



COMPOSITE TECHNOLOGIES

Field Operations

Hybrid Reel Break Down Procedure

Date of Issue
June 6, 2023

Document Number
14-4199

Revision Number
1.1

Applicable Department:	Field Operations, Warehouse Associates, Rentals, Field		
Job / Task:	Flexpipe Hybrid Reel Break Down		
Job Titles to Perform Task:	Technicians, Field Technicians, Certified Heavy Machine/Forklift Operator		
First Created By:	Mychal Miles	Title:	Senior Field Technician
Last Analysis/Revised By:	Adrian Saldivar	Title:	District Supervisor
Last Reviewed By:	Jason Correia	Title:	Installation Integrity Manager
Last Approved By:	Jason Correia	Title:	Installation Integrity Manager

Revision #	Revision Date	Revision Details	Revised By (Name)
1	September 24, 2020	Document put into IFS.	Jason Correia
1.1	June 6, 2023	Update for Mattr/Flexpipe rebrand.	Shanna Grant

Reference Documents:	
Document Number	Document Title

PPE Required: Hard Hat, Safety Glasses, Safety Vest, Work Gloves, Steel-Toed Footwear. Recommended: Hearing Protection.



Tool(s), Equipment & Material(s) Required: Impact Drill, ¾ Deep Well Socket, ¾ Box End Wrench (or Crescent Wrench), Center Punch, Hammer, Paint Pen, Step Ladder, Bucket (for collecting bolts), Specially designed Reel Stacker, Dunnage (for Stacked reels), Banding Material, and a Forklift.


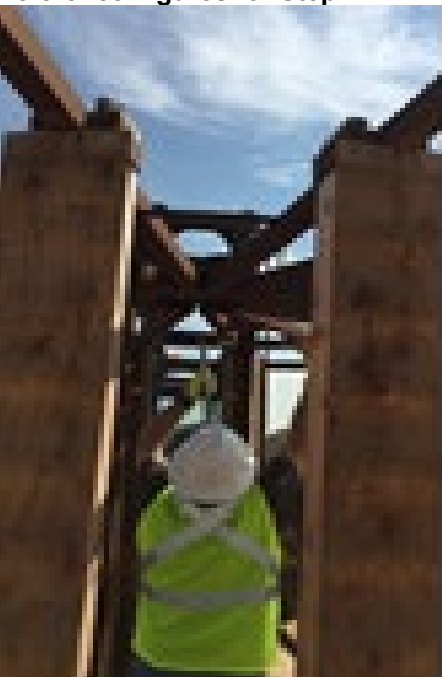
Applicable OHS Legislation:

OVERVIEW

To safely breakdown Flexpipe Hybrid Reels to its components for storage and/or delivery. It's recommended to have a minimum of 2 people for this task due to safety concerns.

PROCEDURE (Add more sections if needed)**

#	Job Task Steps (In Sequence)	Hazard Category	Hazard Description (Potential and Existing)	Who Can Be Harmed?	Risk Type (H/S)	Initial Risk (No Controls)	Existing Control Type	Existing Control Description	Residual Risk (After Control)	Additional Recommendations
1.	Set up the breakdown area.	Moving Vehicles	Traffic and Pedestrians.	Involved and Approximal Workers	Safety	LoPo	Administrative	Access Control Barrier - Safety cones used to alert individuals of tasks being performed and prevent individuals from entering the area in which reels will be flipped over and stacked.	LoPo	
<p>Details of Step 1: Ensure the area for breakdown has a set perimeter using safety cones or is strictly designated for breakdown.</p>						<p>Reference Figures for Step 1:</p> 				
2.	Flip over the reel.	Nip/Pinch Point	Traffic and Crush/Pinch Points	Involved Workers	Safety	MePo	Administrative	Operator needs to inform ground personnel of actions being taken so that they are aware and can stand back.	LoPo	
<p>Details of Step 2: Use the forklift, or if in the field use heavy machinery, with rated slings and clevis to slowly lift and in a controlled manner flip the reel onto its side. Communication with everyone near area is critical.</p>						<p>Reference Figures for Step 2:</p> 				

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3.	Allow access to the center of the reel.	Sharps	Pinch Points/Sharp Objects	Involved Workers	Safety	LoPo	Administrative	Wear gloves and safety glasses. When lifting out the traverse make sure good lifting techniques are practiced.	LoPo	
<p>Details of Step 3: Remove (8" x 8") board from traverse. If applicable, unscrew Robertson screws to remove top board. With both hands, lift a single traverse straight up and pull traverse away from reel allowing bottom boards to free from reel to allow personnel entry into reel.</p>						<p>Reference Figures for Step 3:</p> 				
4.	Remove nuts and bolts (top) to disconnect flange from cross-members.	Noise	Pinch Points, Noise, Repetitive Motions, and working over your head.	Involved Workers	Safety	LoPo	Administrative	When a bolt becomes stuck make sure that you are aware of where your hands are while trying to hammer out the bolt.	LoPo	Place all nuts and bolts in bucket to help with clean up at the end.
<p>Details of Step 4: Use 3/4" wrench and 3/4" socket to remove upper nuts and bolts (x 4) from cross-members. May need to use the hammer and punch to assist in removing bolts. Only one person inside of reel during removal of nuts and bolts.</p>						<p>Reference Figures for Step 4:</p> 				



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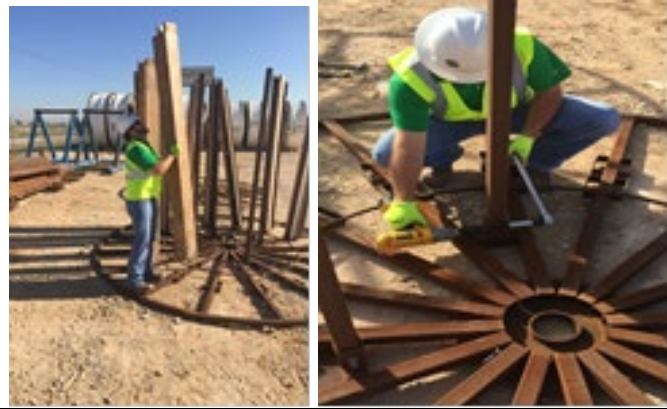

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5.	Remove top flange from reel.	Heavy Load	Traffic, Pinch Points, and Pedestrians	Involved and Approximal Workers	Safety	MePo	Administrative	Operator needs to inform ground personnel of actions being taken so that they are aware and can stand back.	LoPo	
<p>Details of Step 5: Use forklift, or if in the field use heavy machinery, with rated slings and clevis to remove top flange. Safely and slowly flip the flange over and place it on the reel stacker and/or on appropriate dunnage for return shipment.</p>						<p>Reference Figures for Step 5:</p>				
6.	Stack the flange (top).	Nip/Pinch Point	Pinch Points, Heavy Moving, and Repetitive Motions	Involved Workers	Safety	MePo	Administrative	When aligning flange make sure to keep your fingers and hands out of the way when rotating to avoid smashing hands.	MePo	
<p>Details of Step 6: Align flange half cross-member sleeves to ensure alignment of the open section of flange half.</p>						<p>Reference Figures for Step 6:</p>				

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7.	Remove nuts and bolts (bottom) to disconnect flange from cross-members.	Noise	Pinch Points, Noise, Repetitive Motions, and Working at your feet.	Involved Workers	Safety	LoPo	Administrative	When a bolt becomes stuck make sure that you are aware of where your hands are while trying to hammer out the bolt.	LoPo	Place all nuts and bolts in bucket to help with clean up at the end.
<p>Details of Step 7: Remove wooden traverses on existing non-stacked reel half, then use 3/4" wrench and 3/4" socket to remove lower nuts and bolts (x 4) from cross-members. May need to use the hammer and punch to assist in removing bolts.</p>						<p>Reference Figures for Step 7:</p> 				
8.	Stack wood and steel traverses.	Nip/Pinch Point	Pinch Points, Heavy Lifting, and Repetitive motions.	Involved Workers	Safety	LoPo	Administrative	Use good lifting technique when lifting out the traverses and while lowering them onto the stack.	LoPo	
<p>Details of Step 8:</p> <ol style="list-style-type: none"> Stack all wooden and steel traverses separately in neat and even stacks (steel traverses will be shipped back to Canada with flanges). The maximum bundling for cross-members should not exceed 100 cross-members per bundle. 						<p>Reference Figures for Step 8:</p> 				



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9.	Stack the flange (bottom).	Nip/Pinch Point	Traffic, Pinch Points, Pedestrians, Heavy Moving, and Repetitive Motions	Involved and Approximal Workers	Safety	MePo	Administrative	Operator needs to inform ground personnel of actions being taken so that they are aware and can stand back. When aligning flange make sure to keep your fingers and hands out of the way when rotating to avoid smashing hands.	MePo	
Details of Step 9: <ol style="list-style-type: none"> Use forklift, or if in the field use heavy machinery, with rated slings and clevis to move lower flange and place on reel stacker or on appropriate dunnage for return/shipment. Ensure that both top and bottom flanges are kept together during return/shipment. Align flange half cross-member sleeves to ensure alignment of the open section of flange half. The maximum bundling for flanges should not exceed 18 flanges per bundle. 						Reference Figures for Step 9: 				
10.	Identify reel serial numbers.	Other	Bending over, Slip Trips Falls, and Repetitive Motions	Involved Workers	Safety	LoPo	Administrative		LoPo	
Details of Step 10: Using the paint pen, clearly write the serial number of the reel on the outside edge of the reel on both flange ends. Be sure to write the number where it will be visible when the reels are stacked.						Reference Figures for Step 10: 				



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SHUT DOWN

#	Job Task Steps (In Sequence)	Hazard Category	Hazard Description (Potential and Existing)	Who Can Be Harmed?	Risk Type (H/S)	Initial Risk (No Controls)	Existing Control Type	Existing Control Description	Residual Risk (After Control)	Additional Recommendations
1.	Clean up work area.	Repetitive Motions	Slip Trips Falls, Bending over, and Repetitive Motions.	Involved Workers	Safety	LoPo	Administrative	Wear safety glasses and gloves.	LoPo	
Details of Step 1: Clean up around disassembly area. Ensure all nuts, bolts, boards, and debris are cleaned up. Band all flanges together to secure for transport using banding material.										
2.	Package for shipping.	Manual Handling	Sharp Edges, Steel Bands Under Load, Muscle Strain	Involved Workers	Safety	LoPo	Administrative	Wear safety glasses and gloves.	LoPo	
Details of Step 2: Band all steel cross-members together to secure for transport using banding material.										

TROUBLE SHOOTING

Malfunction/Issue	Cause	Corrective action
Cross-member bolts cannot be removed manually.	Weathered or stripped bolts.	Use of 1/4" center punch with a hammer is recommended.
Stacked components falling over.	Uneven stacking.	Ensure all disassembled parts are stacked properly. Do not exceed maximum bundling recommendations: 18 flanges and 100 cross-members.

MAINTENANCE

#	Job Task Steps (In Sequence)	Hazard Category	Hazard Description (Potential and Existing)	Who Can Be Harmed?	Risk Type (H/S)	Initial Risk (No Controls)	Existing Control Type	Existing Control Description	Residual Risk (After Control)	Additional Recommendations
1.	Forklift/Heavy Machinery	Equipment Failure	Hydraulic Leaks, and Damage to Equipment, Property or Personnel	Involved and Approximal Workers	Safety	MePo	Administrative	Go over forklift inspection prior to operation.	LoPo	
Details of Step 1: Ensure forklift/heavy machinery inspection checklist have been completed and proper maintenance have been performed prior to every use.										
2.	Hand and Power Tools	Equipment Failure	Sparks, Fire, and Damage to Equipment, Property or Personnel	Involved Workers	Safety	LoPo	Administrative	Inspect all equipment or tools prior to use.	LoPo	
Details of Step 2: Ensure all hand and power tools have been visually inspected and proper maintenance have been performed prior to every use.										