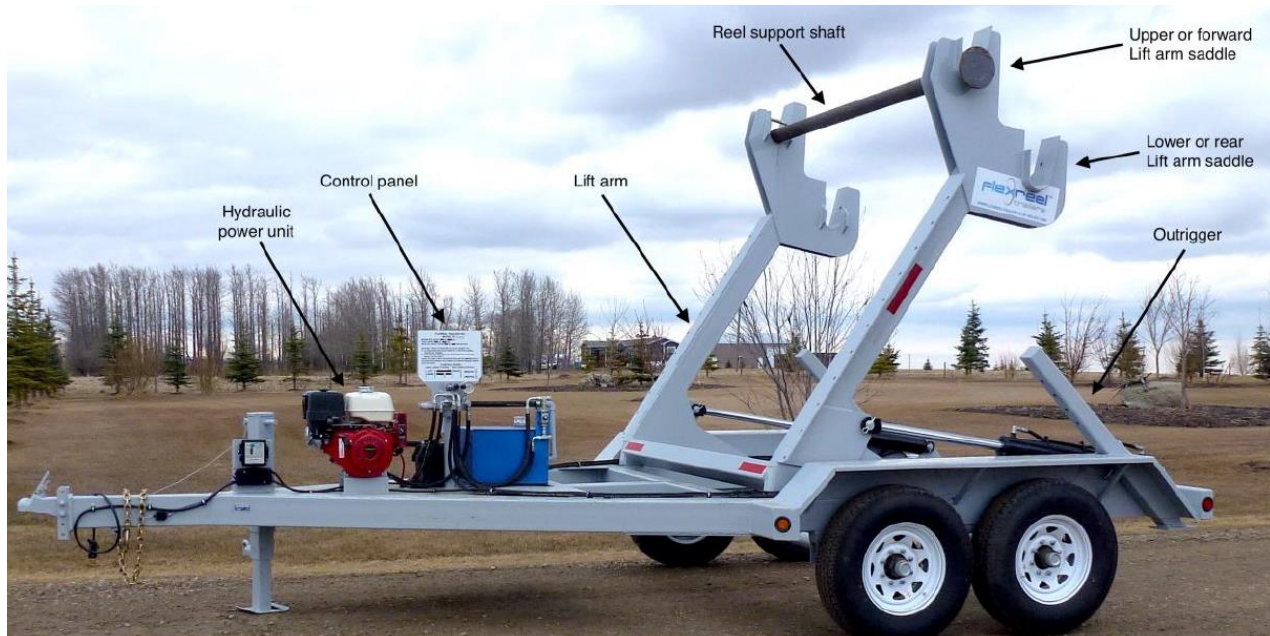
- Crushing injury
- Hand & Finger pinch points
- Equipment or property damage



PRECAUTIONS

- Review the user manual for the model of the trailer being used, trailers come in a variety of sizes with a range of weight capacities.
- Ensure the equipment is used as per the manufacturer’s directions, including completing any required pre-use inspections. If any defects are noted, the equipment must be removed from service, notify your supervisor immediately.
- Ensure you are familiar with the weight of the product reel, do not overload the trailer or lifting device.

COMPONENTS OF POWER TRAILER:





GENERAL PRECAUTION DOS/DON'TS

THE DOs

- DO** Determine the weight of the reel to be loaded before starting the loading process.
- DO** Determine that you have the appropriate trailer model with sufficient capacity to safely lift the reel.
- DO** Verify that the reels and trailer are sufficiently stable and level before starting to load the trailer.
- DO** Clear the area around the trailer of all workers who are not required for the task. Flag off the work area (as required).
- DO** Verify that any towing vehicles have sufficient capacity to tow the trailer (See SWP 04 Cargo Securement and Trailer Use).
- DO** Ensure any CPES Employees required to tow self-loading reel trailers on public roads comply with NSC Regulations (See Section 21 Fleet Safety and Journey Management)
- DO** Complete a walkaround of the immediate work area before starting. Look for obstacles that may need to be removed.
- DO** Ensure that no personnel are in the vicinity of the lift arms path. Always warn all personnel before lifting/lowering the lift arms.
- DO** Ensure that there are no overhead obstacles or power lines in the area where the product will be unspooled use a spotter when lifting the arms/product reel.
- DO** Ensure that no personnel are in the vicinity of the lift arms path when spooling or unspooling. Always warn all personnel that you are raising the reel.
- DO** Have a worker stationed at the reel trailer to quickly shut off the equipment in the event of an emergency.
- DO** Verify Reel Support Shaft is rated to handle the Weight of the reel.

THE DON'Ts

- DON'T** Remove the reel support shaft by hand alone, these shafts weigh ~130lbs (61kg) and must be removed by mechanical means or a team lift.
- DON'T** Tow trailers without the use of an approved hitch or approved hitch attachment for equipment.
- DON'T** Raise a reel, until the outriggers are in place. Ensure that the trailer is relatively level from side to side.
- DON'T** Attempt to unspool a reel when the hydraulic rotation drive is engaged, bypass the drive/ set the engine to unspool. Unrolling the reel with the rotation drive engaged can damage the equipment.

TRANSPORTING REEL TRAILER

Before transporting a Reel Trailer:

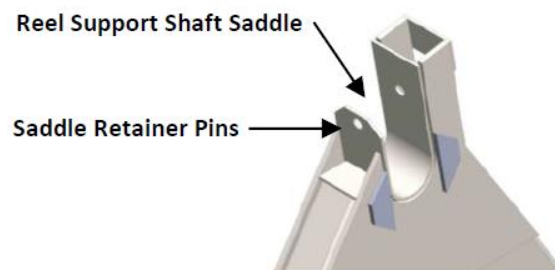
1. Review the trailer model towing specifications and verify that the tow vehicle has enough towing capacity to safely transport the combined load trailer and the reel.
2. Ensure the tow vehicle has the appropriate hitch and electrical receptacle that is compatible with the model of trailer being used. Test to determine all brake and signal lights are in proper working order before transporting.
3. Perform a pre-operation inspection trailer and ensure the load is properly balanced on the trailer to provide the appropriate hitch weight for the tow vehicle. Many self-loading reel trailers are equipped with a sliding lift arm saddle which can be operated to move the reel forward or backward. This can be used to adjust the balance of the load.
4. Ensure the load is properly secured (see SWP 04 Cargo Securement and Trailer Use).

5. Review the transportation speed requirements of the reel trailer's OEM Manual. For example, the Flexreel Trailer OEM indicates that when a trailer is not carrying a load, speeds should not exceed 100 km/hr. and 80 km/hr. when loaded.
6. Product reel trailers are generally connected to the towing vehicle using ball & pintle style hitch, verify that the ball size hitch capacity is sufficient for the load being towed and that the coupler socket matches the ball size on the trailer, the size of the coupler should be stamped on it. If the size is not stamped on the coupler, measure the inside opening to determine the size of the coupler:



LOADING A PRODUCT REEL

1. Start the hydraulic power unit, the hydraulic power unit must be running before any of the controls will function. Once the engine is started run it at a low throttle until the engine is warm (note that it takes approximately 3 minutes to warm up in summer and 15 minutes in winter). Once the engine is warm, the throttle can be increased to $\frac{3}{4}$ for the operation of the trailer controls.
2. Extend the lift arms: Inspect the area around the lift arms and below the lift cylinders to ensure that there are no objects or debris in the path of the lift arms or the lift cylinders. Lower the lever until the lift arms are fully extended.
3. Remove the reel support shaft. To remove the reel support shaft, first remove the saddle retainer pins from both lift arms. Ensure the reel support shaft does not dislodge from the saddle when removing the pins. Insert the shaft into the center hole on the reel, this must be completed using a team lift or use of a mechanical lifting device:



4. Position the Trailer adjacent to the intended reel. Remember that loading from one side will allow the product to be un-spooled off the top and the other side will allow the product to be un-spooled off the bottom. The center of the trailer should be aligned with the center of the reel. Adjust the position of the lift arms to allow the spool to spin freely. Ensure that the reel support shaft diameter is 5-20mm smaller than the center hole of the reel. Verify that the reel can roll freely without contacting the trailer. Shaft spacers may be required to prevent the reel from catching on the trailer during spooling and unspooling.
5. Secure the reel support shaft: Once the reel support shaft is positioned in the lift arm saddles the retainer pins should be re-inserted to secure the reel support shaft to the lift arms.

6. Lower outriggers, (before lowering the outriggers inspect the ground conditions in the area where the outriggers will contact). If the ground conditions are soft, outrigger pads should be used. When lowering the outriggers, ensure that no workers are in the vicinity, always warn all personnel in the area before lowering the outriggers.
7. To lower the outriggers, locate and remove the outrigger retainer pin. Manually lower the outrigger shaft until the outrigger foot is in contact with the ground. Re-insert the retainer pin.



8. Raise the reel using the lift control, note* before lifting a spool ensure that the trailer is level from side to side (Do not raise the reel if the trailer is more than 5 degrees out from one side of the trailer to the other, this could lead to the trailer tipping).
9. Raise the outriggers by removing the retainer pin and manually raise the outrigger shaft until the outrigger foot is in contact with the trailer frame. Once the outrigger is up re-insert the retainer pin. Ensure that the outriggers on both sides have been raised and secured with the retainer pins.
10. Strap the reel to the trailer frame before transporting. Straps must be rated to the weight of the load.

UNSPoolING PRODUCT REEL

1. Start the hydraulic power unit.
2. Lower outriggers, (before lowering the outriggers inspect the ground conditions in the area where the outriggers will contact). If the ground conditions are soft, outrigger pads should be used. When lowering the outriggers, ensure that no workers are in the vicinity, always warn all personnel in the area before lowering the outriggers.
3. Bypass the hydraulic rotation drive (when equipped with a re-spooler hydraulic drive). Set the control panel to the un-spool position.
4. Un-spooling cable, cable must be un-spooled at a slow speed in a controlled manner. All workers involved in cable pull must remain in constant communication (verbal, hand signals, or two-way radios). Note* If the product is un-spooled too quickly the momentum of the reel rotation can cause a pile-up of loose product on the reel.

*Note: If the reel rotation must be stopped, the operator can engage the re-spooler hydraulic drive system. To engage the hydraulic rotation drive, locate the valve next to the control panel and turn the handle to the re-spool position.



SPOOLING PRODUCT ONTO REEL

1. Select the appropriate mounting position for the reel diameter. When mounted in the proper position, the re-spooler roller should engage with the reel flange.
2. Start the hydraulic power unit.
3. Lower outriggers, (before lowering the outriggers inspect the ground conditions in the area where the outriggers will contact). If the ground conditions are soft, outrigger pads should be used. When lowering the outriggers, ensure that no workers are in the vicinity, always warn all personnel in the area before lowering the outriggers.
4. The lead end of the product being re-spooled must be anchored to the reel. Refer to the product manufacturer’s recommended installation practices for the best attachment method. It is recommended that the reel be rotated in the direction that will re-spool the product onto the bottom of the reel.
5. Bypass the hydraulic rotation drive (when equipped with a re-spooler hydraulic drive). Set the control panel to the Spool position.
6. Spooled product at a slow speed in a controlled manner. All workers involved in product pull must remain in constant communication (verbal, hand signals, or two-way radios).

*Note: If the reel rotation must be stopped, the operator can engage the re-spooler hydraulic drive system. To engage the hydraulic rotation drive, locate the valve next to the control panel and turn the handle to the un-spool position.

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