# Flexco Slider/Impact Bed

# Installation, Operation and Maintenance Manual







# Flexco Slider/Impact Beds

Serial Number:		
Purchase Date: ———		
Purchased From:		
Installation Date:		

Serial number information can be found on the Serial Number Label included in the Information Packet shipped with the impact bed.

This information will be helpful for any future enquiries or questions about replacement parts, specifications or troubleshooting.

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#### 1.1 General Introduction

We at Flexco are very pleased that you have selected a Flexco Slider Bed or Flexco Impact Bed for your conveyor system.

This manual will help you to understand the operation of this product and assist you in making it work up to its maximum efficiency over its lifetime of service.

It is essential for safe and efficient operation that the information and guidelines presented be properly understood and implemented. This manual will provide safety precautions, installation instructions, maintenance procedures and troubleshooting tips.

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Visit www.flexco.com for other Flexco locations and products.

Please read this manual thoroughly and pass it on to any others who will be directly responsible for installation, operation and maintenance of this product. While we have tried to make the installation and service tasks as easy and simple as possible, it does however require correct installation and regular inspections and adjustments to maintain top working condition.

#### 1.2 User Benefits

The "transfer point" is integrally important to the successful operation of a belt conveyor system. The material transferred from one conveyor (or other source) to another conveyor must be done without damaging the conveyor's key component...the belt. A correctly-selected impact bed is critical for this task.

Since material size, weight and the drop height can cause considerable impact force that can damage the belt, the right impact bed must be chosen to absorb the impact energy and minimize any damage to the beltline.

The proper impact bed can also support the belt in the loading zone to prevent material spillage.

## 1.3 Proper Impact Bed Selection

Flexco Impact beds are expressly designed to absorb energy from falling materials. The bed model should be spec'd to the needs of the conveyor application. To do this, the following data points are needed (Also see the Flexco Impact Bed Spec Sheet on Page 7).

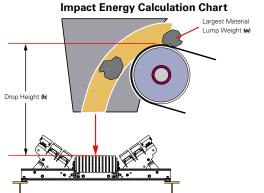
- 1. **Belt Width** This is typically a simple check and the only additional information that would be required is if belt width is inconsistent with structure width.
- 2. Troughing Angle What is the angle of the current bed or troughing set?
- 3. Roller Diameter Rollers are typically 125mm or 150mm
- 4. Bed Length Typically 1200mm or 1500mm. Special lengths available upon request.
- 5. Drop Height and Lump Size & Weight This is the critical information required. NOTE: Flexco Slider Bed with Core Tech roll not for use in impact zone.
  - a. Drop Height The measurement from where the material leaves the feeding conveyor to where it makes contact with the receiving conveyor.
  - b. Lump Size and Weight The lump size The largest dimension of the material pieces dropping. The material weight is of the largest lump size found and weighed.
  - c. Chart for Rough Calculations Weighing is always more accurate, but the chart values will give a rough weight estimate.

Material	kg/m³
Coke	657
Fertilizer	961
Bauxite, crushed	1282
Potash	1282
Coal, Bituminous, Solid	1346
Coal, Anthracite, Solid	1506
Slag, Solid	2114
Chromium Ore	2163
Halite (Salt), Solid	2323
Phosphorus	2339
Stone (Common, Generic)	2515
Limestone, Solid	2611
Shale, Solid	2675
Granite, Solid	2691
Gypsum, Solid	2787
Trap Rock, Solid	2883
Dolomite, Solid	2899
Malachite (Copper Ore)	3860
Platinum Ore	4293
Hematite (Iron Ore)	5158

**NOTE:** Shale is approximately the same as limestone.



Now you can calculate the impact energy (in kg-m) and make the bed selection by the rating chart.



By using this simple kg-m formula, for whatever your application, you will know the load capacities needed to specify the best Impact Bed to get the job done right.

#### Calculate Impact Energy:

Lump weight	kg
x Drop length	m
Total	kg-m

Match kg-m to bed rating:		
0 kg-m	<i>EZSB-C</i>	
0-25 kg-m	<i>EZSB-I</i>	
	or EZIB-L	
25-100 kg-m	<i>EZIB-M</i>	

A sample Impact Bed Spec Sheet is included (Page 7) for future use.

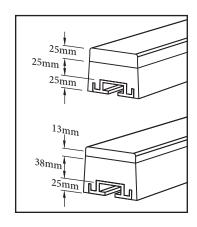
## 1.4 Selecting the Right Impact Bar

The primary purpose of the impact bars is to absorb the energy of the falling material and prevent damage to the belt. They are the first line of defence. Typical impact bars can be purchased with a 13mm UHMW top cover or with a longer-wearing 25mm top cover. Care should be taken to choose the right top cover thickness for your application to ensure maximum energy absorption.

Generally, impact bars are 75mm high and 100mm wide. They are made up of an aluminum extrusion base, an elastomer (rubber) centre, and a low-friction (UHMW) top cover. The extrusion takes up about 25mm of the bar's height. That means, depending on the thickness of the top cover chosen 13mm or 25mm, the energy-absorbing rubber core is either 38mm or 25mm. Reducing the rubber core of each bar by 50% in heavier impact applications can reduce the impact bed's effectiveness and performance.

Some general guidelines:

- 1. The impact bed's primary use is for dust suppression with no sizeable amount of impact (for loads not exceeding 50 kg-m of impact energy), choose the 25mm top cover. It will offer twice the service life with no measurable performance degradation.
- 2. For applications with 50 kg-m or more of impact force, the 13mm topcover is strongly recommended. It will provide 50% more energy impact protection for the belt.



#### 1.5 Installation and Service Option

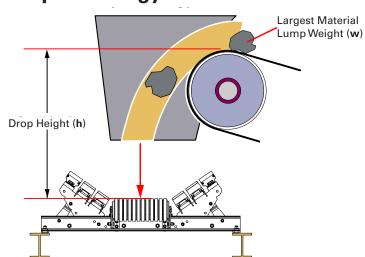
The Flexco Impact Bed is designed to be easily installed and serviced by your on-site personnel. However, if you would prefer complete turn-key factory service, please contact your local Flexco Field Engineer or your Flexco Distributor.

# 1.6 Flexco Impact Bed Spec Sheet

#### **CUSTOMER INFO:**

Company Name:				
Address:	ddress: Date:			
		Phone #:		
Contact Name:		Fax #:		
Title/Position:		e-Mail:		
Converyor Name:	PO #:	Dist	ributor:	
	A Mounting Bolt Center-to-C	enter		Idler Length 1
	B Center Roll Height Above I	Mounting Base		Idler Length 2
	C Inside Structure Dimension	n		Idler Length 3
	D Trough Angle			
	E Belt Width	<u>/</u>		* 4
	F Length of Load Zone	1	2 3	D
	G Material			<b>1</b>
	-			
Length Width Hei	ght I Maximum Lump Size	€	A	<b>&gt;</b>
	J Tons per Hour	<del></del>	с	<del></del>
	K Belt Speed		Belly Pan: ☐ Yes ☐ No	
	W Maximum Lump Weight			

## **Impact Energy Calculation Chart**



#### **Impact Energy**

Lump Weight (w)

Drop Height (h) x

Total - kg-m (lb-ft)

See below for bed recommendation/selection

#### **Bed Selection:**

No impact □ EZSB-C
Up to 25 kg-m (200 lb-ft) □ EZSB-I □ EZIB-L
25 to 100 kg-m (200 to 750 lb-ft) □ EZIB-M



## **Section 2 - Safety Considerations and Precautions**

Before installing and operating the Flexco Slider/Impact Bed, it is important to review and understand the following safety information.

There are set-up, maintenance and operational activities involving both stationary and operating conveyors. Each case has a safety protocol.

## 2.1 Stationary Conveyors

The following activities are performed on stationary conveyors:

• Installation

- Impact bar replacement
- Skirt rubber adjustments
- Cleaning

#### Repairs

#### **A** DANGER

It is imperative that local Lockout/Tagout/ Safety regulations, be followed before undertaking the preceding activities. Failure to use LOTO exposes workers to uncontrolled behavior of the impact bed caused by movement of the conveyor belt. Severe injury or death can result.

#### Before working:

- Lockout/Tagout the conveyor power source
- Disengage any takeups
- Clear the conveyor belt or clamp securely in place

#### **A** WARNING

**Use Personal Protective Equipment (PPE):** 

- Safety eyewear
- Hardhats
- Safety footwear

Close quarters and heavy components create a worksite that compromises a worker's eyes, feet and skull.

PPE must be worn to control the foreseeable hazards associated with conveyor belt components. Serious injuries can be avoided.

## 2.2 Operating Conveyors

There are two routine tasks that must be performed while the conveyor is running:

- Inspection of the sealing performance
- Dynamic troubleshooting

#### **A** DANGER

Every belt conveyor is an in-running nip hazard. Never touch or prod an operating impact bed. Conveyor hazards cause instantaneous amputation and entrapment.

## **A WARNING**

Conveyor chutes contain projectile hazards. Stay as far from the impact bed as practical and use safety eyewear and headgear. Missiles can inflict serious injury.

## **A** WARNING

Never adjust anything on an operating impact bed. Unforseeable materials falling into the chute can cause violent movements of the impact bed structure. Flailing hardware can cause serious injury or death.

## **Section 3 - Pre-Installation Checks and Options**

#### 3.1 Checklist

- Check the model and size of the impact bed. Is it the right one for your beltline?
- Check the bed to be sure all the parts are included in the shipment.
- Find the Information Packet in the shipment.
- Review the "Tools Needed" section on the front of the installation instructions.
- Prepare the conveyor site:
  - Lift the belt in the transfer zone. Use a lifting hoist or Flexco's Belt Lifters.
  - Remove the old impact bed or impact idlers.
  - Inspect the conveyor structure for damage or misalignment. Make adjustments as necessary.
  - Troughing idlers should be installed directly before and after the new impact bed.



## **Section 3 - Pre-Installation Checks and Options**

## 3.2 Optional Installation Accessories

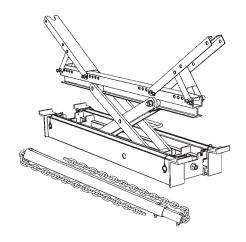
Optional tools can make the installation of the Flexco Slider/Impact Bed easier and faster.

#### Flex-Lifter Conveyor Belt Lifter

Description	Ordering Number	Item Code
Medium Flex-Lifter 900 - 1500 mm	FL-M-AUS	76979
Large Flex-Lifter 1200 - 1800 mm	FL-L-AUS	76980
XL Flex-Lifter 1800-2400 mm	FL-XL	76983

#### Flex-Lifter<sup>™</sup> Conveyor Belt Lifter

The Flexco® Flex-Lifter makes the job of lifting the conveyor belt easy and safe. Using two Flex-Lifters, the belt can be quickly lifted out of the way to install the impact bed. The Flex-Lifter has the highest safe lift rating available at 1800 kg on Medium and Large, and 2725 kg on XL. And it's versatile. It can also be used to lift topside or return side belt for splicing, roller replacement or other maintenance jobs. Available in three sizes: Medium for belt widths 900 - 1500mm, Large for belt widths 1200 - 1800mm, and XL for belt widths 1800 - 2400mm.



#### **Impact Bed Shim Kits**

Description	Ordering Number	Item Code	Wt. Kg.
Shim Kit - L Metric	SHIM-LDKIT	82393	6.2
Shim Kit - M Metric	SHIM-MFKIT	82394	9.3

#### **Shims**

Depending on your idler size, shimming may be required. Your impact bed has been supplied with shims. Shim the impact bed up or the lead and trailing idler frames up as required to ensure the impact bed is level with the centre roll height.

#### **Impact Bed Handy Wrench**

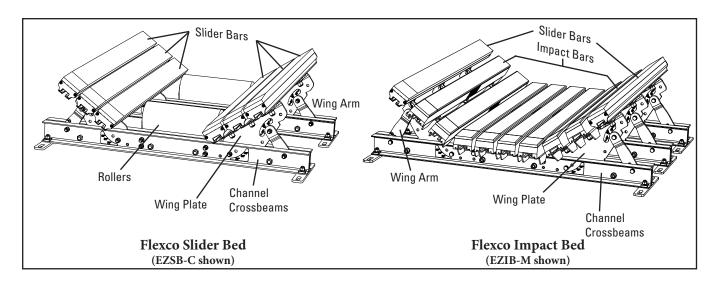
Description	Ordering	Item	Wt.
	Number	Code	Kg.
Impact Bed Handy Wrench	HW-IMPB	76939	0.7



#### Impact Bed Handy Wrench

A handy ratcheting spanner with two common sizes (19mm and 24mm) for easier installation and maintenance of impact beds.

## 4.1 Flexco Slider/Impact Beds



Physically lock out and tag the conveyor at the power source before you begin installation.

Caution: Components may be heavy. Use safety approved lifting procedures.

Before Installation: Inspect structure. Shim bed or idlers as required to ensure impact bed is level with the centre roll height. NOTE: Installation of an idler is required 25-150mm before and after a Flexco Flexco Slider or Impact Bed. Do not place idlers between a series of two beds. If there are more than two beds, then add an idler station between them.

#### **Tools Needed:**

- Welder - 19mm open-ended spanner

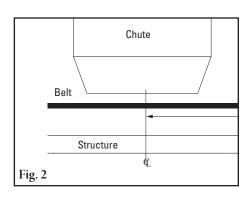
- Grease Pencil - 19mm and 24mm deep sockets

- Tape Measure with ratchet or impact wrench

- Cutting torch - Flex-Lifter™ (helpful)

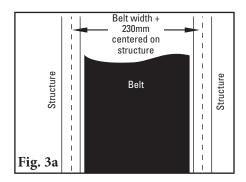
- 90° square

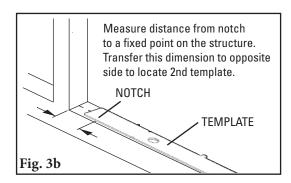
- Free the area of previous system. Remove material (idlers, etc.) from the area of desired installation. Loosen or remove skirting material for extra space. If available, use Flex-Lifters before and after the load zone to lift the belt out of the way.
- 2. Visually locate centre of loading zone. Determine the centre of the load zone on the side of the structure and mark (Fig. 2). Mark and measure from the end of template to a fixed point on the structure, then transfer this dimension to the opposite side of the structure.



## 4.1 Flexco Slider/Impact Beds (cont.)

**3. Locate mounting templates.** Measure and mark where the center of the template will sit on the structure by measuring belt width + 230mm and centering this on the structure (Fig. 3a). Often this can be centered on the holes left from the previous idlers. Lengthwise, center template over the center mark from Step 2. Align notches on mounting templates with marks on structure and mark all the holes (Fig. 3b). Drill or torch holes. Included mounting bolts should fit freely through the holes.

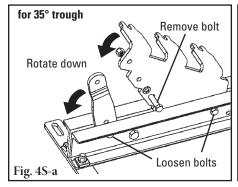


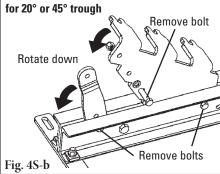


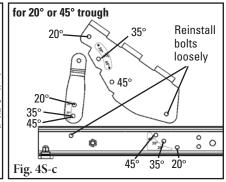
#### If installing a slider bed:

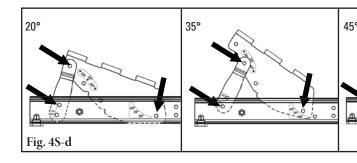
4S. Bed Preparation - lower wing plates, install idler. All beds come preset with a 35° trough. If 35° trough is preferred setting, loosen bolts at base of wing arms and wing plates. Remove bolt between wing arms and wing plates. Rotate wing arms and wing plates down (Fig. 4S-a).

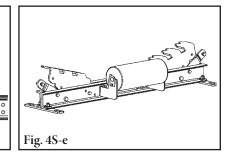
If 20° or 45° trough is preferred setting, remove bolts (Fig. 4S-b). Reassemble bolts loosely at base of wing arms and wing plates in the correct holes for 20° or 45° trough per affixed labels (Fig. 4S-c). Confirm correct setting as shown below (Fig. 4S-d). Confirm crossbeam assembly is ready for assembly installation to conveyor (Fig. 4S-e).





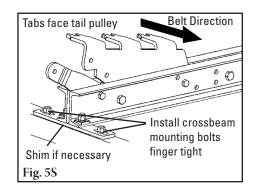






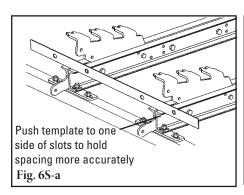
## 4.1 Flexco Slider/Impact Beds (cont.)

58. Install channel crossbeams. Position all channel crossbeams onto the conveyor structure with the tabs on the wing plates facing the tail pulley, aligning with the mounting holes from Step 3. Insert the channel crossbeam mounting bolt and leave finger tight (Fig. 5S). Use a shim under mounting plate if needed. Verify the height of centre roller on leading and trailing idlers.



6S. Square up all channel crossbeams. With a square, ensure the first channel crossbeam is perpendicular to the conveyor structure and belt, then tighten in place. Next, space the remaining channel crossbeams with the correct centre-to-centre spacing. Use tabs on provided template to set spacing (Fig. 6S-a). If this is not possible, use dimensions in Table 3 (Fig. 6S-b). Tighten all bolts in place.

**Note:** Centre-to-centre spacing must be maintained to within +/- 3mm.



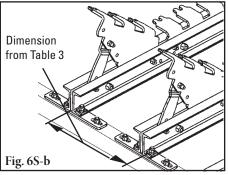
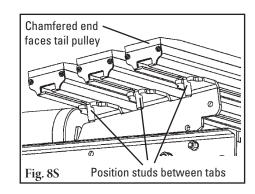
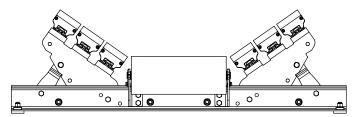


Table 3: Centre-to-centre (C-C) Dimensions

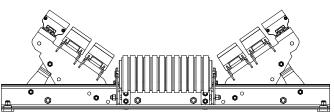
Bed Model	1200mm 1500mm	
EZSB-C	660mm	864mm
EZSB-I	660mm	864mm

- 7S. Install idlers. If idlers were removed at any point during installation, reinstall now.
- 8S. Install impact/slider bars to wing plates. Starting with the innermost bars, set the bars in place. Position the studs between the tabs in the wing assembly while confirming the chamfer of the bar is positioned facing the tail pulley (Fig. 8S). See below for bar assembly configuration based on bed model.









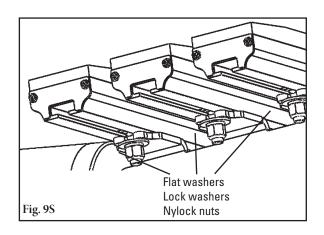
EZSB-4I has 4 impact idlers under center, and EZSB-5I has 5. All (white) impact bars with support bars on side troughs, except last outboard (purple) slider bar on each side.



## 4.1 Flexco Slider/Impact Beds (cont.)

98. Fasten all impact bars. With all impact bars correctly positioned on the wing assemblies, install on each stud a flat washer, lock washer and a nylock nut (Fig. 9S). Tighten to 135N-m torque.

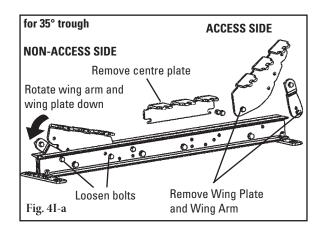
# Skip to Step 10 - Final Assembly (Page 17)

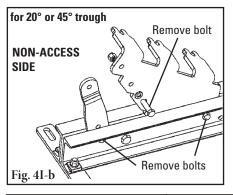


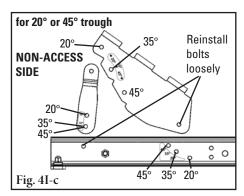
#### If installing an impact bed:

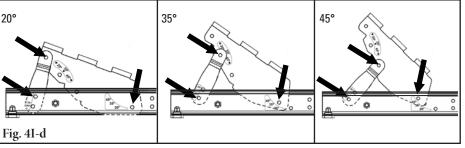
4I. Bed preparation - Lower/remove wing plate/centre plate. All beds come preset with a 35° trough. If 35° trough is preferred setting, loosen bolts at base of wing plate and wing arms on non-access side and remove wing plates and wing arms completely from the access side. To remove centre plate, loosen non-access side bolt and remove the access side bolt (Fig. 4I-a).

If 20° or 45° trough is preferred setting, remove bolts (Fig. 4I-b) and reassemble non-access side wing arm and wing plate to the correct holes for 20° or 45° trough per affixed labels (Fig. 4I-c). Confirm correct setting as shown below (Fig. 4I-d). Prepare crossbeam for installation by removing centre plate and access side wing assembly (Fig. 4I-a).



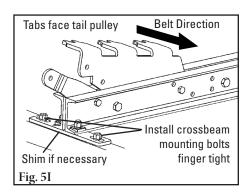






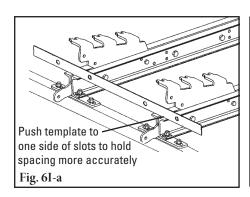
## 4.1 Flexco Slider/Impact Beds (cont.)

5I. Install channel crossbeams. Position all channel crossbeams onto the conveyor structure with the tabs on the wing plates facing the tail pulley, aligning with the mounting holes from Step 3. Insert the channel crossbeam mounting bolt and leave finger tight (Fig. 5I). Use shim under mounting plate if needed. Verify the height of centre roller on leading and trailing idlers.



61. Square up all channel crossbeams. With a square, ensure the first channel crossbeam is perpendicular to the conveyor structure and belt, then tighten in place. Next, space the remaining channel crossbeams with the correct centre-to-centre spacing. Use tabs on provided template to set spacing (Fig. 6I-a). If this is not possible, use dimensions in Table 3 (Fig. 6I-b). Tighten all bolts in place.

Note: Centre-to-centre spacing must be maintained to within +/- 3mm.



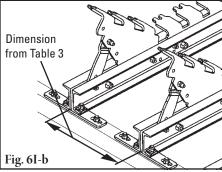
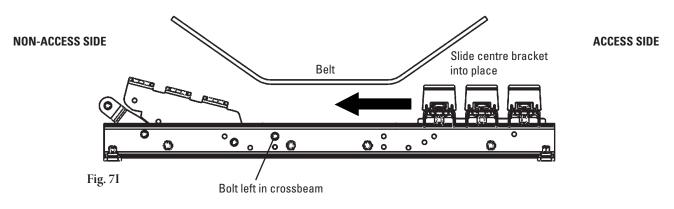


Table 3: Centre-to-centre (C-C)
Dimensions

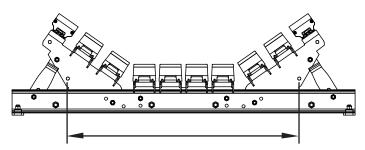
Bed Model	1200mm 1500mm	
EZIB-L	660mm	864mm
EZIB-M	406mm	559mm

7I. Install centre impact bars. Slide the centre bracket into the channel crossbeam. Tabs must face the tail pulley. Position studs between tabs in the centre bracket while confirming the chamfer of the impact bar is positioned facing the tail pulley. Tighten the nuts to the studs on the bars to 135N-m of torque. Slide this assembly into place under the belt until the notch on the centre bracket engages the bolt left in the channel crossbeam (Fig. 7I). Reinstall second bolt and tighten these two with 80N-m torque. After centre plate is installed, reinstall wing assembly to channel crossbeam per Step 4I for access side.

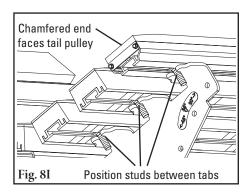


## 4.1 Flexco Slider/Impact Beds (cont.)

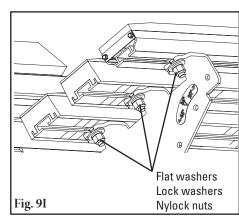
8I. Install bars to wing plates. Starting with the innermost bars, set the bars in place. Position the studs between the tabs in the wing assembly while confirming the chamfer of the bar is positioned facing the tail pulley (Fig. 8I). See below for bar assembly configuration based on bed model.



EZIB has bar supports under all white impact bars.



**9I.** Fasten all impact bars. With all impact bars correctly positioned on the wing assemblies, install on each stud a flat washer, lock washer and a nylock nut (Fig. 9I). Tighten to 135N-m torque.

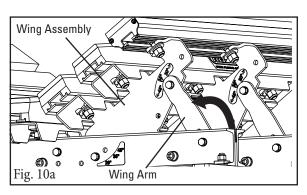


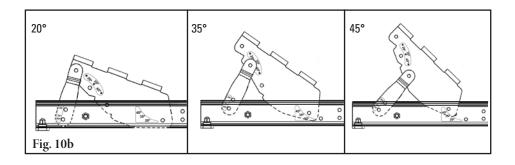
## 4.1 Flexco Slider/Impact Beds (cont.)

## **Final Assembly**

10. Lift wing assemblies into operating position. Lift wing assembly up to belt. Rotate wing arm up so that it supports the wing assembly for the correct degree trough angle (Fig. 10a). Insert bolt and ensure all wing plates are set to the preferred trough angle setting (Fig. 10b). Tighten bolts to 80N-m. torque. Also tighten bolts at base of wing plate and wing arm.

**Note:** This is easier when the skirt rubber has been removed.



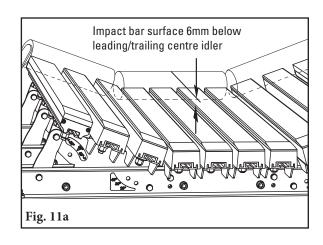


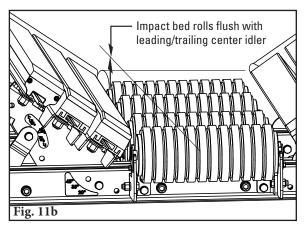
11. Confirm correct clearance between impact bars and belt. Reference Table 2 to confirm center roll height. On beds with full bars, this should provide a 6mm gap to lift the belt (Fig. 11a). On beds with rolls, this should align the idler with the rolls on the bed (Fig. 11b). If this gap or alignment is incorrect, shim idlers or bed accordingly.

**Table 2: Nominal Center Roll Height** 

Belt Width	600-1200mm	1350-1500mm	1800mm
Height	229mm	235mm	241mm

**12. Readjust skirt rubber** to maintain a good seal against impact bed. Replace all protective guarding around load zone.







## **Section 5 - Pre-Operation Checklist and Testing**

## 5.1 Pre-Op Checklist

- · Recheck that all fasteners are tight
- Check that empty belt is 6mm (1/4") above the impact bars
- Apply all supplied labels
- Be sure that all installation materials and tools have been removed from the belt and conveyor area

## 5.2 Test Run the Conveyor

• Run the conveyor for at least 15 minutes and confirm the skirt rubber is properly sealing the transfer point. Adjust skirt rubber as needed.

Flexco impact beds are designed to operate with minimum maintenance. However, to maintain superior performance some service is required. When the impact bed is installed a regular maintenance program should be set up. This program will ensure that the impact bed operates at optimal efficiency, and problems can be identified and fixed before any damage is done to the belt, the bed, other conveyor components, or structure.

All safety procedures for inspection of equipment (stationary or operating) must be observed. The Flexco Slider/Impact Bed operates in the loading zone of the conveyor system and is in direct contact with the moving belt. Only visual observations can be made while the belt is running. Service tasks can be done only with the conveyor stopped and by observing the correct lockout/tagout procedures.

## **6.1** New Installation Inspection

After the impact bed has run for a few days a visual inspection should be made to ensure the bed is performing properly. Make adjustments as needed.

## 6.2 Routine Visual Inspection (every 2-4 weeks)

A visual inspection of the impact bed can determine:

- If the skirt rubber is adequately keeping the chute area sealed
- If the impact bars are worn out and need to be replaced
- If there are excessive materials building up around the impact bed
- If there is damage to the impact bed, belt or other conveyor components

If any of the above conditions exist, a determination should be made on when the conveyor can be stopped for cleaner maintenance.

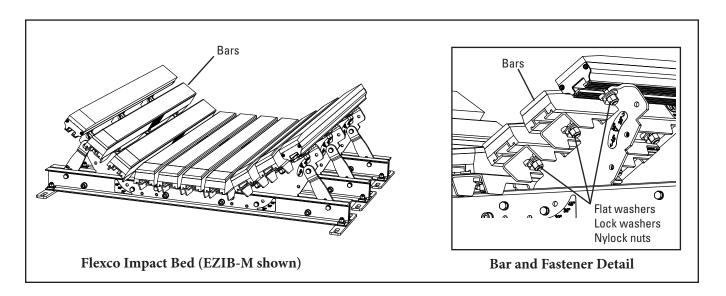
## 6.3 Routine Physical Inspection (every 6-8 weeks)

When the conveyor is not in operation and properly locked and tagged out, a physical inspection of the cleaner to perform the following tasks:

- Clean material buildup off the impact bed and conveyor structure.
- Closely inspect each impact bar for wear and damage. Bars are worn when the UHMW is worn down to or near the rubber. Replace if needed.
- Check the impact bed frame for damage.
- Inspect all fasteners for tightness and wear. Tighten or replace as needed.
- Inspect skirt rubber and adjust as needed to compensate for impact bar wear.
- When maintenance tasks are completed, test run the conveyor to ensure the impact bed is performing properly.



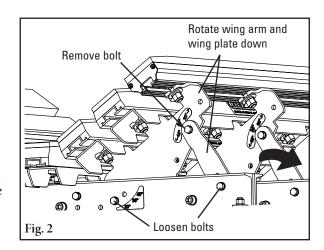
## **6.4** Bar Replacement Instructions

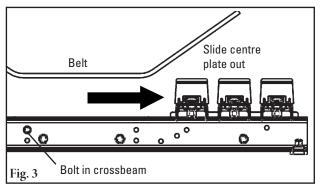


Physically lock out and tag the conveyor at the power source before you begin maintenance.

#### **Tools Needed:**

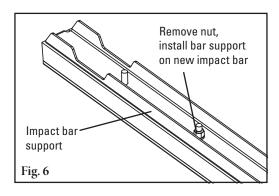
- 19mm open-ended spanner
- 19mm and 24mm deep sockets with ratchet or impact wrench
- Flex-Lifter™
- 1. Remove tension. Use a Flexco Belt Lifter or other appropriate lifting equipment to lift the belt off the impact bed.
- 2. Loosen wing assemblies. Loosen or remove bolts from each wing assembly; drop wing arms and wing plates to provide vertical clearance for inspection/removal of bars (Fig. 2).
- 3. Drop wing arms. If belt lifter is used, access to centre bars is available. If lifter is not used, remove one side of wing assemblies and remove centre plate to slide out and inspect/replace centre bars (Fig. 3).
- 4. **Inspect bars**. Check to see which bars are worn or damaged and need to be replaced.

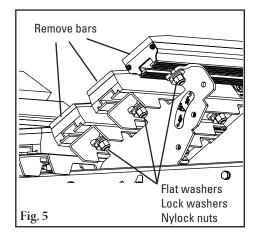




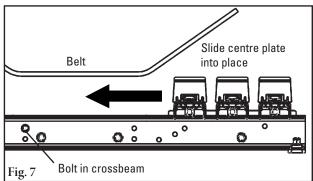
## 6.4 Bar Replacement Instructions (cont.)

- 5. Remove worn bars. Loosen and remove nuts at each cross stringer and remove the impact bars (Fig. 5).
- 6. Remove support bar (if attached). Remove the nuts holding the support in place and attach to the new bar (Fig. 6).

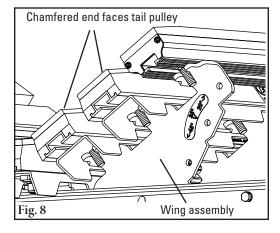




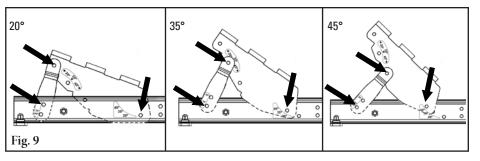
7. Install new bars and supports onto centre plate. Place the new bars and bar supports onto the centre plate with the chamfered ends facing the tail pulley. Line up the bolts and tighten the bars to the centre plate. Tighten to 135N-m torque. Slide centre plate back into place (Fig. 7). Tighten centre plate bolts to 80N-m torque.



8. Install new bars (and supports) onto wing assemblies. Place the new bars (and bar supports, if present) onto the wing plate with chamfered ends facing the tail pulley (Fig. 8). Line up the bolts and tighten the bars to the wing assemblies. Tighten to 135N-m torque.



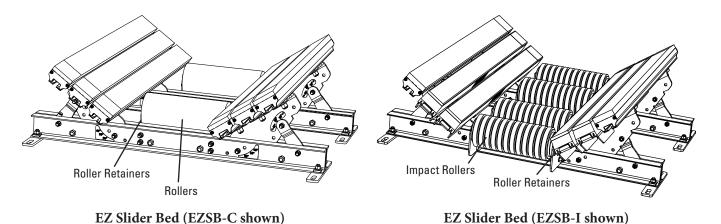
9. Reset wing assemblies. Depending on trough setting (20°, 35° or 45°) use Fig. 9 to reset trough on all wing assemblies. Tighten to 80N-m torque.



Test run the conveyor. Run the conveyor for a few minutes and inspect to ensure that the bed is performing properly. Make adjustments as necessary.



## **6.5** Roller Replacement Instructions



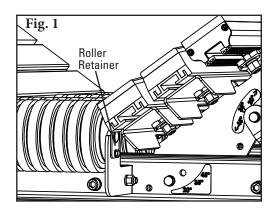
Physically lock out and tag the conveyor at the power source before you begin maintenance.

#### **Tools Needed:**

- Tape measure
- 13mm spanner or crescent wrench
- Flex-Lifter<sup>™</sup> (helpful)

## CAUTION: Components may be heavy. Use safety-approved lifting procedures.

- 1. Remove tension from belt. Use a Flex-Lifter or other appropriate lifting equipment to lift the belt approx. 75mm off the bed.
- 2. Remove roller by unbolting Roller Retainers (Fig. 1).
- 3. **Install new roller** and re-bolt Roller Retainers (Fig. 1). Confirm roller turns smoothly.
- 4. Lower the belt. Ensure belt completely contacts rollers. Lower brackets if there is not good contact. Tighten all bolts.
- 5. Test run the conveyor. Run the conveyor for a few minutes and inspect to ensure that the bed is performing properly. Make adjustments as necessary.



# 6.6 Maintenance Log

Conveyor Name/No		
Date:	Work done by:	Service Quote #:
Activity:		
Date:	Work done by:	Service Quote #:
Activity:		
Date:	Work done by:	Service Quote #:
Activity:		
Date:	Work done by:	Service Quote #:
Activity:		
Data	Work done by	Sarvica Quata #1
	Work done by:	
Activity:		
Date:	Work done by:	Service Quote #:
Activity:		
	TUT 1 1 1	
Date:	Work done by:	Service Quote #:
Activity:		
Date:	Work done by:	Service Quote #:
	· 	

# **6.7** Slider/Impact Bed Maintenance Checklist

Site:	Inspected by:	Date:	
Impact Bed:		Serial Number:	
Beltline Information:	Dalk Candikian		
	Belt Condition:		
Belt Width: ☐ 600mm	□ 750mm □ 900mm □ 1050mm □ 1200r	nm □ 1350mm □ 1500mm □ 1800mm	
Transition Distance (ba	ck of bed to center of tail pulley):	Belt Speed:	Belt Thickness:
Distance to Leading Id	ler: Distance to	Trailing Idler:	
Vertical Distance betw	een top of nearest idler and top surface of	center impact bars:	
Impact Bar Life:			
Date bars installed:	Date bars inspected:	Estimated bar life:	
Bar Condition:	inches of top	cover remaining:	
Roll Life:			
Date rolls installed:	Date rolls inspected:	Estimated roll life:	
Roll Condition:			
Impact Bed Frame Con	dition:		
□ Good	☐ Bent ☐ Rusted		
Overall Impact Bed Pe	rformance: (Rate the following	1 - 5, 1= very poor - 5 = very good)	
Appearance:	Comments:		
Location:	Comments:		
Maintenance:	Comments:		
Performance:	Comments:		
Other comments:			

# **Section 7 - Troubleshooting**

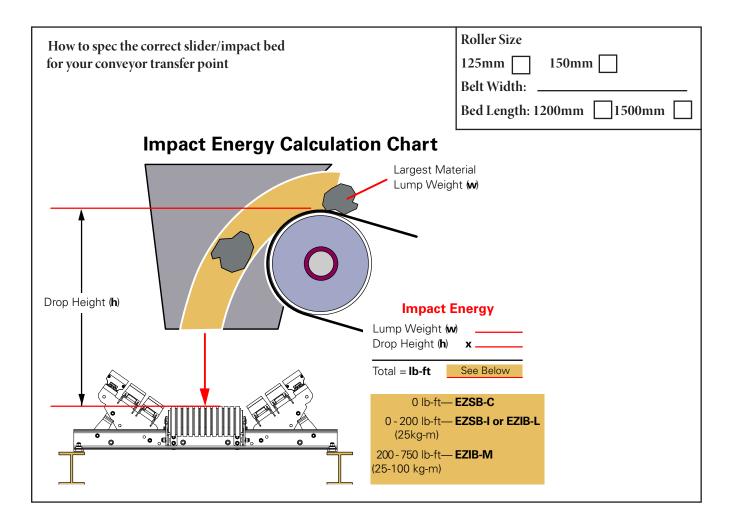
Problem	Possible Cause	Possible Solutions
	Impact bars are not at 6mm below leading and trailing idlers	Adjust/shim as needed to correct dimension
Bars wearing out too fast	More than two beds in a row without idler between	Add an idler between at least every other bed to lift the belt back up
	Leading idler does not match troughing angle	Correct the angle of the leading idler to match the bed
	Belt rubbing too hard on UHMW impact bar covers	Verify height of leading/trailing idlers
Vibration or noise	Material buildup under bed	Clean up buildup
	Skirt rubber pushing too hard on belt	Adjust skirt rubber
Bars deforming	Larger material than specified is flowing through transition (under-specified bed)	Replace with a heavier-duty version of impact bed or add additional bar supports
Bar damage	Mechanical splice damaging UHMW top covers	Repair, skive or replace splice

## **Section 8 - Specs and CAD Drawings**

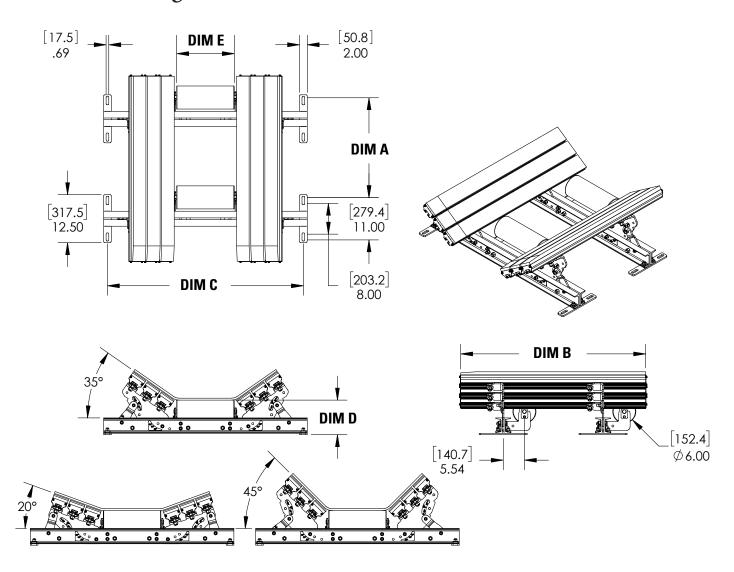
## 8.1 Specifications and Guidelines

#### **Easy Solution for Load Zone Problems**

- Complete load zone offering with slider beds through impact beds for up to 100 kg-m of force.
- No specifying trough angle; each bed is adjustable for 20°, 35° and 45° trough settings (ships at 35° setting)
- Low-profile installation. Because Flexco beds feature trough wings that are adjustable, they lay flat during installation, providing more clearance.
- Full UHMW slider bars included on outside bar to provide proper sealing and long life.
- Unique Impact Bar Supports protect the impact bars from damage, extending service life. An Anti-Migratory Tab on each support secures the bar and prevents it from sliding in the direction of belt travel.
- All beds are manufactured for mounting holes belt width + 225mm. For wider structure, contact Customer Service for special quote.

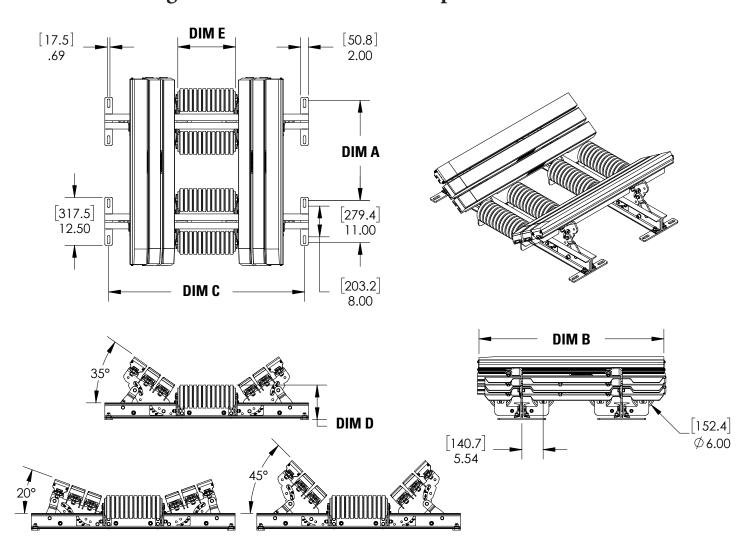


# 8.2 CAD Drawing - EZSB-C Slider Bed with Rollers



Bed Lo 1200	-	Bed Length 1500mm					
Dim A	Dim B	Dim A	Dim B	Bed Width	Dim C	Dim D	Dim E
660.4mm	1240mm	863.6mm	1500mm	600mm	838mm	229mm	229mm
				750mm	991mm	229mm	279mm
				900mm	1143mm	229mm	330mm
				1050mm	1295mm	229mm	381mm
				1200mm	1448mm	229mm	432mm
				1350mm	1600mm	235mm	483mm
				1500mm	1753mm	235mm	533mm
				1800mm	2057mm	241mm	635mm

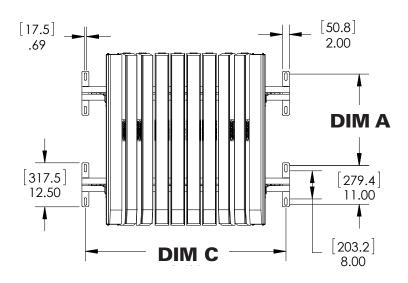
# 8.2 CAD Drawing - EZSB-I Slider Bed with Impact Rollers

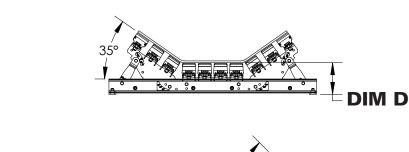


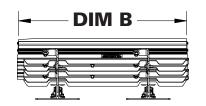
Bed Length 1200mm		Bed Length 1500mm					
Dim A	Dim B	Dim A	Dim B	Bed Width	Dim C	Dim D	Dim E
660.4mm	1223mm	863.6mm	1483mm	600mm	838mm	229mm	229mm
				750mm	991mm	229mm	279mm
				900mm	1143mm	229mm	330mm
				1050mm	1295mm	229mm	381mm
				1200mm	1448mm	229mm	432mm
				1350mm	1600mm	235mm	483mm
				1500mm	1753mm	235mm	533mm
				1800mm	2057mm	241mm	635mm

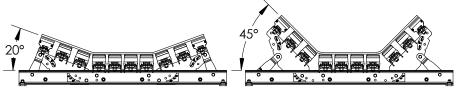
<sup>\*1.5</sup>M beds come with 5 impact rolls.

# 8.2 CAD Drawing - EZIB-L Light-Duty Impact Bed



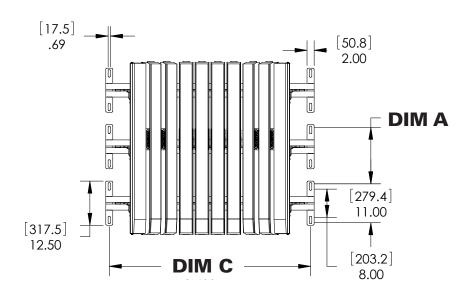


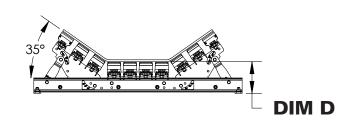


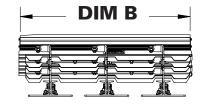


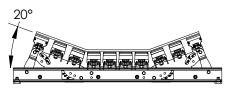
Bed Lo 1200	•		ength )mm			
Dim A	Dim B	Dim A	Dim B	Bed Width	Dim C	Dim D
660.4mm	1223mm	863.6mm	1483mm	600mm	838mm	229mm
				750mm	991mm	229mm
				900mm	1143mm	229mm
				1050mm	1295mm	229mm
				1200mm	1448mm	229mm
				1350mm	1600mm	235mm
				1500mm	1753mm	235mm
				1800mm	2057mm	241mm

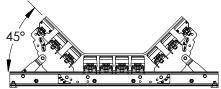
# 8.2 CAD Drawing - EZIB-M Medium-Duty Impact Bed





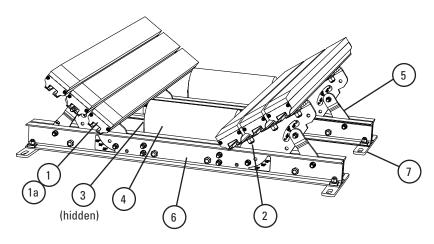






Bed Lo 1200	•	Bed Length 1500mm				
Dim A	Dim B	Dim A	Dim B	Bed Width	Dim C	Dim D
406.4mm	1223mm	558.8mm	1483mm	600mm	838mm	229mm
				750mm	991mm	229mm
				900mm	1143mm	229mm
				1050mm	1295mm	229mm
				1200mm	1448mm	229mm
				1350mm	1600mm	235mm
				1500mm	1753mm	235mm
				1800mm	2057mm	241mm

# 9.1 Replacement Parts List - Flexco Slider Bed - EZSB-C



#### **Replacement Parts**

DEE	DECORIDATION	ORDERING	ITEM	WT.
REF	DESCRIPTION	NUMBER	CODE	KG.
1	Slider Bar, 1200mm	SB4	78789	9.1
1a	Slider Bar, 1500mm	SB5	78790	10.9
2	Bar Bolt Kit (incl. 1 ea. 16mm carriage bolt, square washer, flat washer, lock washer, Nylock nut)	RIBBK	81250	0.2
3	Slider Roll Mount Kit*	EZRMKM	82344	2.3
	CoreTech™ Roll 600mm	RRTD6-24	79874	4.1
	CoreTech Roll 750mm	RRTD6-30	79875	4.8
	CoreTech Roll 900mm	RRTD6-36	79876	5.6
4	CoreTech Roll 1050mm	RRTD6-42	79877	6.3
4	CoreTech Roll 1200mm	RRTD6-48	79878	7.3
	CoreTech Roll 1350mm	RRTD6-54	79879	7.7
	CoreTech Roll 1500mm	RRTD6-60	79880	8.2
	CoreTech Roll 1800mm	RRTD6-72	79881	9.8
	Wing Plate Kit 600mm*	EZWPK-600	82345	7.7
	Wing Plate Kit 750mm*	EZWPK-750	82346	7.9
	Wing Plate Kit 900mm*	EZWPK-900	82347	9.6
5	Wing Plate Kit 1050mm*	EZWPK-1050	82348	11.9
J	Wing Plate Kit 1200mm*	EZWPK-1200	82349	13.7
	Wing Plate Kit 1350mm*	EZWPK-1350	82350	16.1
	Wing Plate Kit 1500mm*	EZWPK-1500	82351	17.7
	Wing Plate Kit 1800mm*	EZWPK-1800	82352	21.2
	Cross Stringer Kit 600mm*	EZCSK-600	82353	22.3
	Cross Stringer Kit 750mm*	EZCSK-750	82354	25.6
	Cross Stringer Kit 900mm*	EZCSK-900	82355	28.9
6	Cross Stringer Kit 1050mm*	EZCSK-1050	82356	32.1
U	Cross Stringer Kit 1200mm*	EZCSK-1200	82357	35.6
	Cross Stringer Kit 1350mm*	EZCSK-1350	82358	38.9
	Cross Stringer Kit 1500mm*	EZCSK-1500	82359	42.2
	Cross Stringer Kit 1800mm*	EZCSK-1800	82360	45.0
7	Shim Kit Light Duty (incl. 4 shims)	SHIM-LDKIT	82393	6.2

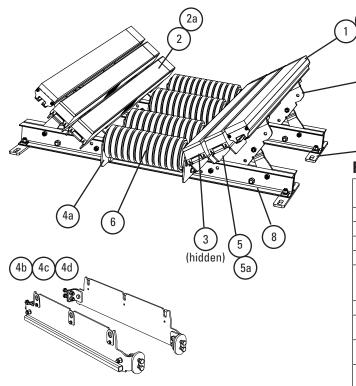
<sup>\*</sup>Hardware Included

#### **Replacement Quantities for EZSB-C**

mm		600	750	900	1050	1200	1350	1500	1800
ROLLS REQUIRED		2	2	2	2	2	2	2	2
BARS REQUIRED	SLIDER	4	4	4	6	6	8	8	8
BAR BOLT KITS F	REQUIRED	8	8	8	12	12	16	16	16



# 9.2 Replacement Parts List - Flexco Slider Bed - EZSB-I



$\sim$		
Rep	acement	<b>Parts</b>

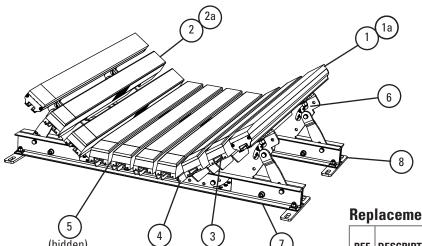
REF	DESCRIPTION	ORDERING NUMBER	ITEM CODE	WT KG
1	Slider Bar, 1200mm	SB4	78789	9.1
1a	Slider Bar, 1500mm	SB5	78790	10.9
2	Impact Bar, 1200mm	IB4	76926	7.7
2a	Impact Bar, 1500mm	IB5	76927	9.
3	Bar Bolt Kit (incl. 1 ea. 16mm carriage bolt, square washer, flat washer, lock washer, Nylock nut)	RIBBK	81250	0.:
4a	Slider Roll Mount Kit*	EZRMKM	82344	2.5
4b	Center Roller Mount Kit for 1.5M x 600-1200mm**	EZCRMK24-48	90434	19.
4c	Center Roller Mount Kit for 1.5M x 1350-1500mm**	EZCRMK54-60	90261	19.
4d	Center Roller Mount Kit for 1.5M x 1800mm**	EZCRMK72	90262	19.
5	Impact Bar Support - L 1.2M*	EZBS-1200	82361	7.
5a	Impact Bar Support - L 1.5M*	EZBS-1500	82362	9.
	Impact CoreTech™ Roll 600mm	RRTID6-24	79883	4.
	Impact CoreTech Roll 750mm	RRTID6-30	79884	5.
	Impact CoreTech Roll 900mm	RRTID6-36	79885	6.
6	Impact CoreTech Roll 1050mm	RRTID6-42	79886	7.
U	Impact CoreTech Roll 1200mm	RRTID6-48	79887	8.
	Impact CoreTech Roll 1350mm	RRTID6-54	79888	9.
	Impact CoreTech Roll 1500mm	RRTID6-60	79889	9.
	Impact CoreTech Roll 1800mm	RRTID6-72	79890	11.
	Wing Plate Kit 600mm*	EZWPK-600	82345	7.
	Wing Plate Kit 750mm*	EZWPK-750	82346	7.
	Wing Plate Kit 900mm*	EZWPK-900	82347	9.
7	Wing Plate Kit 1050mm*	EZWPK-1050	82348	11.
,	Wing Plate Kit 1200mm*	EZWPK-1200	82349	13.
	Wing Plate Kit 1350mm*	EZWPK-1350	82350	16.
	Wing Plate Kit 1500mm*	EZWPK-1500	82351	17.
	Wing Plate Kit 1800mm*	EZWPK-1800	82352	21.
	Cross Stringer Kit 600mm*	EZCSK-600	82353	22.
	Cross Stringer Kit 750mm*	EZCSK-750	82354	25.
	Cross Stringer Kit 900mm*	EZCSK-900	82355	28.
0	Cross Stringer Kit 1050mm*	EZCSK-1050	82356	32.
8	Cross Stringer Kit 1200mm*	EZCSK-1200	82357	35.
	Cross Stringer Kit 1350mm*	EZCSK-1350	82358	38.
	Cross Stringer Kit 1500mm*	EZCSK-1500	82359	42.
	Cross Stringer Kit 1800mm*	EZCSK-1800	82360	45.
9	Shim Kit Light Duty (incl. 4 shims)	SHIM-LDKIT	82393	6.

#### **Replacement Quantities for EZSB-I**

nepiaceme	iit <b>Q</b> uaii	illill G	3 101		ו־נ				114
mm		600	750	900	1050	1200	1350	1500	1800
in.		24 30 36 42 48 54 60 72						72	
ROLLS REQU	JIRED	1.2M beds have 4 rolls; 1.5M beds have 5 rolls							
BARS REQUIRED	SLIDER	2	2	2	2	2	2	2	2
DANS NEUVINED	IMPACT	2	2	2	4	4	6	6	6
BAR BOLT KITS I	10	10	10	16	16	22	22	22	
BAR SUPPORTS REQUIRED		2	2	2	4	4	6	6	6

\*Hardware Included

# 9.3 Replacement Parts List - Flexco Impact Bed, Light Duty - EZIB-L



**Replacement Parts** 

REF	DESCRIPTION	ORDERING NUMBER	ITEM CODE	WT. KG.
1	Slider Bar, 1200mm	SB4	78789	9.1
1a	Slider Bar, 1500mm	SB5	78790	10.9
2	Impact Bar, 1200mm	IB4	76926	7.7
2a	Impact Bar, 1500mm	IB5	76927	9.5
3	Bar Bolt Kit (incl. 1 ea. 16mm carriage bolt, square washer, flat washer, lock washer, Nylock nut)	RIBBK	81250	0.2
4	Impact Bar Support - 1200mm	EZBS-1200	82361	7.3
4a	Impact Bar Support - 1500mm	EZBS-1500	82362	9.3
	Centre Bar Mount Kit 600mm*	EZBMK-600	82281	2.4
	Centre Bar Mount Kit 750mm*	EZBMK-750	82282	2.6
	Centre Bar Mount Kit 900mm*	EZBMK-900	82283	3.4
5*	Centre Bar Mount Kit 1050mm*	EZBMK-1050	82284	3.6
ס״	Centre Bar Mount Kit 1200mm*	EZBMK-1200	82285	4.4
	Centre Bar Mount Kit 1350mm*	EZBMK-1350	82286	4.8
	Centre Bar Mount Kit 1500mm*	EZBMK-1500	82287	5.6
	Centre Bar Mount Kit 1800mm*	EZBMK-1800	82288	6.6
	Wing Plate Kit 600mm*	EZWPK-600	82345	7.7
	Wing Plate Kit 750mm*	EZWPK-750	82346	7.9
	Wing Plate Kit 900mm*	EZWPK-900	82347	9.6
0*	Wing Plate Kit 1050mm*	EZWPK-1050	82348	11.9
6*	Wing Plate Kit 1200mm*	EZWPK-1200	82349	13.7
	Wing Plate Kit 1350mm*	EZWPK-1350	82350	16.1
	Wing Plate Kit 1500mm*	EZWPK-1500	82351	17.7
	Wing Plate Kit 1800mm*	EZWPK-1800	82352	21.2
	Cross Stringer Kit 600mm*	EZCSK-600	82353	22.3
	Cross Stringer Kit 750mm*	EZCSK-750	82354	25.6
	Cross Stringer Kit 900mm*	EZCSK-900	82355	28.9
74	Cross Stringer Kit 1050mm*	EZCSK-1050	82356	32.1
7*	Cross Stringer Kit 1200mm*	EZCSK-1200	82357	35.6
	Cross Stringer Kit 1350mm*	EZCSK-1350	82358	38.9
	Cross Stringer Kit 1500mm*	EZCSK-1500	82359	42.2
	Cross Stringer Kit 1800mm*	EZCSK-1800	82360	45.0
8	Shim Kit Light Duty (incl. 4 shims)	SHIM-LDKIT	82393	6.2

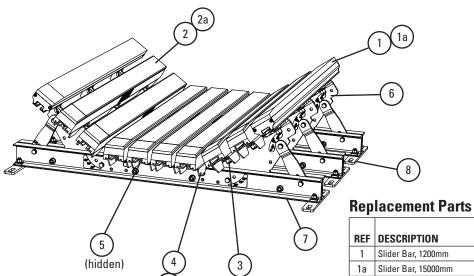
<sup>\*</sup>Hardware Included

#### **Replacement Quantities for EZIB-L**

mm		600	750	900	1050	1200	1350	1500	1800
in.		24	30	36	42	48	54	60	72
BARS REQUIRED	SLIDER	2	2	2	2	2	2	2	2
	IMPACT	4	4	5	7	8	10	11	12
BAR BOLT KITS I	REQUIRED	16	16	19	25	28	34	37	40
BAR SUPPORTS REQUIRED		4	4	5	7	8	10	11	12



# 9.4 Replacement Parts List - Flexco Impact Bed, Medium Duty - EZIB-M



REF	DESCRIPTION	ORDERING NUMBER	ITEM CODE	WT. KGS.
1	Slider Bar, 1200mm	SB4	78789	9.1
1a	Slider Bar, 15000mm	SB5	78790	10.9
2	Impact Bar, 1200mm	IB4	76926	7.7
2a	Impact Bar, 1500mm	IB5	76927	9.5
3	Bar Bolt Kit (incl. 1 ea. 16mm carriage bolt, square washer, flat washer, lock washer, Nylock nut)	RIBBK	81250	0.2
4	Impact Bar Support - 1200mm*	IBS-M1200	82397	7.7
4a	Impact Bar Support - 1500mm*	IBS-M1500	82398	9.6
	Centre Bar Mount Kit 600mm*	EZBMK-600	82281	2.4
	Centre Bar Mount Kit 750mm*	EZBMK-750	82282	2.6
	Centre Bar Mount Kit 900mm*	EZBMK-900	82283	3.4
-	Centre Bar Mount Kit 1050mm*	EZBMK-1050	82284	3.6
5	Centre Bar Mount Kit 1200mm*	EZBMK-1200	82285	4.4
	Centre Bar Mount Kit 1350mm*	EZBMK-1350	82286	4.8
	Centre Bar Mount Kit 1500mm*	EZBMK-1500	82287	5.6
	Centre Bar Mount Kit 1800mm*	EZBMK-1800	82288	6.6
	Wing Plate Kit 600mm*	EZWPK-600	82345	7.7
	Wing Plate Kit 750mm*	EZWPK-750	82346	7.9
	Wing Plate Kit 900mm*	EZWPK-900	82347	9.6
	Wing Plate Kit 1050mm*	EZWPK-1050	82348	11.9
6	Wing Plate Kit 1200mm*	EZWPK-1200	82349	13.7
	Wing Plate Kit 1350mm*	EZWPK-1350	82350	16.1
	Wing Plate Kit 1500mm*	EZWPK-1500	82351	17.7
	Wing Plate Kit 1800mm*	EZWPK-1800	82352	21.2
	Cross Stringer Kit 600mm*	EZCSK-600	82353	22.3
	Cross Stringer Kit 750mm*	EZCSK-750	82354	25.6
	Cross Stringer Kit 900mm*	EZCSK-900	82355	28.9
-	Cross Stringer Kit 1050mm*	EZCSK-1050	82356	32.1
7	Cross Stringer Kit 1200mm*	EZCSK-1200	82357	35.6
	Cross Stringer Kit 1350mm*	EZCSK-1350	82358	38.9
	Cross Stringer Kit 1500mm*	EZCSK-1500	82359	42.2
	Cross Stringer Kit 1800mm*	EZCSK-1800	82360	45.0
8	Shim Kit Medium Duty (incl. 6 shims)	SHIM-MDKIT	82394	9.3

<sup>\*</sup>Hardware Included

#### **Replacement Quantities for EZIB-M**

Tropiacomon duantitico for ELIS III									
mm		600	750	900	1050	1200	1350	1500	1800
in.		24	30	36	42	48	54	60	72
BARS REQUIRED	SLIDER	2	2	2	2	2	2	2	2
	IMPACT	4	4	5	7	8	10	11	12
BAR BOLT KITS REQUIRED		26	26	31	41	46	56	61	66
BAR SUPPORTS REQUIRED		4	4	5	7	8	10	11	12

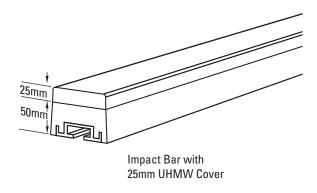
## 9.5 Optional Replacement Parts

#### **Impact Bars with 25mm UHMW**

For impact beds that have heavy abrasive wear on the impact bars.

DESCRIPTION	ORDERING NUMBER	ITEM CODE	WT. KG.
1200mmm Impact Bar with 25mm UHMW	IB4-1U	76965	7.7
1500mmm Impact Bar with 25mm UHMW	IB5-1U	76966	9.6

Lead time: 1 working day



#### Impact Bar Bolt Kit for Other OEM Impact Beds\*

13mm carriage bolt, square washer, flat washer and Nylock nut to mount DRX Impact Bars on other OEM beds that use 13mm T-bolts. Count cross stringers on OEM bed (example: 3 cross stringers require 3 Bolt Kits per impact bar)

DESCRIPTION	ORDERING	ITEM	WT.
	NUMBER	CODE	KG.
OEM Impact Bar Bolt Kit	OIBBK	76950	0.2

\*Kit includes 1 ea. bolt, square washer, flat washer and Nylock nut. Lead time: 1 working day



Bar Bolt Kit

## **Section 10 – Other Flexco Conveyor Products**

Flexco provides many conveyor products that help your conveyors to run more efficiently and safely. These components solve typical conveyor problems and improve productivity. Here is a quick overview on just a few of them:

#### **EZP1 Precleaner**



- Patented ConShear™ blade renews its cleaning edge as it wears
- Visual Tension Check™ for optimal blade tensioning and simple retensioning
- Quick and easy one-pin blade replacement Material Path Option<sup>™</sup> for optimal cleaning and reduced maintenance

#### **MHS Secondary Cleaner**



- Long-wearing tungsten carbide blades for superior cleaning efficiency
- Patented FormFlex<sup>™</sup> cushions independently tension each blade to the belt for consistent, constant cleaning power
- Easy to install, simple to service
- Works with Flexco mechanical belt splices

## Flexco Specialty Belt Cleaners



- "Limited space" cleaners for tight conveyor applications
- High Temp cleaners for severe, high heat applications
- A rubber fingered cleaner for chevron and raised rib belts
- Multiple cleaner styles in stainless steel for corrosive applications

#### Flex-Lok™ Skirt Clamps



- Eliminates transfer zone spillage
- Interlocking design for easy installation and one person maintenance
- Unique wedge pin holds rubber securely in place and is easy to adjust
- Available in various models and in stainless steel

#### PT Max<sup>™</sup> Belt Trainer



- Patented "pivot & tilt" design for superior training action
- Dual sensor rollers on each side to minimize belt damage
- Pivot point guaranteed not to seize or freeze up
- Available for topside and return side belts

#### **Belt Plows**



- A belt cleaner for the tail pulley
- Exclusive blade design quickly spirals debris off the belt
- Economical and easy to service
- · Available in vee or diagonal models



