

Power Roll Bed Normal Application Maintenance & Service

This section will describe service procedures for major mechanical elements of a Power Roll Bed NA.

⚠ WARNING ⚠

- Only qualified and trained personnel should perform the disassembly and assembly of electrical and mechanical components.
- Before attempting any maintenance on this equipment all involved personnel should follow plant internal regulations along with any state, federal, or province regulations. Do not begin any repair procedure until the proper shutdown procedures and the appropriate power lockout procedures have been applied.

How to Replace a Belt

- 1 Remove and lock out power to the Power Roll Bed using your plant's procedures.



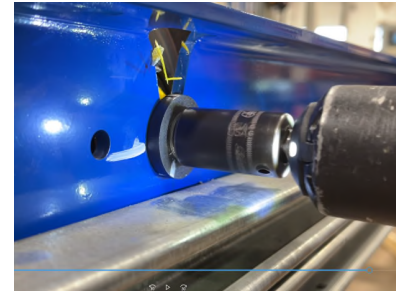
- 2 Remove cover.



- 3 Both belt sharing rollers of the damaged belt will need to be loosened from the frame to free up any tension and to replace the belt.



- 4 Remove the hex head screws holding the shafts on both sides of the rollers.



- 5 Lift roller shaft upward and remove one end of the belt. Perform the same to belt sharing roller shaft.



- 6 Remove damaged belt and replace with new one. Thread each roller through the toothed belt(s) so that they are on the appropriate pulleys and rollers.



- 7 Insert rollers into both sides of the frame, turning the roller so that the rod end fits into the slots.



- 8 Retighten screws on both sides of rollers on the Power Roll Bed.



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- 9 Place cover back on power roll bed and tighten screws.



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- 10 Restore power to the system and test for proper operation.



How to Replace a Roller

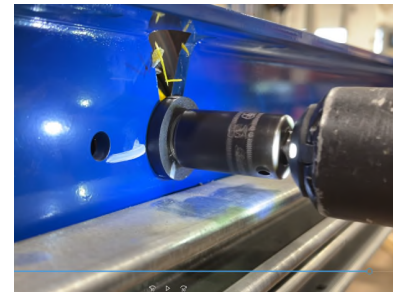
- 1 Remove and lock out power to the Power Roll Bed using your plant's procedures.



- 2 Remove cover.



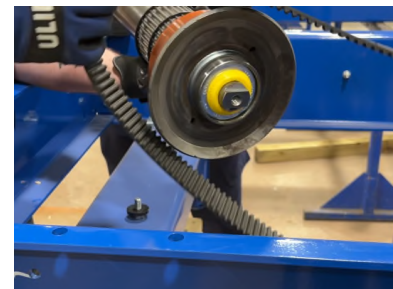
- 3 Remove the hex head screws holding the shafts on both sides of the roller. To replace an interior roller, the belt sharing rollers may also need to be loosened from the frame to free up tension from the belts.



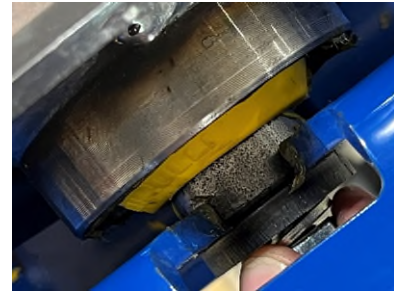
- 4 Lift roller shaft upward and remove belt(s) off roller shaft.



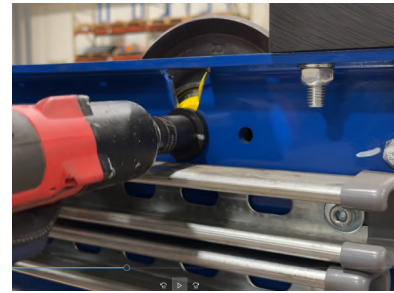
- 5 Insert new roller through the toothed belt(s) and place it on the pulley.



- 6 Turn the roller so that the rod end fits into the slots on both sides of the frame.



- 7 Retighten screws on both sides of the Power Roll Bed.



- 8 Place cover back on power roll bed and tighten screws.



- 9 Restore power to the system and test for proper operation.



How to Replace a Gearmotor or Drive Pulley

- 1 Remove and lock out power to the Power Roll Bed using your plant's procedures.



- 2 Remove cover.



- 3 Loosen screws at one side of the motor. Then proceed to remove mounting bolts.



- 4 Hoist gearmotor and remove belts from pulley.



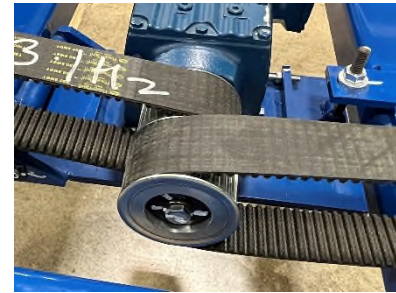
- 5 Remove head screw and split pin to dismantle pulley from old gearmotor. Install pulley with a new split pin on new gearmotor.



- 6 Set and loosely bolt gearmotor back in place on power roll bed.



- 7 Fit drive belts on pulley.



- 8 Hand-tighten the four gearmotor mounting bolts and adjust alignment with horizontal hex-head screws. Adjust drive pulley to roller pulleys, so they are straight and square for proper operation. Then tighten the four mounting bolts completely.



- 9 Place cover back on power roll bed and tighten screws.



- 10 Restore power to the system and test for proper operation.



How to Check and Adjust Belt Tension

- 1 Remove and lock out power to the Power Roll Bed using your plant's procedures.



- 2 Remove cover.



- 3 For inspection equipment use belt tension measuring instrument Tension Meter.



- 4 Hit the belt with a metallic article (spanner or similar) to cause the belt to vibrate.

Small Belt Tension: 84 – 98 Hz

Large Belt Tension: 29 – 36 Hz



- 5 If belt adjustment is necessary, begin with the large belt by correcting the tightness of the motor (increase or decrease) to achieve the desired tension.



- 6 Once the large belt tension is sufficient, adjust the tensioner to achieve the desired tension for the small belt.



- 7 If a belt cannot become correctly tightened (<10Hz), then the belt is to be replaced.
If the tension of belt is too high, and/or cannot be adjusted, then the belt should be replaced.



- 8 Place cover back on power roll bed and tighten screws.



- 9 Restore power to the system and test for proper operation.

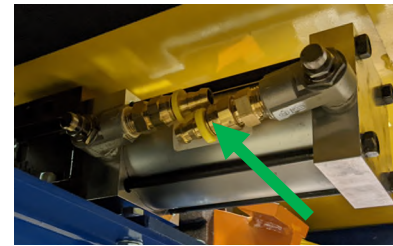


How to Replace a Pneumatic Skid Positioner

- 1 Remove and lock out power to the Power Roll Bed using your plant's procedures.



- 2 Disconnect the pneumatic hoses from the clamp cylinder.



- 3 Disconnect the cords from the cylinder position sensors.



- 4 Remove the M10 bolts (4) from the clamp mounting bracket and then remove the clamp.



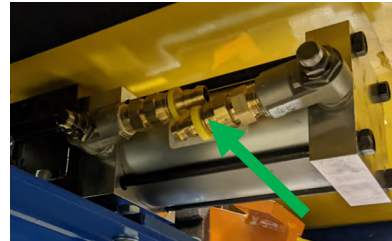
- 5 Install the new clamp in the mounting bracket.



- 6 Connect the cords to the cylinder sensors.



- 7 Connect the pneumatic hoses to the clamp cylinder.



- 8 Restore power to the Power Roller Bed and test for proper operation.

