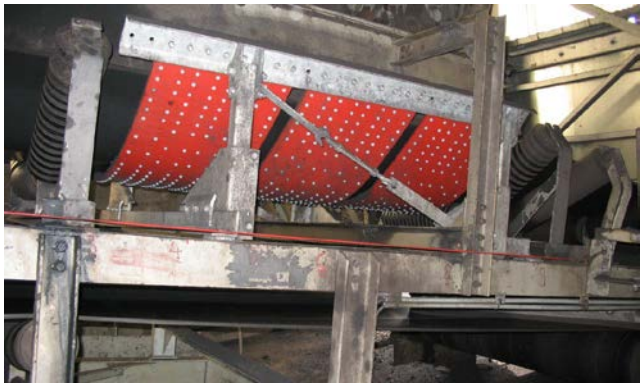
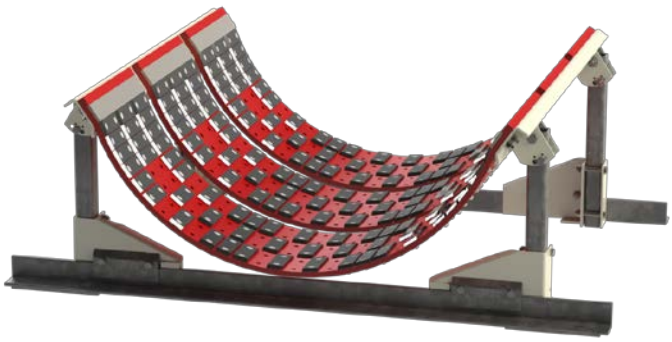
Installation Instructions: K-Flexal® Elastic Belt Support

Kinder Australia product:	K-Flexal® Elastic Belt Support System
Product category:	Belt Support
Issue date:	14.10.2017
Revision:	0

Overview:

The K-Flexal® Elastic Belt Support System is used to provide proper belt support under a conveyor transfer point and protect the belt from early failure due to pinch point damage. This product should be used where a static impact load zone is causing belt damage as the elastic saddles absorb much more of the burden impact. These saddles are fitted with UHMWPE wear pads for low friction running and a surface which can be easily replaced.





Procedure:

1. Run the conveyor until all the material is removed.
2. Isolate, lock and danger tag the conveyor at the main positive isolator in accordance with the appropriate health and safety regulations in force at your site to prevent unauthorized starting.
3. Remove any existing impact cradle or impact frames in the load zone.
4. Using the table in the provided drawing, select the appropriate dimensions based on the lead in/out roller set in your system. You will need to know the angle of the lead in/out idler frames and the height from the conveyor stringer up to the top of the centre roller. These lead in/out idler frames should be set immediately before and after the K-Flexal® unit.
5. To run the unit in a 70° trough arrangement, 5 roll trough sets must be used as lead in/out idler frames (see below example).

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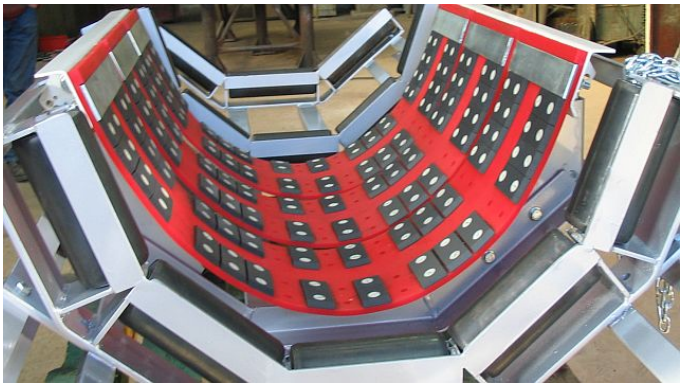
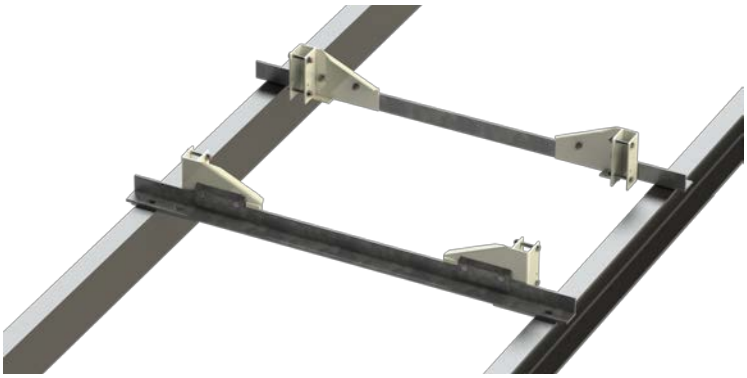


6. Set the “E” value (see accompanying drawing) across the wing support adjusters on both transoms. Be sure to centre them across the length of the transom. Then tighten the wing support adjustment clamp bolts and place the transoms over the stringers with angles toe out as shown below.



7. Place the wing support square tubes in the wing support adjusters at each corner and set the “A” value (see accompanying drawing). Ensure the large top hole through the square tube runs parallel with the system and is on the inside. Tighten the two clamp bolts for each square tube.

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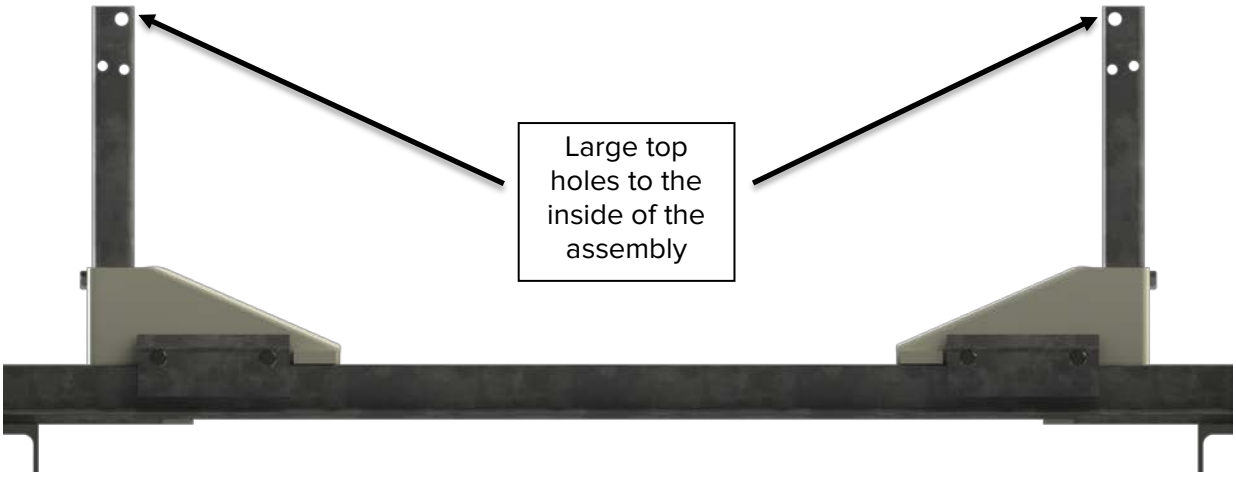

8. Place the wing rail on top of the square tubes and fasten with provided M16 pivot bolts through the large top hole. Leave them loose until angle is set.

9. For mounting of the frame directly to the stringers, drill Ø17 holes through the stringer top flange where the slots are in the K-Flexal® frame. You may choose to mark and move the frame before drilling to avoid damage. Use the M16 bolts provided to fix the frame to your system. Alternatively, the provided clamp plates may be used to extend around the top flange of your conveyor stringer as shown below.

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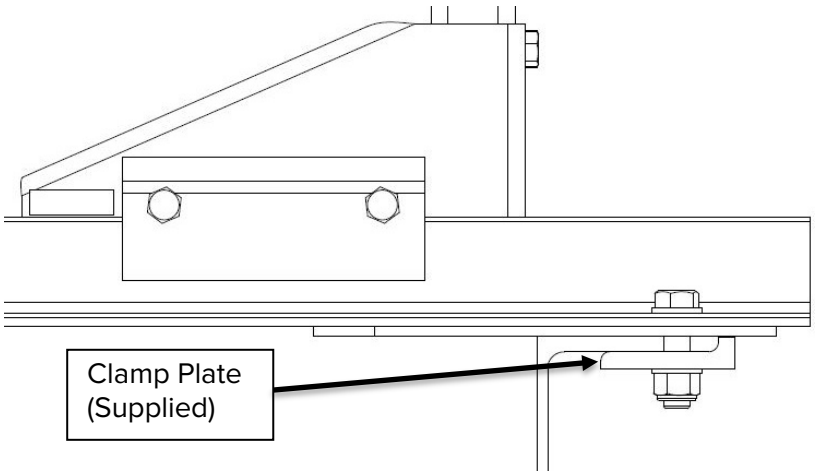
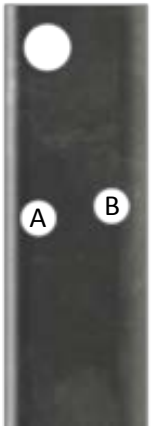


10. For setting of correct angle, refer to the below diagram and table for which holes to match up. Once selected, use the provided fasteners to fix the angle. Tighten both the M16 pivot bolts and the smaller angle fix bolts on each corner.



Roller Trough Angle	K-Flexal® Trough Angle	Hole
20°	30°	2+A
30°	40°	1+B
35°	40°	1+B
45°	55°	2+B
45°+	70°	3+B

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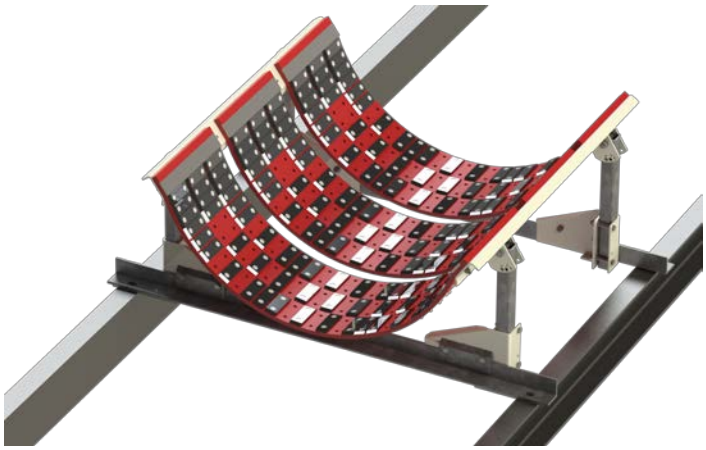
11. Fit the saddles through the wing rail bolt holes and tighten the provided nyloc nuts. The saddle location in the frame can be set as required for the application. For a 1200BW, three saddle assembly, there should be a one hole gap between each of the saddles. For 600-800BW models, all holes will be used in the frame for three saddle models. Generally the saddles should be placed in the main load stream location.



12. Check the distances from the bottom of the belt to the saddle. When unloaded, a gap of approximately 5mm at the sides and 10-20mm at the centre should be maintained. **Adjust the unit to suit if this is not met.**

13. Check all bolts are securely fastened. See below table for torque settings. Test run the conveyor, checking that none of the saddles are being pulled along the path of the belt, indicating insufficient clearance between the saddle and the belt when unloaded.

Fastener Size	Torque Requirement
M10	55 N.m.
M12	92 N.m.
M16	215 N.m.

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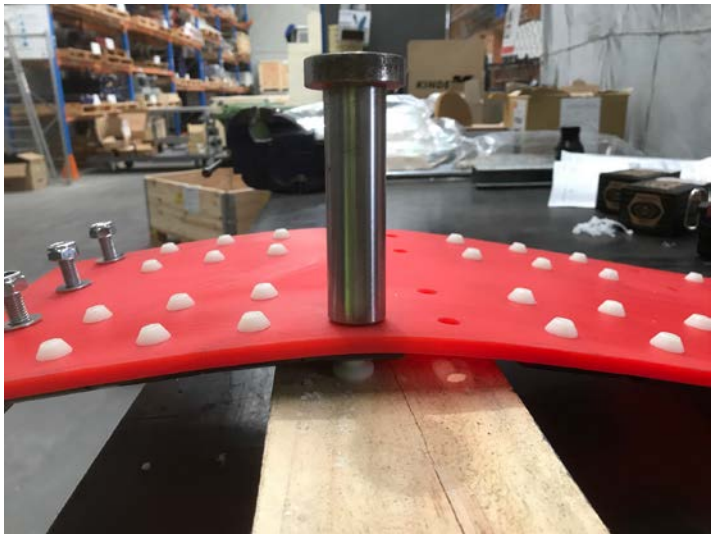
Replacement of UHMWPE wear pads:

1. Please contact Kinder to source new rivets and wear pads to suit your system and the K-Flexal® Rivet Replacement Tool. Also, we are also able to fit new rivets and wear pads for you upon sending the saddles to us for refurbishment.

2. With a K-Flexal® Rivet Replacement Tool, hammer the rivet clamp end over the back of the rivet. With a Ø9mm drill bit, drill through the tool into the rivet at least 10mm deep. Then with a chisel, tap the rivet on the back of the saddle to break the retaining head off.

3. To fit a new wear pad, with the saddle upside down as per rivet removal and place it in the desired location with the holes lined up. Fit the rivet below the saddle with the rivet pointing upwards. Place the K-Flexal® Rivet Replacement Tool over the hole and hit the tool down to press the rivet through the saddle. The void in the tool allows the rivet to protrude through the saddle whilst also applying pressure on the saddle around it.



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