

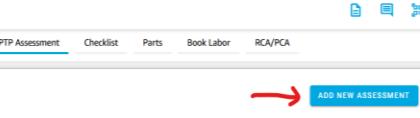
Maintenance Job Planning/Estimating Worksheet

DEMATIC MODEL 9265 13 WEEK PM

Job Description:	DEMATIC MODEL 9265 13 WEEK PM
Techs Needed:	1 (2 if elevated)
Equip Needed	Hand tools
Elapsed Time:	1 Hour, 20 minutes
Equipment Down:	1 Hour
PPE:	safety shoes, gloves, safety glasses, bump cap, reflective vest, Electrical PPE appropriate for disconnect
Hazards:	Electrical (LOTO), Heights (if elevated)
Helpful Links:	Narrow Belt conveyor manual Manual for the narrow belt conveyors Narrow belt conveyor drawings There are 20 different drawings for narrow belt conveyors in this location. You will need to find correct drawing package for the items that you are searching

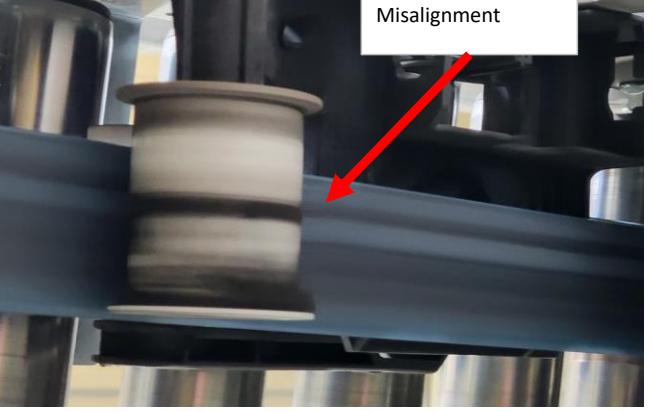
Job Scope

All job plan estimates are based off of work being performed on a ground level conveyor. All elevated or excessively long conveyors will require more techs & time

Job Plan Seq.	Task Description	Task Duration	# of Techs	Total Est Labor Hours	Reference Pictures
10	Check for any open or recently repaired WO's in EAM/ ezRME. Check for any open PdM work orders or Waites Wireless/ Monitron alarms	0.03	1	0.03	
20	In ezRME, complete a PTP for all technicians completing this PM and submit any other permits for approval	0.02	1	0.02	
30	Ensure you have all of your PPE (safety shoes, gloves, safety glasses, bump cap, reflective vest, Electrical PPE appropriate for disconnect)	0.02	1	0.02	
40	Always follow OSHA, LOTO, NFPA, FTHA, and Amazon policies before placing hands on equipment	0.02	1	0.02	

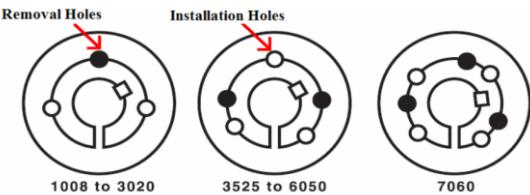
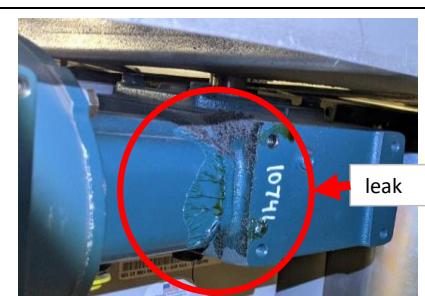
Before shutting down and locking out, follow these steps

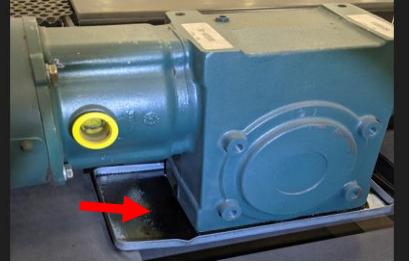
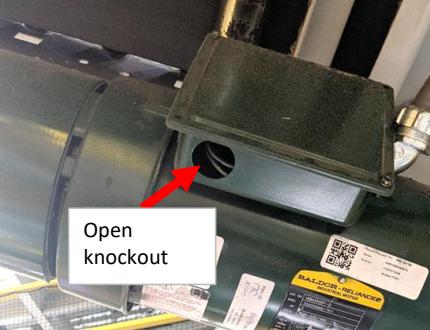
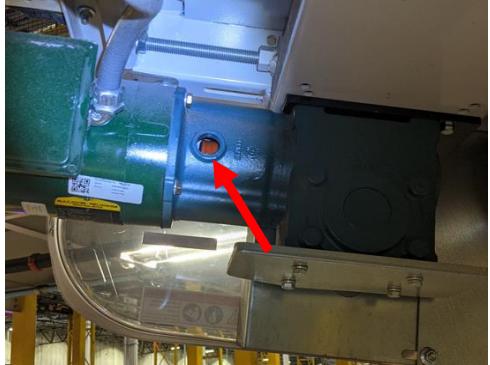
50	Inspect guide rails: no signs of tote/package shavings, loose or missing hardware	0.02	1	0.02	
60	If safety netting is present, ensure it is secure the length of conveyor with no rips	0.02	1	0.02	
70	Inspect that all rollers are turning concentric with no up/down or side-to-side movement	0.02	1	0.02	
80	Listen for any unusual noise or excessive vibrations.	0.03	1	0.03	

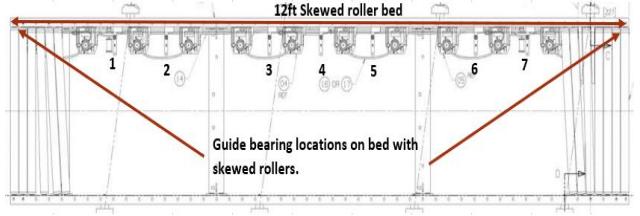
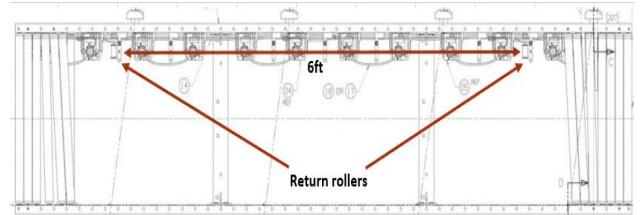
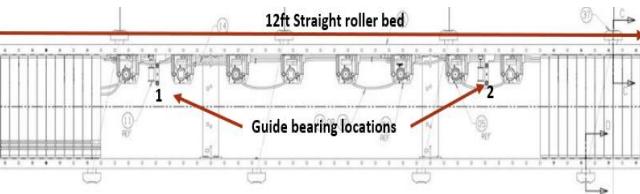
90	Inspect that drive cover (if present) and bearing caps are in place and not damaged	0.02	1	0.02	
100	Watch the belt tracking. It should ride in center of pulleys at both ends and all take-up pulleys.	0.02	1	0.02	
110	Watch the belt tracking over the guide rollers & skates. Belt should ride in bearing guides when skates actuated, bearings free spin	0.02	1	0.02	
120	Inspect all electrical conduit and j-boxes, no visible damage or exposed wires.	0.02	1	0.02	
130	Inspect control wiring for loose or hanging wire	0.02	1	0.02	
140	Ensure all photo eye cables are properly secured as to prevent damage from belts, sheaves etc.	0.03	1	0.03	

150	Inspect skate assemblies air regulator for leaks, damage, fluid in regulator, set at 7psi. If water is found in the trap, purge it during the PM	0.02	1	0.02	
160	Inspect air for Nitta belt tension regulator for leaks, damage, fluid in regulator, & set at 45psi. If water is found in the trap, purge it during the PM	0.02	1	0.02	
170	Inspect emergency pull cord routing to ensure there are no obstructions	0.02	1	0.02	
180	Pull estop cable to ensure that conveyor shuts off properly. Restart conveyor and test every e-stop for the equipment	0.05	1	0.05	
190	LOTO Equipment: Complete LOTO Application portion of current LOTO Tracking Form THIS LOTO INCLUDES PNEUMATIC SOURCES!	0.05	1	0.05	
200	Verify LOTO, equipment should not start up	0.02	1	0.02	

LOCKED OUT Drive Package Inspections

210	For most taper lock bushing, check that there are two setscrews on sprocket taper lock are in place and tight, replace/tighten as needed. See tightening torques & number of bolt specs in the picture to the right.	0.02	1	0.02	 Figure 1 – Taper-Lock Bushing Installation Diagrams																																																																										
220	If the taper lock has a keyway present, ensure that the key is tightly in place with no damage or rolling of the keyways	0.02	1	0.02	<p style="text-align: center;">Taper-Lock® Bushings</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th rowspan="2">Bushing Style</th> <th colspan="2">Bolts</th> <th colspan="2">Torque Wrench</th> </tr> <tr> <th>Qty.</th> <th>Size</th> <th>lb-ft</th> <th>lb-in</th> </tr> </thead> <tbody> <tr><td>1008</td><td>2</td><td>1/4-20 x 1/2</td><td>4.6</td><td>55</td></tr> <tr><td>1108</td><td>2</td><td>1/4-20 x 1/2</td><td>4.6</td><td>55</td></tr> <tr><td>1210</td><td>2</td><td>3/8-16 x 5/8</td><td>14.6</td><td>175</td></tr> <tr><td>1610</td><td>2</td><td>3/8-16 x 5/8</td><td>14.6</td><td>175</td></tr> <tr><td>2012</td><td>2</td><td>7/16-14 x 7/8</td><td>23.3</td><td>280</td></tr> <tr><td>2517</td><td>2</td><td>1/2-13 x 1</td><td>35.8</td><td>430</td></tr> <tr><td>3020</td><td>2</td><td>5/8-11 x 1 1/4</td><td>66.7</td><td>800</td></tr> <tr><td>3525</td><td>3</td><td>1/2-13 x 1 1/2</td><td>83.3</td><td>1000</td></tr> <tr><td>4030</td><td>3</td><td>5/8-11 x 1 3/4</td><td>141.7</td><td>1700</td></tr> <tr><td>4535</td><td>3</td><td>3/4-10 x 2</td><td>204.2</td><td>2450</td></tr> <tr><td>5040</td><td>3</td><td>7/8-9 x 2 1/4</td><td>258.3</td><td>3100</td></tr> <tr><td>6050</td><td>3</td><td>1 1/4-7 x 3 1/2</td><td>651.7</td><td>7820</td></tr> <tr><td>7060</td><td>4</td><td>1 1/4-7 x 3 1/2</td><td>651.7</td><td>7820</td></tr> </tbody> </table>	Bushing Style	Bolts		Torque Wrench		Qty.	Size	lb-ft	lb-in	1008	2	1/4-20 x 1/2	4.6	55	1108	2	1/4-20 x 1/2	4.6	55	1210	2	3/8-16 x 5/8	14.6	175	1610	2	3/8-16 x 5/8	14.6	175	2012	2	7/16-14 x 7/8	23.3	280	2517	2	1/2-13 x 1	35.8	430	3020	2	5/8-11 x 1 1/4	66.7	800	3525	3	1/2-13 x 1 1/2	83.3	1000	4030	3	5/8-11 x 1 3/4	141.7	1700	4535	3	3/4-10 x 2	204.2	2450	5040	3	7/8-9 x 2 1/4	258.3	3100	6050	3	1 1/4-7 x 3 1/2	651.7	7820	7060	4	1 1/4-7 x 3 1/2	651.7	7820
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230	Verify motor package is installed square and all hardware is tight.	0.1	1	0.1																																																																											
240	Verify pulley are install square and aligned with the Nitta belt.	0.1	1	0.1																																																																											
250	Inspect for gearbox for oil leaks. There should be no oil at shaft seals, bottom of gear box, or drip pan.	0.02	1	0.02																																																																											

260	Clean the drip pan of oil, dust, or debris	0.02	1	0.02	
270	Check both the motor & gearbox for damage or missing or loose covers.	0.02	1	0.02	
280	If possible, remove the coupling plug and inspect the coupling. Ensure that there is still tight contact between the coupling halves and the spider and that the set screws are tight	0.05	1	0.05	
290	Clean motor fan. Use vacuum or canned air. There should be no visible dust or debris after cleaning	0.03	1	0.03	
300	After inspection, make sure that all motor/ gearbox guards are in place and that they are tight, secure, and with no holes or damage	0.08	1	0.08	
LOCKED OUT: Roller and Guide bearing Inspections					
310	Ensure there are no more than 12 skewed rollers at the infeed of bed and the skew is between 2"-3" and skewed away from the belt. Correct by straightening out rollers if needed.	0.1	1	0.1	

320	Verify (7) guide bearings on 12ft section bed with skewed rollers are installed and there is no more than 2ft spacing between.	0.1	1	0.1	
330	Ensure there are 2 return rollers per 12ft section of conveyor installed at least 6ft apart but no more than 8ft.	0.2	1	0.25	
340	Ensure every 12ft section of bed has 2 guide bearings installed 6ft apart.	0.2	1	0.25	
350	Visually inspect the rollers for dents, bending, wear, damage or label/debris buildup. Clean as necessary	0.03	1	0.03	
360	Make sure the pop out axle secure, functional with no damage/ wear	0.03	1	0.03	
LOCKED OUT Nitta belt components					
370	Inspect belt condition. There should be no missing/hanging edges, fraying, or cracks on top or bottom of belt. Ensure that the width is > 1.5in	0.08	1	0.08	

380	Check for wear or damaged to skate assembly rollers and return rollers	0.08	1	0.08	
390	Ensure DZCs cable are connect and air lines for damage	0.03	1	0.03	
400	Inspect Nitta belt tensioner: the cylinder should be extended from 1 - 4 inches	0.03	1	0.03	
410	Inspect air take-up cylinder for free movement, smooth operation, & no binding	0.03	1	0.03	
420	Inspect charge end pulleys. Check for damage & cotter pins in place: 2 on steerable, 1 on idler	0.05	1	0.05	
430	Inspect discharge end pulleys. Check for damage & cotter pins in place: 2 on steerable, 1 on idler	0.05	1	0.05	
440	O-rings present on each roller, no cracking, damage, or spots thinner than the original band width. Make sure the O-ring grooves do not have excessive buildup	0.03	1	0.03	
Closing					
450	Wipe down all surfaces: no visible dust, debris, fingerprints or lubricants	0.05	1	0.05	
460	Reverse Lockout: Complete LOTO Removal portion of current LOTO Tracking Form	0.03	1	0.03	
470	Conduct startup and test with normal production, no unusual noises or vibrations	0.02	1	0.02	

480	Fill line with the appropriate product, totes or boxes. Ensure photo eyes are working properly when they are blocked the skates should disengage and the rollers should stop. When the photo eyes are cleared the skates should re-engage and roller should start running again.	0.08	1	0.08						
490	Close out PM work order and ensure that all follow-ups found have been created	0.05	1	0.05						
Total Job Plan Duration:		2.17	Total Backlog Labor Hours:		2.27					
Safety Requirements										
Permits:	Confined Space Entry	NO	Hot Work	NO	LOTO					
PPE:	safety shoes, gloves, safety glasses, bump cap, reflective vest, Electrical PPE appropriate for disconnect									
Additional Comments: All estimates are only that, estimates. Time may be adjusted based on access, ease of entry, elevated work, number of guards & belly pans, etc., etc. The estimates are only meant to be a reference										
Special Tools Needed: none										