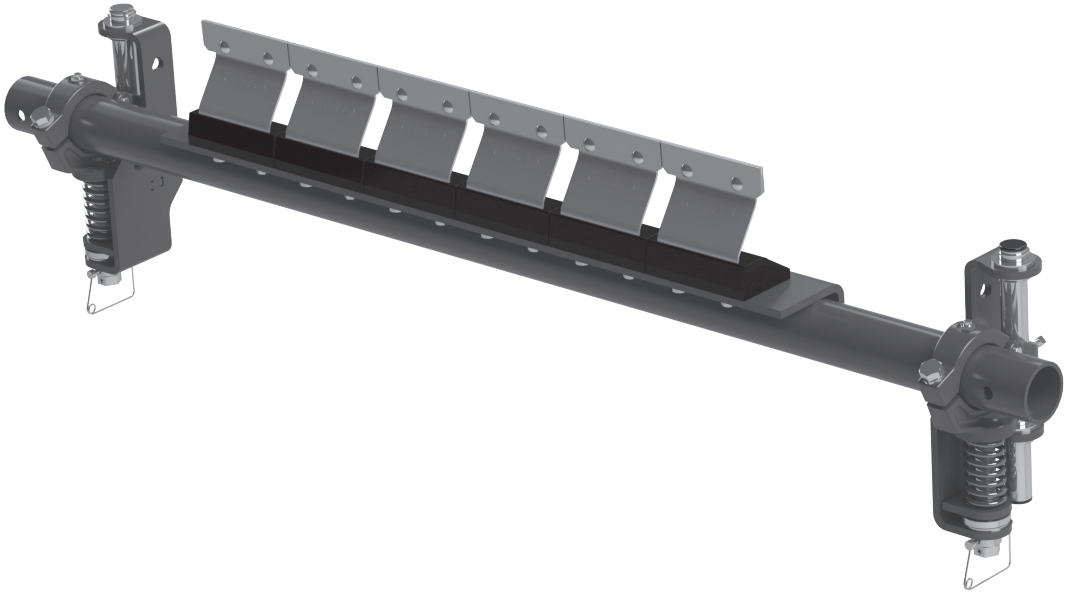
FMS HD Secondary Belt Cleaner

Installation, Operation and Maintenance Manual



FLEXCO

Serial Number: _____

Purchase Date:_____

Purchased From: _____

Installation Date:_____

Serial number information can be found on the Serial Number Label included in the Information Packet found in the cleaner carton.

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

Table of Contents

Section 1 - Important Information

1.1 General Introduction

We at Flexco are very pleased that you have selected an FMS HD Secondary Cleaner 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.

If, however, you have any questions or problems that are not covered, please contact your field representative or our Customer Service Department.

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 cleaner. 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

Correct installation and regular maintenance will provide the following benefits for your operation:

- Reduced conveyor downtime
- Reduced man-hour labor
- Lower maintenance budget costs
- Increased service life for the belt cleaner and other conveyor components

1.3 Service Option

The FMS HD Secondary Cleaner 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 Representative.

Section 2 - Safety Considerations and Precautions

Before installing and operating the FMS HD Secondary Cleaner, 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
- Tension adjustments
- Blade replacement
- Cleaning
- Repairs

⚠ DANGER

It is imperative that OSHA/MSHA Lockout/Tagout (LOTO) regulations be followed before undertaking the preceding activities. Failure to use LOTO exposes workers to uncontrolled behavior of the belt cleaner 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

⚠ WARNING

Use Personal Protective Equipment (PPE):

- Safety eyewear
- Hardhats
- Safety footwear

Close quarters, springs 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 cleaners. 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 cleaning performance
- Dynamic troubleshooting

⚠ DANGER

Every belt cleaner is an in-running nip hazard. Never touch or prod an operating cleaner. Cleaner hazards cause instantaneous amputation and entrapment.

⚠ WARNING

Belt cleaners can become projectile hazards. Stay as far from the cleaner as practical and use safety eyewear and headgear. Missiles can inflict serious injury.

⚠ WARNING

Never adjust anything on an operating cleaner. Unforseeable belt projections and tears can catch on cleaners and cause violent movements of the cleaner structure. Flailing hardware can cause serious injury or death.

Section 3 - Pre-installation Checks and Options

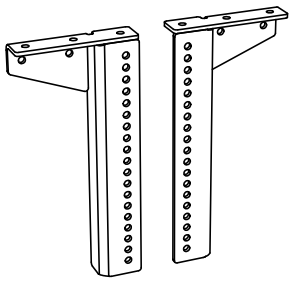
3.1 Checklist

- Check that the cleaner size is correct for the beltline width.
- Check the belt cleaner carton and make sure all the parts are included.
- Review the “Tools Needed” list on the top of the installation instructions.
- Check the conveyor site:
  - Will the cleaner be installed on a chute?
  - Is the install on an open head pulley requiring mounting structure?

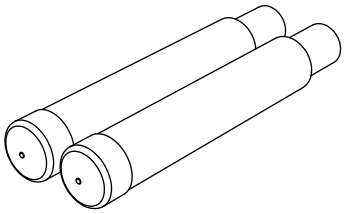
    (see 3.2 - Optional Installation Accessories)

3.2 Optional Installation Accessories

Versatile, adjustable brackets that can be mounted on the conveyor structure so the FMS HD Secondary Cleaner can be quickly and easily bolted into place. Pole extenders are also available for wide, non-standard conveyor structures.



MST Drop Bracket Kit
(for MST Tensioner Only)
(incl. 2 brackets)
(Item Code: 79434)



Pole Extender Kit
(incl. 2 pole extenders)
(Item Code: 76024)

- For cleaner sizes 1800 mm (72") and larger
- Provides 750 mm (30") of extended pole length

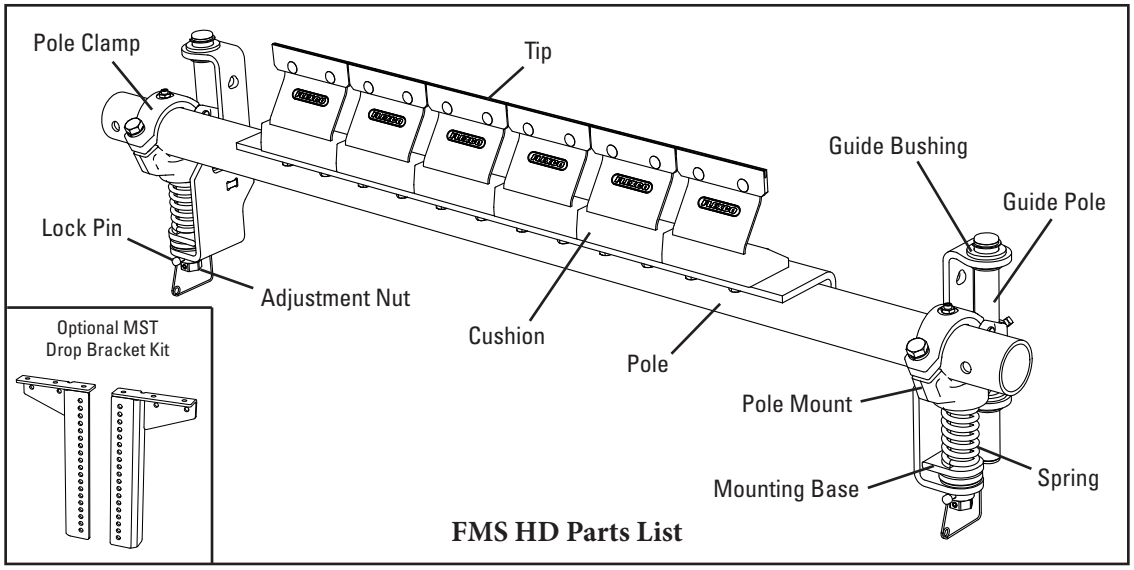
Optional Mounting Kits (includes 2 brackets/bars)

DESCRIPTION	ORDERING NUMBER	ITEM CODE	WT. KG
Pole Extender Kit	MAPEK	76024	9.9
MST Drop Bracket Kit	MSTDB	79434	12.6

*Hardware Included
Lead time: 1 working day

Section 4 - Installation Instructions

4.1 FMS HD

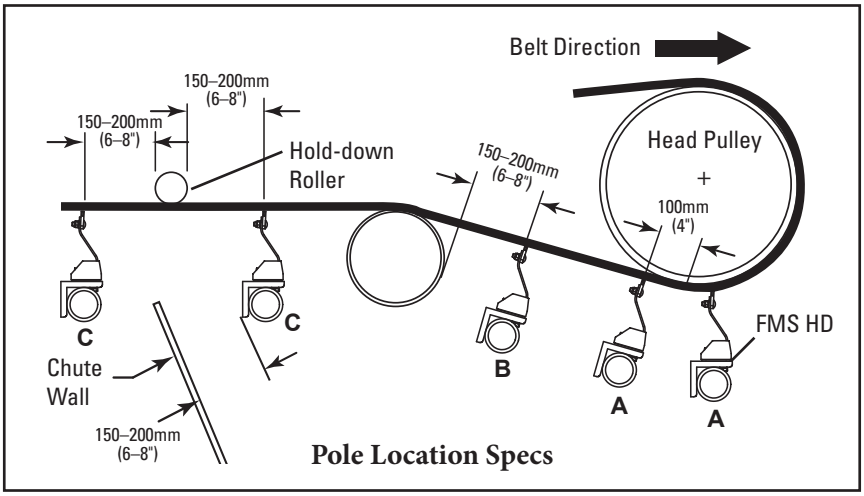


FMS HD Parts List

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

Tools Needed:

- 10 mm (3/8") Wrench
- 14 mm (9/16") Wrench
- 19 mm (3/4") Wrench
- 25 mm (1") Wrench
- 29 mm (1-1/8") Wrench **OR** Large Adjustable/ Crescent Wrench
- Ratchet with 19 mm (3/4") Socket
- 152 mm (6") C-Clamps (x2)
- Torch/Welder (as needed)
- Tape Measure
- Level
- Marking Pen or Soapstone



Pole Location Specs

Section 4 - Installation Instructions

4.1 FMS HD

1. **Install the spring tensioner mounting bases.** The preferred mounting orientation relative to the belt's direction is shown; if necessary the tensioners may be mounted with the opposite belt direction (reversing) (Fig. 1). Clamp the mounting base into position so the top flange is 102 mm (4") below the bottom of the belt. Bolt or weld the mounting base in place. Locate and install the mounting base on the opposite side. Remove the tensioner lock pins and turn the adjustment nuts to fully lower the pole mount.

   NOTE: For chute mounting, a belt location line must be drawn on the chute wall so the mounting base can be aligned 102 mm (4") below the belt (Fig. 1a). Cut access holes as needed.

2. **Install the pole.** Remove the pole clamp bolt and lift or remove the top half of the pole clamp from the tensioner on the near side of the conveyor, and loosen the pole clamp bolt on the opposite side. Slide the pole across the conveyor and through the loosened pole clamp, and place the near end of pole in the remaining pole clamp (Fig. 2). Replace the top half of the pole clamp, and reinstall both bolts finger tight.

3. **Set the blade angle.** Center the pole/blades on the belt and rotate the pole until the tips align with the FMS tip setup gauge provided (Fig. 3). Tighten the pole clamp bolt on each pole mount to lock the pole in place and tighten the set screw (Fig. 3a). There should be no blade-to-belt contact while locking the pole in the correct position. If contact occurs, double check the dimension from Step 1.

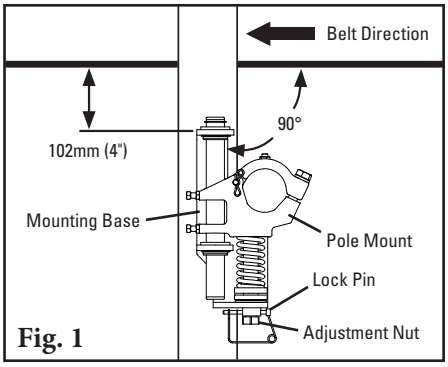


Fig. 1

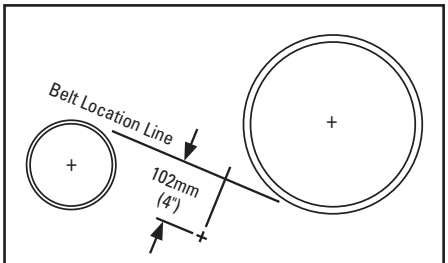


Fig. 1a (Chute Mounting)

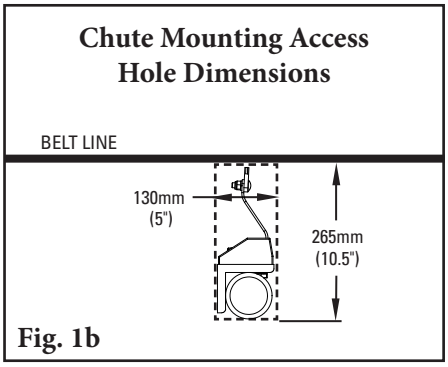


Fig. 1b

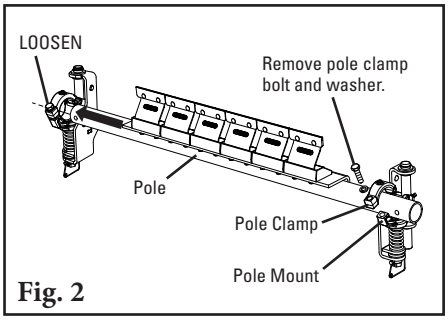


Fig. 2

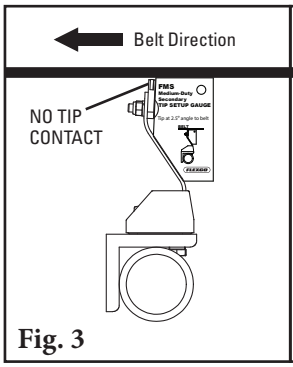


Fig. 3

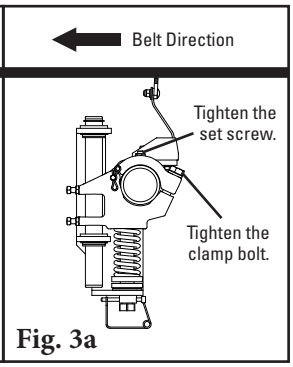


Fig. 3a

Section 4 - Installation Instructions

4.1 FMS HD

4. **Ensure the tensioner travels freely.** Pull up and push down on each pole end to ensure the pole mount travels freely on the guide pole. If there is any sign of binding, loosen the bolts on the mounting base and pivot until the tensioner moves freely (Fig. 4). Retighten the bolts.

5. **Set the blade tension.** Turn the adjustment nuts until the correct spring compression is reached (Fig. 5). Spring compression is determined by spring length. See the chart for the correct spring length for your belt width. Replace the locking pins.

6. **Secure the guide poles.** Ensure the ends of the guide pole extend at least 13mm (1.2") from the top and bottom guide bearings. If adjustment is necessary, loosen the guide pole set screws and lock nuts, then tap guide the pole up or down. Tighten the guide pole set screws and lock nuts (Fig. 6).

7. **Check the movement of each tensioner to ensure they do not bind up.** If there are binding concerns, refer to Step 4.

8. **Test run the cleaner and inspect the cleaning performance.** If vibration occurs or more cleaning efficiency is desired, increase the blade tension by making 3mm (1/8") compression adjustments on the tension springs.

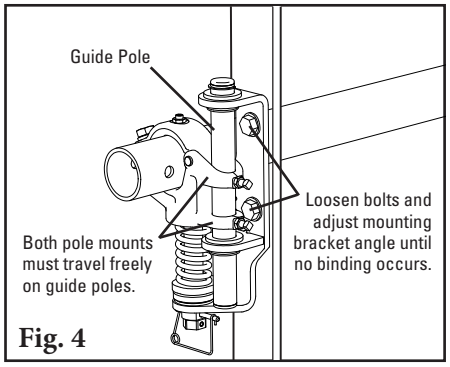


Fig. 4

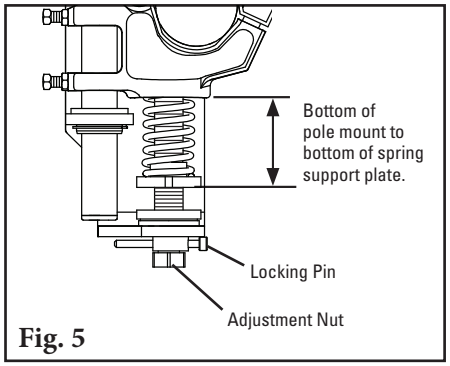


Fig. 5

MST Spring Length Chart

Blade Width		White Springs		Silver Springs		Black Springs	
mm	in.	mm	in.	mm	in.	mm	in.
450	18	73	2 7/8	89	3 1/2	89	3 1/2
600	24	67	2 5/8	86	3 3/8	89	3 1/2
750	30	60	2 1/2	83	3 1/4	86	3 3/8
900	36	54	2 1/4	79	3 1/8	83	3 1/4
1050	42	N/A	N/A	76	3	79	3 1/8
1200	48	N/A	N/A	73	2 7/8	79	3 1/8
1350	54	N/A	N/A	70	2 3/4	76	3
1500	60	N/A	N/A	70	2 3/4	73	2 7/8
1800	72	N/A	N/A	N/A	N/A	70	2 3/4

Shading indicates preferred spring option.

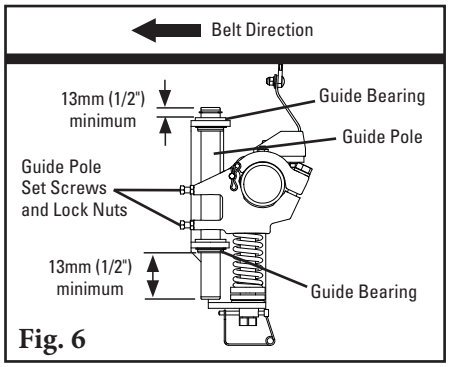


Fig. 6

Section 5 - Pre-Operation Checklist and Testing

5.1 Pre-Op Checklist

- Recheck that all fasteners are tightened properly.
- Add pole caps.
- Apply all supplied labels to the cleaner.
- Check the blade location on the belt.
- Be sure that all installation materials and tools have been removed from the belt and the conveyor area.

5.2 Test Run the Conveyor

- Run the conveyor for at least 15 minutes and inspect the cleaning performance.
- Check the tensioner spring for recommended length (proper tensioning).
- Make adjustments as necessary.

NOTE: Observing the cleaner when it is running and performing properly will help to detect problems or when adjustments are needed later.

Section 6 - Maintenance

Flexco belt cleaners are designed to operate with minimum maintenance. However, to maintain superior performance some service is required. When the cleaner is installed a regular maintenance program should be set up. This program will ensure that the cleaner operates at optimal efficiency and problems can be identified and fixed before the cleaner stops working.

All safety procedures for inspection of equipment (stationary or operating) must be observed. The FMS Belt Cleaner operates at the discharge end of the conveyor 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 new cleaner has run for a few days a visual inspection should be made to ensure the cleaner is performing properly. Make adjustments as needed.

6.2 Routine Visual Inspection (every 2-4 weeks)

A visual inspection of the cleaner and belt should look for:

- If spring length is the correct length for optimal tensioning
- If belt looks clean or if there are areas that are dirty
- If blade is worn out and needs to be replaced
- If there is damage to the blade or other cleaner components
- If fugitive material is built up on cleaner or in the transfer area
- If there is cover damage to the belt
- If there is vibration or bouncing of the cleaner on the belt
- If a snub pulley is used, a check should be made for material buildup on the pulley
- Significant signs of carryback

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 of the cleaner blade and pole
- Closely inspect the blade for wear and any damage. Replace if needed.
- Ensure full blade to belt contact
- Inspect the cleaner pole for damage
- Inspect all fasteners for tightness and wear. Tighten or replace as needed.
- Replace any worn or damaged components
- Check the tension of the cleaner blade to the belt. Adjust the tension if necessary using the chart on the cleaner or the one on Page 10.
- When maintenance tasks are completed, test run the conveyor to ensure the cleaner is performing properly.

Section 6 - Maintenance

6.4 Blade Replacement Instructions

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

1. **Release the blade tension and remove worn blade tips.**

   a. Remove locking pins and turn the adjustment nuts to release the tension on both ends (Fig. 1).

   b. Loosen the set screw, remove pole clamp bolt and washer and lift or remove top half of pole clamp from the tensioner on the near side of the conveyor (Fig. 1a).

   c. Loosen the pole clamp bolt on the opposite side and slide the pole out of the loosened pole clamp and across the conveyor to remove the pole (Fig. 1b).

   d. Remove the nuts, lock washers and flat washers from the tips and remove worn tips (Fig. 1c).

   e. Insert new blade tips and install flat washers, lock washers and nuts finger tight. Buff the outside corners of the last tip on each side of the cleaner (Fig. 1d).

2. **Align the blade tips.** Push tips together so there is no more than a .25mm to .38mm (.010" to 015") gap between them. Position a straightedge along the top surface of new blade tips. Pull upward on each blade to align with the bottom of the straightedge and tighten the nuts (Fig. 2).

3. **Reinstall the pole and reset the tension.** Follow Steps 2–8 from Section 4.

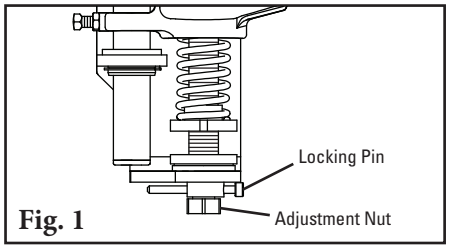


Fig. 1

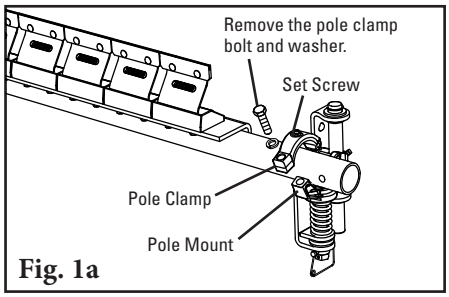


Fig. 1a

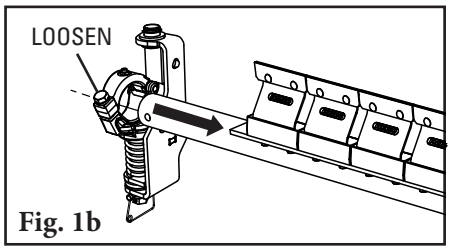


Fig. 1b

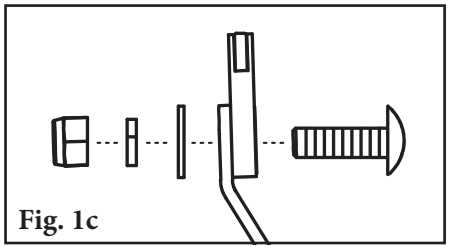


Fig. 1c

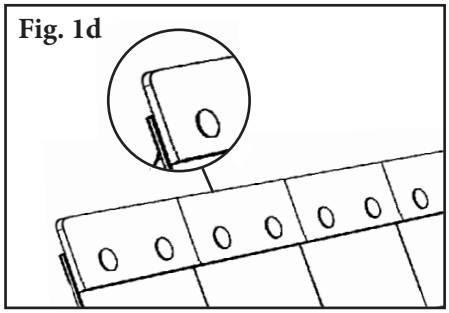


Fig. 1d

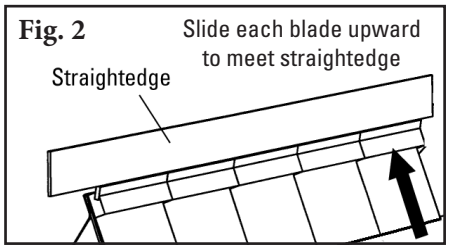


Fig. 2

Section 6 - Maintenance

6.5 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: _____

Date: _____ Work done by: _____ Service Quote #: _____

Activity: _____

Date: _____ Work done by: _____ Service Quote #: _____

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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: _____

Section 6 - Maintenance

6.6 Cleaner Maintenance Checklist

Site: _____ **Inspected by**: _____ **Date:** _____

Belt Cleaner: _____ **Serial Number:** _____

Beltline Information:

Beltline Number: _____ Belt Condition: _____

Belt Width: ☐ 450mm (18") ☐ 600mm (24") ☐ 750mm (30") ☐ 900mm (36") ☐ 1050mm (42") ☐ 1200mm (48") ☐ 1350mm (54") ☐ 1500mm (60") ☐ 1800mm (72") ☐ 2100mm (84") ☐ 2400mm (96")

Belt Speed:_____ fpm Belt Thickness: _____

Belt Splice:_____ Condition of Splice:_____ Number of Splices:_____ ☐ Skived ☐ Unskived

Material conveyed: _____

Days per week run:_____ Hours per day run:_____

Blade Life:

Date blade installed:_____ Date blade inspected:_____ Estimated blade life:_____

Is blade making complete contact with belt? ☐ Yes ☐ No

Distance from wear line: Left _____ Middle _____ Right _____

Blade condition: ☐ Good ☐ Grooved ☐ Smiled ☐ Not contacting belt ☐ Damaged

Measurement of spring: Required _____ Currently _____

Was Cleaner Adjusted: ☐ Yes ☐ No

Pole Condition: ☐ Good ☐ Bent ☐ Worn

Lagging: ☐ Side Lag ☐ Ceramic ☐ Rubber ☐ Other ☐ None

Condition of lagging: ☐ Good ☐ Bad ☐ Other _____

Cleaner's Overall Performance: (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
Vibration	Cleaner secure bolts not set	Ensure all locking nuts are tight (Loctite)
	Cleaner not set up correctly	Ensure cleaner set up properly (check tip angle with gauge) 1°-3° into belt
	Belt tension too high	Ensure cleaner can conform to belt, or replace with alternate Flexco secondary cleaner
	Belt flap	Introduce hold-down roller to flatten belt
	Cleaner over-tensioned	Ensure cleaner is correctly tensioned
	Cleaner under-tensioned	Ensure cleaner is correctly tensioned
	UHMW bearing worn out or missing	Replace bearing
Material buildup on cleaner	Cleaner not set up correctly	Ensure cleaner set up properly (1°-3° into belt)
	Buildup on chute	Ensure cleaner is not located too close to back of chute, allowing buildup
	Cleaner being overburdened	Introduce Flexco precleaner
	Excessive sticky material	Frequently clean unit of buildup
Damaged belt cover	Cleaner over-tensioned	Ensure cleaner is correctly tensioned
	Cleaner blade damage	Check blade for wear, damage and chips, replace where necessary
	Attack angle not correct	Ensure cleaner set up properly (check tip angle with gauge) 1°-3° into belt
	Material buildup in chute	Frequently clean unit of buildup
Cleaner not conforming to belt	Cleaner not set up correctly	Ensure cleaner set up properly (check tip angle with gauge) 1°-3° into belt
	Belt tension too high	Ensure cleaner can conform to belt (introduce hold-down roller), or replace with alternate Flexco secondary cleaner
	Belt flap	Introduce hold-down roller to flatten belt
	Cleaner cannot conform	Ensure cleaner can conform to belt (introduce hold-down roller), or replace with alternate Flexco secondary cleaner
Material passing the cleaner	Cleaner not set up correctly	Ensure cleaner set up properly (check tip angle with gauge) 1°-3° into belt
	Cleaner tension too low	Ensure cleaner is correctly tensioned
	Cleaner blade worn/damaged	Check blade for wear, damage and chips, replace where necessary
	Cleaner being overburdened	Introduce Flexco precleaner
	Belt flap	Introduce hold-down roller to flatten belt
	Belt worn or grooved	Introduce water spray pole or brush cleaner
	Cleaner cannot conform	Ensure cleaner can conform to belt (introduce hold-down roller), or replace with alternate Flexco secondary cleaner
	Blade in backwards	Install blade correctly and set correct tension
Damage to mechanical fastener	Incorrect cleaner blade selection	Change blade type to accomodate fastener style (C or V)
	Belt not skived correctly	Spot and redo splice correctly, lowering the profile flush or below the belt surface
	Blade angle incorrect	Reset with gauge
Missing material in belt center only	Cupped Belt	Install hold-down roller and reset blade angle with gauge
	Cleaner blade worn/damaged	Check blade for wear, damage and chips, replace where necessary
Missing material on outer edges only	Cupped Belt	Install hold-down roller and reset blade angle with gauge
	Cleaner blade worn/damaged	Check blade for wear, damage and chips, replace where necessary
MST Tensioners binding	Tensioners not aligned properly	Adjust mounting bases until tensioners travel without binding
	Material buildup on tensioner guide pole	Clean off guide pole

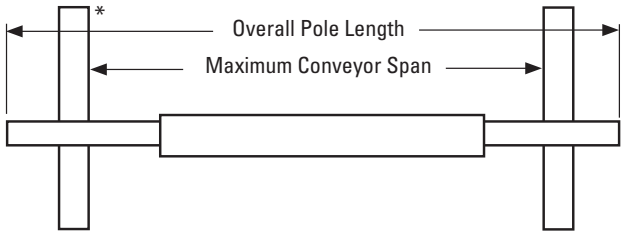
Section 8 - Specs and CAD Drawings

8.1 Specs and Guidelines

Pole Length Specifications*

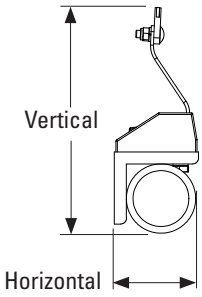
CLEANER SIZE		BLADE WIDTH		POLE LENGTH		MAXIMUM CONVEYOR SPAN	
mm	in.	mm	in.	mm	in.	mm	in.
600	24	600	24	1350	54	1700	68
750	30	750	30	1500	60	1850	74
900	36	900	36	1650	66	2000	80
1050	42	1050	42	1800	72	2150	86
1200	48	1200	48	1950	78	2300	92
1350	54	1350	54	2100	84	2450	98
1500	60	1500	60	2350	93	2600	104
1800	72	1800	72	2650	106	2900	116

*For special extra long pole length requirements a Pole Extender Kit (#76024) is available that provides 750mm (30") of extended pole length. See Page 7. Pole Diameter - 73mm (2-7/8"). For larger sizes please contact Flexco.



Clearance Guidelines for Installation

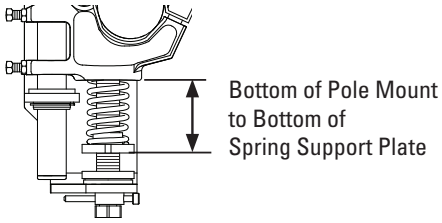
HORIZONTAL CLEARANCE REQUIRED		VERTICAL CLEARANCE REQUIRED	
mm	in.	mm	in.
130	5	265	10.5



MST Spring Length Chart

Blade Width		White Springs		Silver Springs		Black Springs	
mm	in.	mm	in.	mm	in.	mm	in.
450	18	73	2 7/8	89	3 1/2	89	3 1/2
600	24	67	2 5/8	86	3 3/8	89	3 1/2
750	30	60	2 1/2	83	3 1/4	86	3 3/8
900	36	54	2 1/4	79	3 1/8	83	3 1/4
1050	42	N/A	N/A	76	3	79	3 1/8
1200	48	N/A	N/A	73	2 7/8	79	3 1/8
1350	54	N/A	N/A	70	2 3/4	76	3
1500	60	N/A	N/A	70	2 3/4	73	2 7/8
1800	72	N/A	N/A	N/A	N/A	70	2 3/4

Shading indicates preferred spring option.



Specifications:

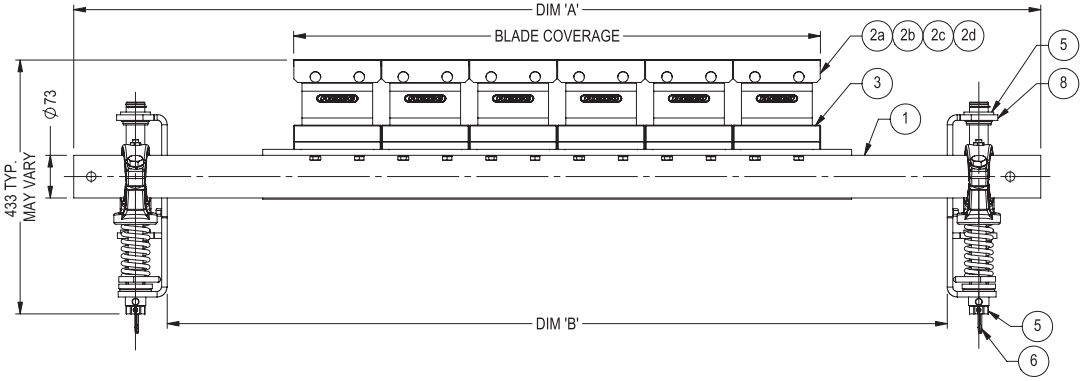
- Not recommended for Reversing Belts
- Maximum Belt Speed .....5m/s (1000 FPM)
- Temperature Rating .....-35 to 82°C (-30 to 180°F)
- Usable Blade Wear Length.....**C-Tip/R V-Tip:** 9mm (3/8")
  EL R V-Tip: 14–24mm (7/16–15/16")
- Blade Materials.....**C-Tip:** Impact Resistant Tungsten Carbide (works with mechanical fasteners)
  V-Tip: Long Life and Ultra Long Life Tungsten Carbide (for vulcanized belts only)
- Available for Belt Widths .....600 to 1800mm (24 to 72"). Other sizes available upon request.
- CEMA Cleaner Rating .....Class 4

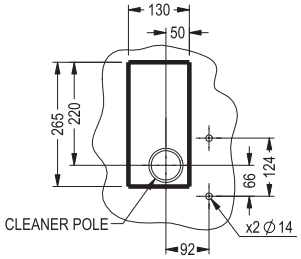
Section 8 - Specs and CAD Drawings

8.2 CAD Drawing - FMS HD - MST Tensioners

ORDERING INFORMATION & DIMENSION INFORMATION - MILD STEEL													
Belt Width		Blade	R V-Tip		C-Tip		Extra Long Life R V-Tip		Ultra Long Life R V-Tip		Tip	Dim A	Dim B
(mm)	(in)	Coverage	Item Code	Order Code	Item Code	Order Code	Item Code	Order Code	Item Code	Order Code	Count		
600	24	600	79647	FMS-600V	66167	FMS-600C	65660	FMS-600-EL15	66926	FMS-600-XXL	4	1350	1100
750	30	750	79648	FMS-750V	66168	FMS-750C	65661	FMS-750-EL15	66927	FMS-750-XXL	5	1500	1250
900	36	900	79649	FMS-900V	66169	FMS-900C	65662	FMS-900-EL15	66928	FMS-900-XXL	6	1650	1400
1050	42	1050	79650	FMS-1050V	66170	FMS-1050C	65663	FMS-1050-EL15	66929	FMS-1050-XXL	7	1800	1550
1200	48	1200	79651	FMS-1200V	66171	FMS-1200C	65664	FMS-1200-EL15	66930	FMS-1200-XXL	8	1950	1700
1350	54	1350	79652	FMS-1350V	66172	FMS-1350C	65665	FMS-1350-EL15	66931	FMS-1350-XXL	9	2100	1850
1500	60	1500	79653	FMS-1500V	66173	FMS-1500C	65666	FMS-1500-EL15	66932	FMS-1500-XXL	10	2350	2100
1800	72	1800	79654	FMS-1800V	66174	FMS-1800C	65667	FMS-1800-EL15	66933	FMS-1800-XXL	12	2650	2400

ORDERING INFORMATION & DIMENSION INFORMATION - STAINLESS STEEL													
Belt Width		Blade	R V-Tip		C-Tip		Extra Long Life R V-Tip		Ultra Long Life R V-Tip		Tip	Dim A	Dim B
(mm)	(in)	Coverage	Item Code	Order Code	Item Code	Order Code	Item Code	Order Code	Item Code	Order Code	Count		
600	24	600	66106	FMS-600V-S/S	66175	FMS-600C-S/S	65670	FMS-600-EL15-S/S	66934	FMS-600-XXL-S/S	4	1350	1100
750	30	750	66107	FMS-750V-S/S	66176	FMS-750C-S/S	65671	FMS-750-EL15-S/S	66395	FMS-750-XXL-S/S	5	1500	1250
900	36	900	66108	FMS-900V-S/S	66177	FMS-900C-S/S	65672	FMS-900-EL15-S/S	65856	FMS-900-XXL-S/S	6	1650	1400
1050	42	1050	66109	FMS-1050V-S/S	66178	FMS-1050C-S/S	65673	FMS-1050-EL15-S/S	65317	FMS-1050-XXL-S/S	7	1800	1550
1200	48	1200	66110	FMS-1200V-S/S	66179	FMS-1200C-S/S	65674	FMS-1200-EL15-S/S	64778	FMS-1200-XXL-S/S	8	1950	1700
1350	54	1350	66111	FMS-1350V-S/S	66180	FMS-1350C-S/S	65675	FMS-1350-EL15-S/S	64239	FMS-1350-XXL-S/S	9	2100	1850
1500	60	1500	66112	FMS-1500V-S/S	66181	FMS-1500C-S/S	65676	FMS-1500-EL15-S/S	63700	FMS-1500-XXL-S/S	10	2350	2100
1800	72	1800	66113	FMS-1800V-S/S	66182	FMS-1800C-S/S	65677	FMS-1800-EL15-S/S	63161	FMS-1800-XXL-S/S	12	2650	2400

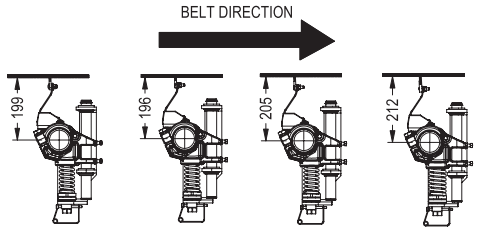




PANEL CUTOUT DETAIL

GENERAL NOTES:

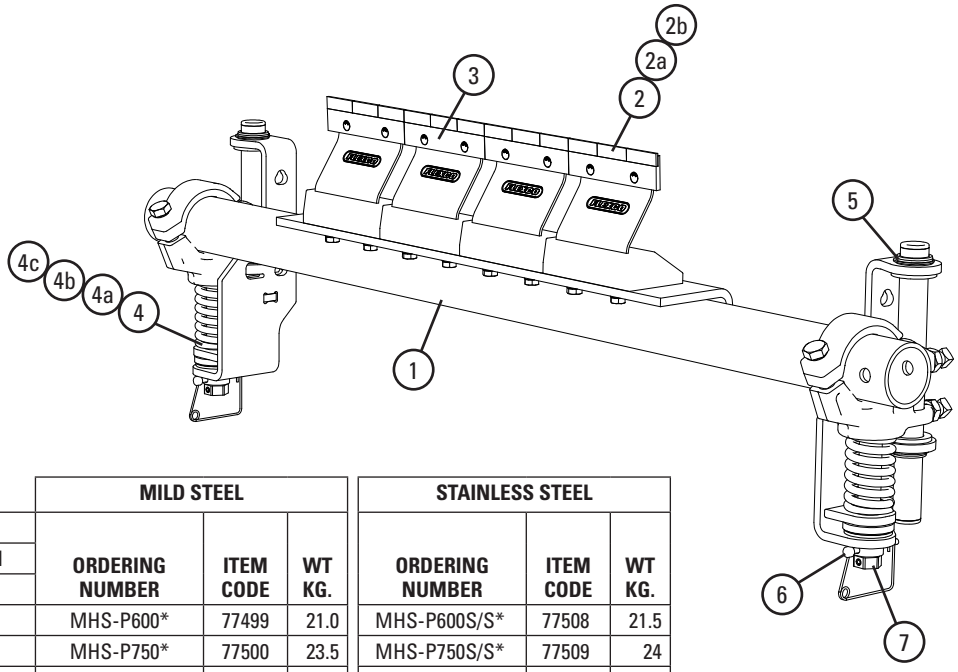
1. ONLY USE GENIUNE FLEXCO REPLACEMENT PARTS, CONTACT YOUR LOCAL DISTRUBUTOR FOR MORE INFORMATION.
2. REFER TO FLEXCO INSTALLATION AND OPERATION MANUAL FOR COMPLETE INSTALLATION AND MAINTENANCE INSTRUCTION.
3. NOT SUITABLE FOR REVERSING BELTS
4. SUITABLE TO MAX BELT SPEEDS OF 5 M/S
5. FOR PRODUCT SPECIFIC GENERAL ARRANGEMENT OR MODEL CONTACT FLEXCO CUSTOMER SERVICE.
6. FOR WIDTHS OVER 1800mm CONTACT YOU LOCAL FLEXCO HD SPECIALIST OR SALES REPRESENTATIVE



TIP TYPES AND SETUP

Section 9 - Replacement Parts

9.1 Replacement Parts List - FMS HD - MST Tensioners



Replacement Parts

REF	DESCRIPTION				MILD STEEL			STAINLESS STEEL		
	BELT WIDTH		POLE LENGTH		ORDERING NUMBER	ITEM CODE	WT KG.	ORDERING NUMBER	ITEM CODE	WT KG.
	mm	in.	mm	in.						
1	600	24	1350	54	MHS-P600*	77499	21.0	MHS-P600S/S*	77508	21.5
	750	30	1500	60	MHS-P750*	77500	23.5	MHS-P750S/S*	77509	24
	900	36	1650	66	MHS-P900*	77501	26.0	MHS-P900S/S*	77510	26.5
	1050	42	1800	72	MHS-P1050*	77502	28.5	MHS-P1050S/S*	77511	29
	1200	48	1950	78	MHS-P1200*	77527	31.0	MHS-P1200S/S*	77528	31.8
	1350	54	2100	80	MHS-P1350*	77503	33.5	MHS-P1350S/S*	77512	34.3
	1500	60	2350	94	MHS-P1500*	77504	36.0	MHS-P1500S/S*	77513	36.8
	1800	72	2650	106	MHS-P1800*	77505	38.5	MHS-P1800S/S*	77514	39.3
2	R - V-Tip (for vulcanised belts only)				RSA150	73628	0.4	RVT6-S/S	76205	0.4
2a	C-Tip (for mechanically spliced and vulcanised belts)				ICT6	74535	0.4			
2b	Extra Life R V-Tip (15mm)				RSA150-EL	61141	0.4			
2c	XXL R V-Tip (24mm)				RSA150-XXL	63790	0.4			
3	FMS Cushion Kit				FMSC	79699	1.9	FMSC	79699	1.9
4	Tension Spring - White (1 ea.) for belts 450–750mm (18–30")				STS-W	75846	0.2	STS-W-S/S	77630	0.2
4a	Tension Spring - Silver (1 ea.) for belts 900–1350mm (36–54")				STS-S	75843	0.4	STS-S-S/S	77631	0.4
4b	Tension Spring - Black (1 ea.) for belts 1500–1800mm (60–72")				STS-B	75844	0.5	STS-B-S/S	77632	0.5
4c	Tension Spring - Gold (1 ea.) for belts over 2100mm (84")				STS-G	78142	0.5	STS-G-S/S	79057	0.5
5	MST Bushing Kit (incl. 4 bushings)				MSTBK	79440	0.1	MSTBK	79440	0.1
6	MST Lock Pin				MSTLP	64930	0.1	MSTLP	64930	0.1
7	MST Adjusting Mechanism				MSTAM	79435	0.5	MSTAM-S/S	64931	0.5
-	MST HD Tensioner w/White Spring				MSTHD-W	79431	16.7	MSTHD-W-S/S	90181	16.7
-	MST HD Tensioner w/Silver Spring				MSTHD-S	79432	17.0	MSTHD-S-S/S	90182	17.0
-	MST HD Tensioner w/Black Spring				MSTHD-B	79433	17.3	MSTHD-B-S/S	90183	17.3
-	MST HD Tensioner w/Gold Spring				MSTHD-G	63020	17.3	MSTHD-G-S/S	90184	17.3

For 2100 and 2400mm (84 and 96") options, please contact Flexco for pricing and availability.
*Lead time 3 weeks

MST Spring Tensioner Selection Chart

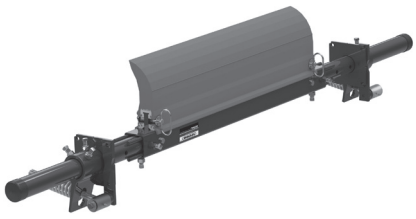
CLEANER SIZE	79431 MSTHD-W	79432 MSTHD-S	79433 MSTHD-B	63020 MSTHD-G
FMS 450–750mm (18–30")	X			
FMS 900–1350mm (36–54")		X		
FMS 1500–1800mm (60–72")			X	
FMS 2100mm+ (84"+)				X

U.S. Patent No. 6,823,983

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:

MMP Primary Cleaner

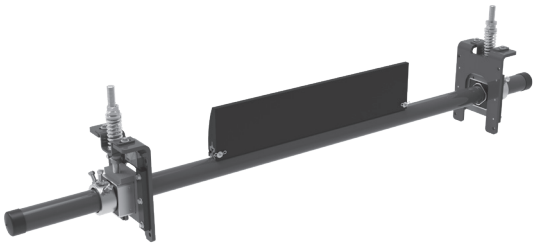


- Extra cleaning power right on the head pulley
- A 250mm (10") TuffShear™ blade provides increased blade tension on the belt to peel off abrasive materials
- The unique Visual Tension Check™ ensures optimal blade tensioning and quick, accurate retensioning
- Easy to install and simple to service

DRX Impact Beds

- Exclusive Velocity Reduction Technology™ to better protect the belt
- Slide-Out Service™ gives direct access to all impact bars for change-out
- Impact bar supports for longer bar life
- 4 models to custom fit to the application

MDWS DryWipe Secondary Cleaner

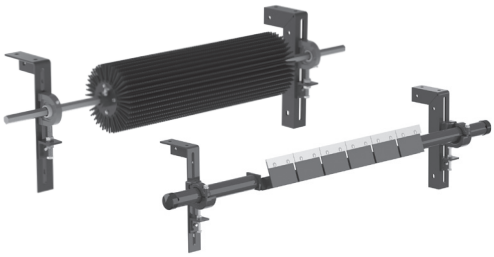


- Wipes the belt dry as final cleaner in system
- Automatic blade tensioning to the belt
- Easy, visual blade tension check
- Simple, one-pin blade replacement

PT Max™ Belt Trainer

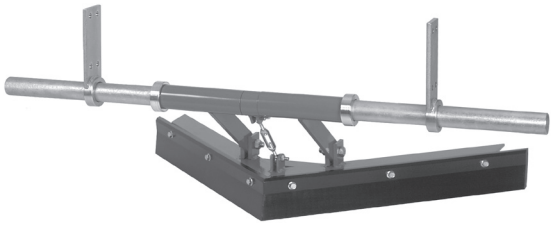
- Patented "pivot & tilt" design for superior training action
- Dual sensor rollers on each side to minimize belt damage
- Pivot point guaranteed not to freeze up
- Available for topside and return side belts

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

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

Visit **www.flexco.com** for other Flexco locations and products, or to find an authorized distributor.