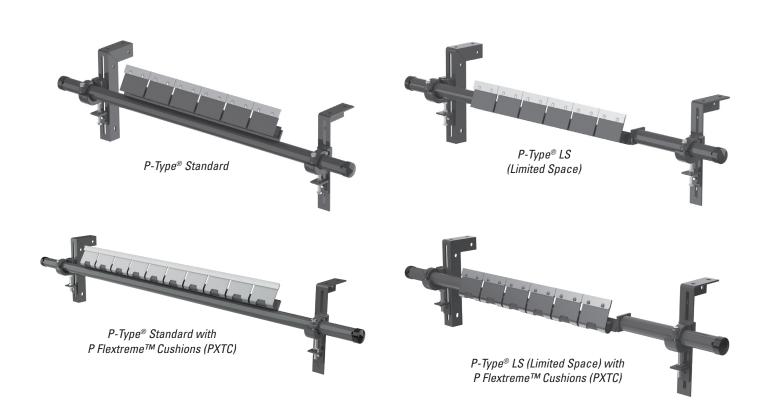
# P-Type® Secondary Belt Cleaner

# Installation, Operation and Maintenance Manual





# P-Type® Secondary Belt Cleaner

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	4
1.1 General Introduction	4
1.2 User Benefits	4
1.3 Service Option	4
Section 2 - Safety Considerations and Precautions	5
2.1 Stationary Conveyors	5
2.2 Operating Conveyors	5
Section 3 – Pre-Installation Checks and Options	6
3.1 Checklist	6
3.2 Optional Installation Accessories	6
Section 4 – Installation Instructions	7
4.1 P-Type®/P-Type® LS	7
Section 5 - Pre-Operation Checklist and Testing	11
5.1 Pre-Op Checklist	11
5.2 Test Run the Conveyor	11
Section 6 - Maintenance	12
6.1 New Installation Inspection	12
6.2 Routine Visual Inspection	12
6.3 Routine Physical Inspection	12
6.4 Blade Replacement Instructions	13
6.5 Maintenance Log	15
6.6 Cleaner Maintenance Checklist	16
Section 7 – Troubleshooting	17
Section 8 - Specs and CAD Drawings	18
8.1 Specs and Guidelines	
8.2 CAD Drawing - P-Type® with C-Tips	19
8.3 CAD Drawing - P-Type® with V-Tips	20
8.4 CAD Drawing - P-Type® with PXTC and C-Tips	21
8.5 CAD Drawing - P-Type® with PXTC and V-Tips	22
8.6 CAD Drawing- P-Type® LS with C-Tips	23
8.7 CAD Drawing- P-Type® LS with PXTC and C-Tips	24
Section 9 - Replacement Parts	25
9.1 Replacement Parts List	25
Section 10 - Other Flexco Conveyor Products	26



### **Section 1 – Important Information**

#### 1.1 General Introduction

We at Flexco are very pleased that you have selected a P-Type® Secondary Belt 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 visit our web site or contact 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 P-Type® Secondary Belt 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 P-Type® Secondary Belt 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
- Blade replacement
- Repairs

- Tension adjustments
- Cleaning

#### **A** DANGER

It is imperative that OSHA/MSHA Lockout/Tagout (LOTO) regulations, 29 CFR 1910.147, 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.

#### **A** 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.

#### **A** DANGER

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

# **A 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.

### **A** 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.



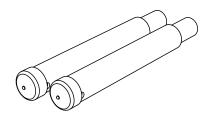
# **Section 3 – Pre-installation Checks and Options**

#### 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)

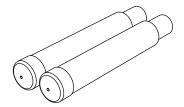
# 3.2 Optional Installation Accessories

Pole extenders are also available for wide, non-standard conveyor structures.



Pole Extender Kit (incl. 2 pole extenders) (Item Code: 77423)

• Provides 750 mm (30") of extended pole length



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

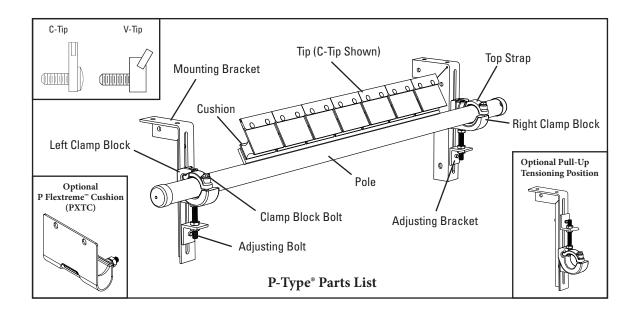
• Provides 750 mm (30") of extended pole length

#### Optional Mounting Kits (includes 2 extenders)

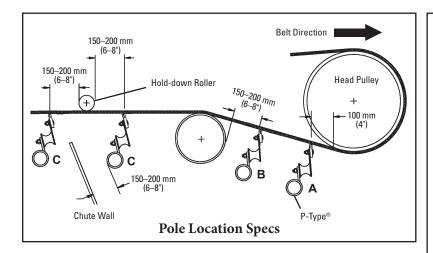
DESCRIPTION	ORDERING NUMBER	ITEM CODE	WT. KG
60mm (2-3/8") Pole Extender Kit	RAPEK	77423	8.2
73mm (2-7/8") Pole Extender Kit	MAPEK	76024	9.9

Lead time: 1 working day

# 4.1 P-Type<sup>®</sup>/P-Type<sup>®</sup> LS



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



#### **Tools Needed:**

- 19 mm (3/4") Wrench
- 24 mm (15/16") Wrench
- 300 mm (12") Adjustable Wrench (x2)
- 19 mm (3/4") Ratchet & Socket
- 24 mm (15/16") Socket
- 150 mm (6") C-Clamps (x2)
- Torch or Drill (as needed)
- Welder (as needed)
- Grinder (as needed)
- Tape Measure
- Marking Pen or Soapstone

#### **Before You Begin:**

- Double check the tip style needed for your application:
  - C-Tip for mechanically spliced and vulcanized belts.
  - V-Tip for vulcanized belts only.
- For chute mounting it may be necessary to cut an access hole to allow for installation and inspections (see next page).
- Follow all safety precautions when using a cutting torch.
- If welding, protect all fastener threads from weld spatter.
- For clearance requirements see page 18.
- P-Type<sup>®</sup> LS (available with C-Tip only) is designed for tighter space configurations.



#### 4.1 P-Type<sup>®</sup>/P-Type<sup>®</sup> LS

#### 1. Install mounting brackets.

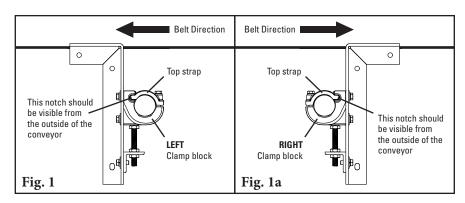
Determine the correct clamp block (left or right) and bracket needed for each side of the conveyor (Fig. 1 & 1a). The top strap should be offset away from the belt (you should be able to see the notch for the top strap from the outside of the conveyor).

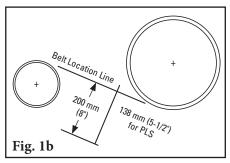
# For chute mounting: A belt location line must be established.

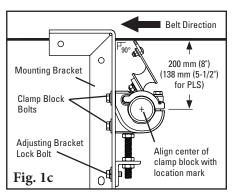
Draw a line on the chute replicating this location. If head pulley and snub pulley are too close, it may be necessary to assume an approximate belt line between the two. In the determined location draw a line perpendicular to the belt line. Make a mark on this line 200 mm (8") (138 mm (5-1/2") for P-Type $^{\circ}$  LS) below the belt location line (Fig. 1b).

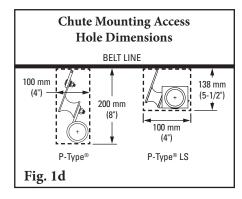
Locate a mounting bracket along the belt location line, allowing the centerline of the clamp block to align with the mark (Fig. 1c). To move the clamp blocks, if necessary, loosen the clamp block lock bolts and the adjusting bracket lock bolt and move the clamp block to a position where the center of the hole is 200 mm (8") (138 mm (5-1/2") for P-Type° LS) below the bottom of the belt. Bolt or weld in place. Repeat on the opposite side, making sure to measure from a fixed point on the structure on both sides of the conveyor to confirm the brackets are in the same location. On one side, an access hole may be required (Fig. 1d).

**NOTE:** The brackets must be aligned perpendicular to the belt.









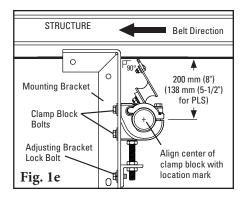
### 4.1 P-Type<sup>®</sup>/P-Type<sup>®</sup> LS

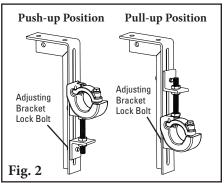
For structure mounting: Clamp the mounting bracket into position (use C-clamps). Move the clamp block to align the center of the block with a point 200 mm (8") (138 mm (5-1/2") for P-Type° LS) below the belt (Fig. 1e). To move the clamp blocks, if necessary, loosen the clamp block lock bolts and the adjusting bracket lock bolt and turn the adjusting bolt jam nuts. The bracket can now be bolted or welded in place. Locate and install bracket on the opposite side of belt in alignment with the first bracket.

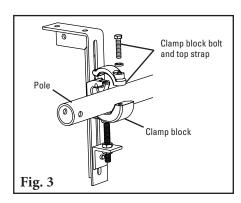
**NOTE:** The brackets must be aligned perpendicular to the belt.

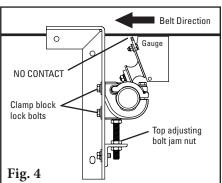
- 2. Choose the tensioner position. The tensioner is shipped mounted in the push-up position. Depending upon the space constraints of the installation, the tensioner can be optionally mounted in a pull-up position. To do this, loosen the threaded rod lock nut, unscrew the threaded rod and remove adjusting bracket lock bolt. Then move the adjusting bracket and threaded rod to the top of the clamp blocks (Fig. 2) and tighten threaded rod lock nut.
- 3. Install the pole. Remove the clamp block top strap on the access side of the conveyor, and on the opposite side loosen the clamp block bolt. Slide the pole across and into the loosened clamp block, place near end of pole in bottom section of clamp block (Fig. 3). Replace the top strap on the clamp block, center the blades on the belt and tighten both clamp block bolts finger tight.
- **4. Set the tip angle.** With angle gauge provided, rotate the tips to the preset angle and lock the pole in place by tightening the clamp block bolts equally (Fig. 4).

**NOTE:** Make sure there is NO tip-to-belt contact while making this alignment. If contact occurs, lower the pole by loosening clamp block lock bolts and raising top adjusting bolt jam nut (Fig. 4). When the tips are not touching the belt, repeat this step.







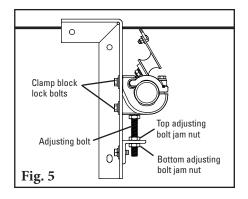


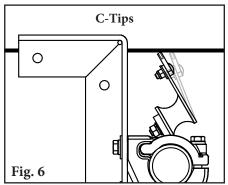


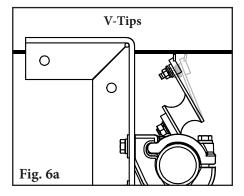
### 4.1 P-Type<sup>®</sup>/P-Type<sup>®</sup> LS

- 5. Set the tip tension. With all clamp block lock bolts slightly loosened, back down the bottom adjusting bolt jam nut 4–5 turns on both sides (Fig. 5). Turn the top adjusting bolt jam nuts down until light contact is made between the tips and belt across the entire width of the cleaner. Give an additional 1 turn to both top adjusting bolt jam nuts.
- 6. Check the tip tension. Pull back on the outside tip until the tip-to-belt contact is broken and release. If the cleaner is correctly tensioned the complete blade of the adjacent tip will be visible (Fig. 6 & 6a). If not, add (or reduce) tension by making 1/4 turn adjustments on each side of the cleaner using the adjusting bolt as described in step 4 until the adjacent tip is visible. Once the desired tension is achieved, tighten the bottom jam nuts of the adjusting rod.

**Test run the cleaner and inspect its performance.** If vibration occurs or more cleaning efficiency is desired, increase the tip tension by making a 1/4 turn adjustment on each adjusting bolt.







# **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 for 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.



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 P-Type® Secondary 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 adjusting brackets are set 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 steps on page 10.

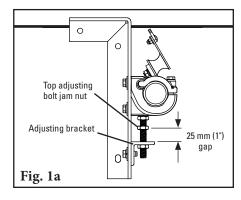
When maintenance tasks are completed, test run the conveyor to ensure the cleaner is performing properly.

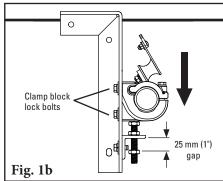
### 6.4 Blade Replacement Instructions

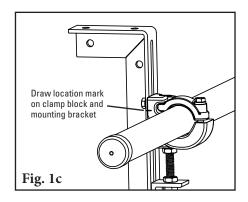
Physically lock out and tag the conveyor at the power source before you begin cleaner installation.

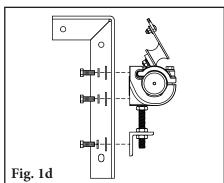
#### **BEFORE YOU BEGIN:**

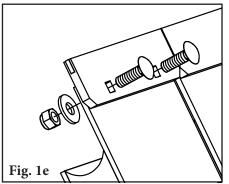
- 1. Release the blade tension and remove worn blade tips.
  - **a.** Loosen the top adjusting bolt jam nuts 25 mm (1") on the top of the adjusting brackets (Fig. 1a).
  - **b.** Loosen the clamp block lock bolts on both sides and allow the pole to move down and rest on the raised top adjusting bolt jam nuts (Fig. 1b).
  - **c.** Place location marks across the mounting bracket and the clamp block for quick positioning after blade replacement (Fig. 1c).
  - **d.** Remove the clamp block lock bolts and adjusting bracket lock bolts on each side and remove the pole with the clamp blocks and adjusting brackets attached (Fig. 1d).
  - **e.** Remove the nuts, flat washers and lock washers from the tips and remove worn tips (Fig. 1e).
  - **f.** 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. 1f).

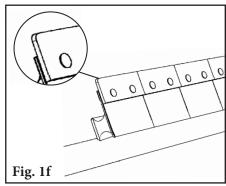














#### 6.4 Blade Replacement Instructions

- **Align the blade tips.** Push tips together so there is no more than a .25-.38 mm (.010-.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. Slide the pole back into position on the mounting brackets, aligning marks made on the bracket and the clamp block. Install the two adjusting bracket lock bolts and tighten. Install the four clamp block lock bolts finger tight (Fig. 3).
- **Set the blade tension.** Turn the top adjusting bolt jam nuts down until light tip to belt contact is made across the entire width of the cleaner. Add an additional 1 turn on the top adjusting bolt jam nuts and lock the bottom adjusting bolt jam nuts. Tighten all clamp block lock bolts.

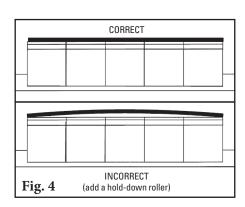
**NOTE:** If the belt is cupped, do not overtension the blades to contact the belt. A hold-down roller should be installed to flatten the belt (Fig. 4 & 4a). (Try the Stabilizing Return Roller or Stabilizing Roller Bracket Kit.)

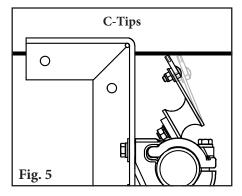


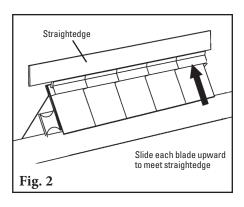
Pull back on the outer blade in the direction of belt travel until the blade breaks contact with the belt. Let go of the blade. With correct tension the full thickness of the adjacent blade tip should be visible in front of the outer blade (Fig. 5 & 5a). Check the center blade in same manner. Add tension in 1/4-turn increments on the top adjusting bolt jam nuts until view of full thickness of the adjacent blade tip is achieved.

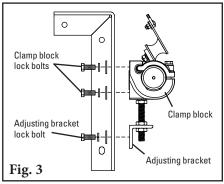
Test run the cleaner and inspect its performance. If vibration occurs or more cleaning efficiency is desired, increase the tip

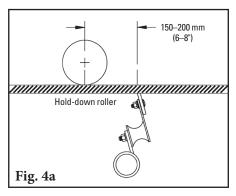
tension by making a 1/4 turn adjustment on each adjusting bolt.

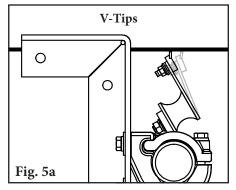












# 6.5 Maintenance Log

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



# **6.6 Cleaner Maintenance Checklist**

Site:	Inspected by:	Date:
Belt Cleaner:	Serial Number:	
Beltline Information: Beltline Number:	Belt Condition:	
Belt (450mm) (600mm) (750mm) Width: □ 18" □ 24" □ 30"	n) (900mm) (1050mm) (1200mm) (1350mm) (1500mm 36" 42" 48" 54" 60"	
Head Pulley Diameter (Belt & Lagging):	Belt Speed: fpm Belt Thickne	9SS:
Belt Splice: Condition of Spl	ice: Number of Splices: 🗆 Skived	☐ Unskived
Material conveyed:		
Days per week run: H	ours per day run:	
Blade Life:		
Date blade installed:	Date blade inspected: Estimated blade	life:
Is blade making complete contact with bel	t? □ Yes □ No	
Blade wear: Left Middle	Right	
Blade condition: $\square$ Good $\square$ Groove	d □ Smiled □ Not contacting belt □ Damage	d
<b>Was Cleaner Adjusted</b> : ☐ Yes ☐ No		
Pole Condition: ☐ Good ☐ Bent	□Worn	
<b>Lagging:</b> □ Side Lag □ Ceramic	□ Rubber □ Other □ None	
Condition of lagging: ☐ Good ☐ Bac	d □ Other	
Cleaner's Overall Performance: (Rate th	e following 1 - 5, 1= very poor - 5 = very good)	
Appearance: Comments: _		
Location: Comments: _		
Maintenance:   Comments: _		
Performance:   Comments: _		
Other comments:		

# Section 7-Trouble shooting

Problem	<b>Possible Cause</b>	<b>Possible Solutions</b>
	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)
Vibration	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
	Cleaner not set up correctly	Ensure cleaner set up properly (check tip angle with gauge)
Material buildup	Buildup on chute	Ensure cleaner is not located too close to back of chute, allowing buildup
on cleaner	Cleaner being overburdened	Introduce Flexco precleaner
	Excessive sticky material	Frequently clean unit of buildup
	Cleaner over-tensioned	Ensure cleaner is correctly tensioned
Damaged	Cleaner blade damage	Check blade for wear, damage and chips, replace where necessary
belt cover	Attack angle not correct	Ensure cleaner set up properly (check tip angle with gauge)
	Material buildup in chute	Frequently clean unit of buildup
	Cleaner not set up correctly	Ensure cleaner set up properly (check tip angle with gauge)
Cleaner not	Belt tension too high	Ensure cleaner can conform to belt, introduce hold-down roller, or replace with alternate Flexco secondary cleaner
conforming to belt	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
	Cleaner not set up correctly	Ensure cleaner set up properly (check tip angle with gauge)
	Cleaner tension too low	Ensure cleaner is correctly tensioned
	Cleaner blade worn/damaged	Check blade for wear, damage and chips, replace where necessary
Material passing	Cleaner being overburdened	Introduce Flexco precleaner
the cleaner	Belt flap	Introduce hold-down roller to flatten belt
	Belt worn or grooved	Introduce water spray pole
	Cleaner cannot conform	Ensure cleaner can conform to belt, introduce hold-down roller, or replace with alternate Flexco secondary cleaner
	Incorrect cleaner blade selection	Change blade type to accomodate fastener style (C-Tip or V-Tip)
Damage to mechanical fastener	Belt not skived correctly	Spot and redo splice correctly, lowering the profile flush or below belt surface
	Blade angle incorrect	Reset with gauge
Missing material	Cupped Belt	Install hold-down roller and reset blade angle with gauge
in belt center only	Cleaner blade worn/damaged	Check blade for wear, damage and chips, replace where necessary
Missing material	Cupped Belt	Install hold-down roller and reset blade angle with gauge
on outer edges only	Cleaner blade worn/damaged	Check blade for wear, damage and chips, replace where necessary

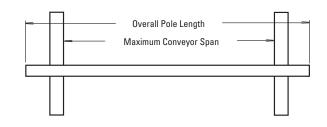


# Section 8-Specifications and CAD Drawings

# 8.1 Specs and Guidelines

#### **Pole Length Specifications**

CLEAN	ER SIZE	POLE L	ENGTH	MAXI CONVEY	MUM Or Span
mm	mm in. 450 18		mm in.		in.
450	18	1200	48	1075	43
600	24	1350	54	1225	49
750	750 30		60	1375	55
900 36		1650	66	1525	61
1050	42	1800	72	1675	67
1200	48	1950	78	1825	73
1350	54	2200	88	2075	83
1500	60	2350	94	2225	89
1800	72	2650	106	2525	101
2100	84	2950	118	2825	113
2400	96	3250	130	3125	125

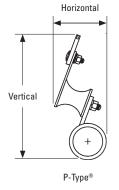


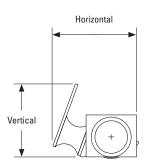
Pole Diameter - 60 mm (2-3/8") up to cleaner size 1200 mm (48")

Pole Diameter - 73 mm (2-7/8") for cleaner size 1350 mm (54") and up

#### **Clearance Guidelines for Installation**

	BELT W	•		ONTAL RANCE JIRED	CLEAF	TICAL RANCE JIRED
CLEANER TYPE	mm	in.	mm	in.	mm	in.
P-Type®	450-2400	18–96	100	4	200	8
P-Type® LS	450-1350	18–54	125	5	138	5 1/2
P-Type® with PXTC	450-1800	18–72	100	4	200	8
P-Type® LS with PXTC	450-1350	18–54	125	5	138	5 1/2

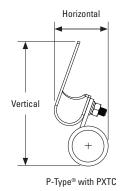


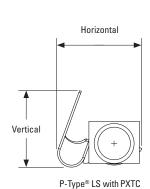


P-Type® LS

#### **Cushion Specifications**

CUSHION TYPE	DUROMETER	TEMPERATURE RANGE
Standard	55A	-35 to 82°C
PXTC	83A±5	(-30 to 180°F)
Polyurethane	85A	-32 to 82°C (-25 to 180°F)

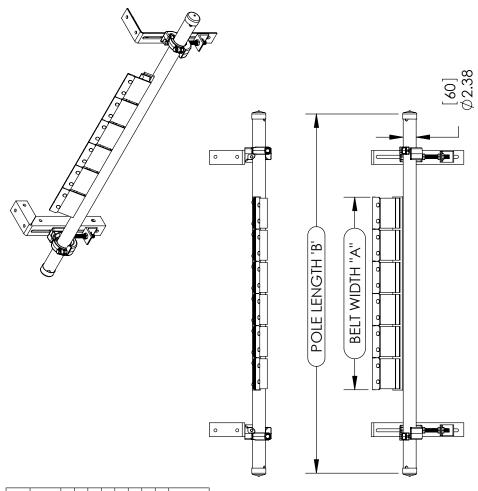




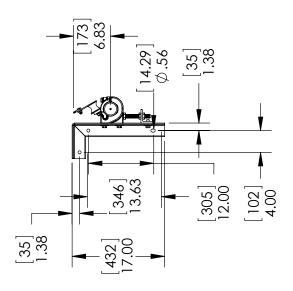
**Specifications:** 

•	Maximum Belt Speed	Standard with C-Tips: 5 m/s (1000 FPM)
		Standard with V-Tips: 6 m/s (1200 FPM)
		PXTC with C-Tips: 6 m/s (1200 FPM)
		PXTC with V-Tips: 7.5 m/s (1450 FPM)
•	Temperature Rating	35 to 82°C (-30 to 180°F)
•	Usable Blade Wear Length	9 mm (3/8")
•	Blade Materials	C-Tip: Impact Resistant Tungsten Carbide (works with mechanical fasteners)
		V-Tip: Long Life Tungsten Carbide (works on vulcanized belts only)
•	Available for Belt Widths	P-Type®: 450 to 2400 mm (18 to 96")
		P-Type <sup>®</sup> LS: 450 to 1350 mm (18 to 54")
		Other sizes available upon request.
•	CEMA Cleaner Rating	Class 3

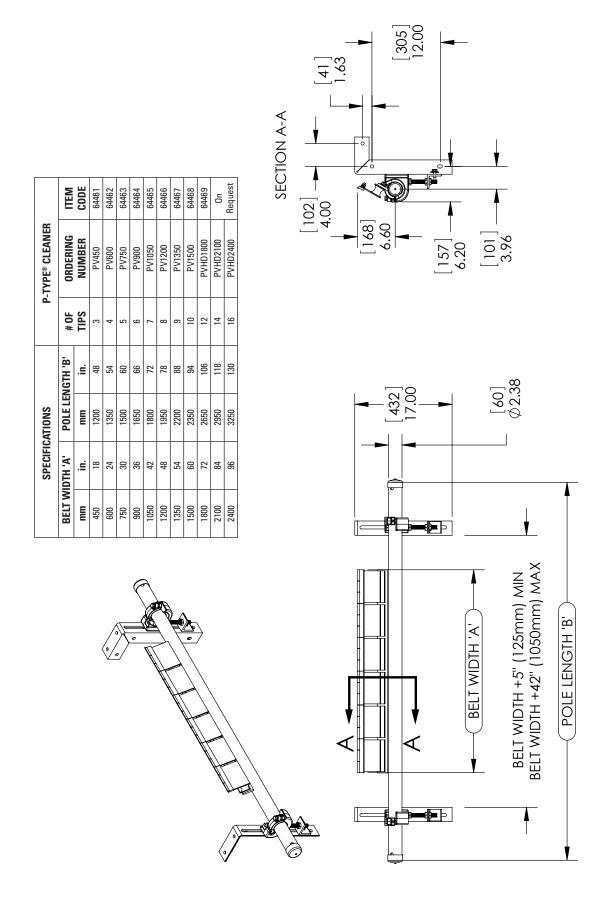
# 8.2 CAD Drawing - P-Type® with C-Tips



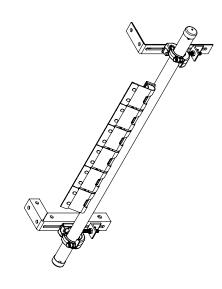
	ITEM	CODE	62219	62220	62221	62222	62223	69606	62224	62229	Ö	Regulest	neahhan
P-TYPE® CLEANER	ORDERING	NUMBER	PC450	PC600	PC750	PC900	PC1050	PC1200	PC1350	PC1500	PCHD1800	PCHD2100	PCHD2400
ď	# 0F	TIPS	3	4	5	9	7	8	6	10	12	14	16
	IGTH 'B'	ij.	48	54	09	99	72	78	88	94	106	118	130
ATIONS	POLE LENGTH 'B'	mm	1200	1350	1500	1650	1800	1950	2200	2350	2650	2950	3250
SPECIFICATIONS	DTH 'A'	ij.	18	24	30	36	42	48	54	09	72	84	96
	BELT WIDTH 'A'	mm	450	009	750	006	1050	1200	1350	1500	1800	2100	2400



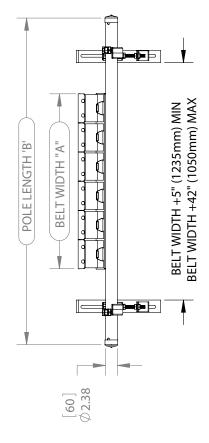
# 8.3 CAD Drawing - P-Type® with V-Tips

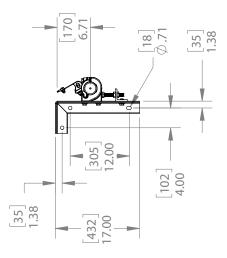


# 8.4 CAD Drawing – P-Type® with PXTC and C-Tips

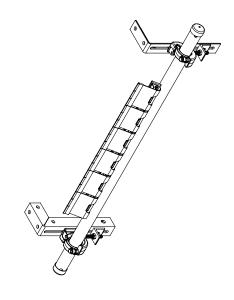


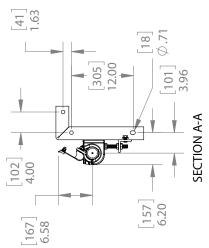
	SPECIFICATIONS	ATIONS			PXT-TYPE CLEANER		ITEM NUMBER '1' P-TYPE® POLE	R.1' IE
 BELT WIDTH 'A'	IDTH 'A'	POLE LENGTH 'B'	NGTH 'B'	# 0F	ORDERING	ITEM	ORDERING	ITEM
 mm	.≝	mm	ij.	TIPS	NUMBER	CODE	NUMBER	CODE
 450	18	1200	48	3	PC-PXT-18-CCMK	121169	PP-18	78414
 009	24	1350	54	4	PC-PXT-24-CCMK	121170	PP-24	78416
 750	30	1500	09	5	PC-PXT-30-CCMK	121171	PP-30	78418
 006	36	1650	99	9	PC-PXT-36-CCMK	121172	PP-36	78420
 1050	42	1800	72	7	PC-PXT-42-CCMK	121173	PP-42	78422
 1200	48	1950	78	8	PC-PXT-48-CCMK	121174	PP-48	78424
1350	54	2200	88	6	PC-PXT-54-CCMK	121175	PP-54	78425
1500	09	2350	94	10	MDD-09-LXA-DA	121176	DP-60	78451
1800	72	2650	106	12	PC-PXT-72-CCMK	121177	PP-72	73017



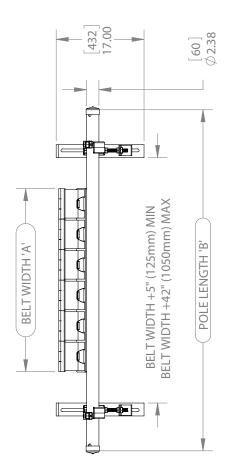


# 8.5 CAD Drawing – P-Type® with PXTC and V-Tips

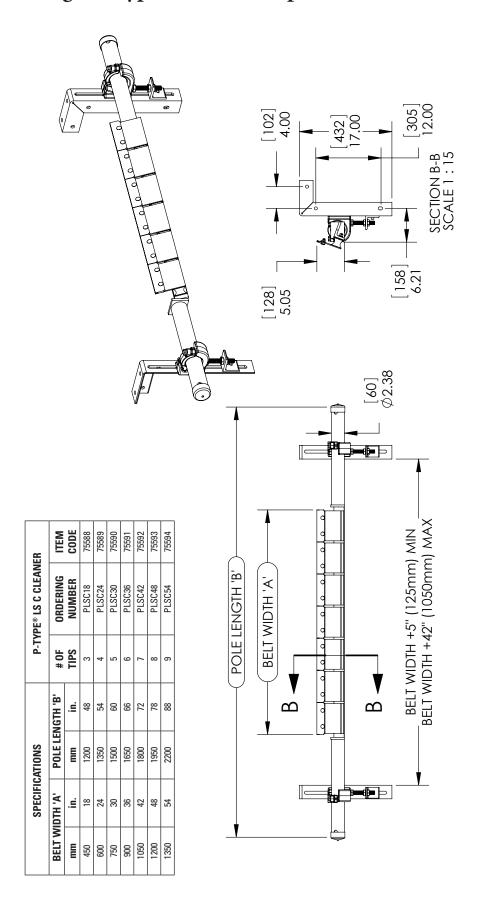




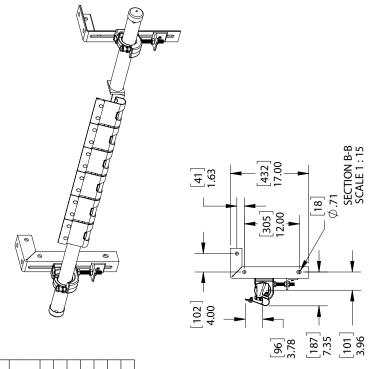
BELT WIDTH 'A'         POLE LENGTH 'B'         # 0F         ORDERING         ITEM         ORDERING         ORDERING		SPECIFIC	SPECIFICATIONS			PXT-TYPE CLEANER		ITEM NUMBER '1' P-TYPE® POLE	R '1' LE
in.         mm         in.         TIPS         NUMBER         CODE         NUMBER           18         1200         48         3         PV-PXT-18-CCMK         121178         PP-18           24         1350         54         4         PV-PXT-24-CCMK         121179         PP-24           30         1500         60         5         PV-PXT-30-CCMK         121180         PP-34           42         1800         72         7         PV-PXT-36-CCMK         121181         PP-42           48         1950         78         8         PV-PXT-48-CCMK         121183         PP-48           54         2200         88         9         PV-PXT-54-CCMK         121184         PP-54           60         2350         94         10         PV-PXT-54-CCMK         121184         PP-54           7         2650         106         12         PV-PXT-54-CCMK         121184         PP-54           7         2550         94         10         PV-PXT-54-CCMK         121185         PP-60           7         2650         10         PV-PXT-54-CCMK         121185         PP-54	BELT W	IDTH 'A'	POLE LEI	NGTH 'B'	# 0F	ORDERING	ITEM	ORDERING	ITEM
18         1200         48         3         PV-PXT-18-CCMK         121178         PP-18           24         1350         54         4         PV-PXT-24-CCMK         121179         PP-24           30         1500         60         5         PV-PXT-30-CCMK         121180         PP-24           42         1800         72         7         PV-PXT-42-CCMK         121181         PP-36           48         1950         78         8         PV-PXT-48-CCMK         121183         PP-48           54         2200         88         9         PV-PXT-54-CCMK         121184         PP-54           60         2350         94         10         PV-PXT-60-CCMK         121186         PP-54           72         2650         106         12         PV-PXT-72-CCMK         121186         PP-54	mm	.≝	mm	ii.	TIPS	NUMBER	CODE	NUMBER	CODE
24         1350         54         4         PV-PXT-24-CCMK         121179         PP-24           30         1500         60         5         PV-PXT-30-CCMK         121180         PP-30           42         1800         72         7         PV-PXT-42-CCMK         121181         PP-42           48         1950         78         8         PV-PXT-48-CCMK         121183         PP-48           54         2200         88         9         PV-PXT-54-CCMK         121184         PP-54           60         2350         94         10         PV-PXT-54-CCMK         121185         PP-60           72         2650         106         12         PV-PXT-72-CCMK         121186         PP-72	450	18	1200	48	က	PV-PXT-18-CCMK	121178	PP-18	78414
30         1500         60         5         PV-PXT-30-CCMK         121180         PP-30           36         1650         66         6         PV-PXT-36-CCMK         121181         PP-36           42         1800         72         7         PV-PXT-42-CCMK         121182         PP-42           48         1950         78         8         PV-PXT-48-CCMK         121183         PP-48           54         2200         88         9         PV-PXT-54-CCMK         121184         PP-54           60         2350         94         10         PV-PXT-60-CCMK         121185         PP-60           72         2650         106         12         PV-PXT-72-CCMK         121186         PP-72	009	24	1350	54	4	PV-PXT-24-CCMK	121179	PP-24	78416
36         1650         66         6         PV-PXT-36-CCMK         121181         PP-36           42         1800         72         7         PV-PXT-42-CCMK         121182         PP-42           48         1950         78         8         PV-PXT-48-CCMK         121183         PP-48           54         2200         88         9         PV-PXT-54-CCMK         121184         PP-54           60         2350         94         10         PV-PXT-60-CCMK         121186         PP-60           72         2650         106         12         PV-PXT-72-CCMK         121186         PP-72	750	30	1500	09	5	PV-PXT-30-CCMK	121180	PP-30	78418
42         1800         72         7         PV-PXT-42-CCMK         121182         PP-42           48         1950         78         8         PV-PXT-48-CCMK         121183         PP-48           54         2200         88         9         PV-PXT-54-CCMK         121184         PP-54           60         2350         94         10         PV-PXT-60-CCMK         121185         PP-60           72         2650         106         12         PV-PXT-72-CCMK         121186         PP-72	006	36	1650	99	9	PV-PXT-36-CCMK	121181	PP-36	78420
48         1950         78         8         PV-PXT-48-CCMK         121183         PP-48           54         2200         88         9         PV-PXT-54-CCMK         121184         PP-54           60         2350         94         10         PV-PXT-60-CCMK         121185         PP-60           72         2650         106         12         PV-PXT-72-CCMK         121186         PP-72	1050	42	1800	72	7	PV-PXT-42-CCMK	121182	PP-42	78422
54         2200         88         9         PV-PXT-54-CCMK         121184         PP-54           60         2350         94         10         PV-PXT-60-CCMK         121185         PP-60           72         2650         106         12         PV-PXT-72-CCMK         121186         PP-72	1200	48	1950	78	8	PV-PXT-48-CCMK	121183	PP-48	78424
60         2350         94         10         PV-PXT-60-CCMK         121185         PP-60           72         2650         106         12         PV-PXT-72-CCMK         121186         PP-72	1350	54	2200	88	6	PV-PXT-54-CCMK	121184	PP-54	78425
72 2650 106 12 PV-PXT-72-CCMK 121186 PP-72	1500	09	2350	94	10	PV-PXT-60-CCMK	121185	PP-60	78451
	1800	72	2650	106	12	PV-PXT-72-CCMK	121186	PP-72	73017



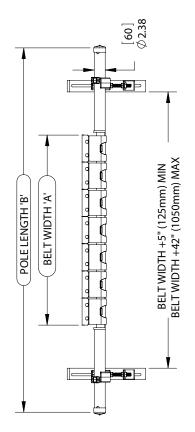
# 8.6 CAD Drawing - P-Type® LS with C-Tips



# 8.7 CAD Drawing – P-Type® LS with PXTC and C-Tips

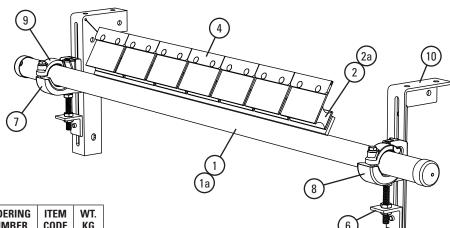


FICAT	CATIONS				PXT-TYPE CLEANER		ITEM NUMBER '1' P-TYPE® POLE	3ER '1'
BELT WIDTH 'A' POLE LENGTH 'B'	POLE LENGTH 'B'	GTH 'B'		# 0F	ORDERING	ILEM	ORDERING	ITEM
in. mm in.	_	ij.		TIPS	NUMBER	CODE	NUMBER	CODE
18 1200 48		48		3	PLSC-PXT-18-CCMK	121187	PLSP18	75595
24 1350 54		54		4	PLSC-PXT-24-CCMK	121188	PLSP24	75596
30   1500   60		09		2	PLSC-PXT-30-CCMK	121189	PLSP30	75597
36 1650 66		99		9	PLSC-PXT-36-CCMK	121190	PLSP36	75598
42   1800   72		72		7	PLSC-PXT-42-CCMK	121191	PLSP42	75599
48   1950   78		78		8	PLSC-PXT-48-CCMK	121192	PLSP48	75600
54 2200 88		88		6	PLSC-PXT-54-CCMK	121193	PLSP54	75601
			ı					



# **Section 9 – Replacement Parts**

# 9.1 Replacement Parts List



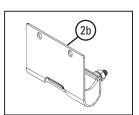
# **Replacement Parts**

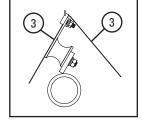
REF	DESCRIPTION	ORDERING NUMBER	ITEM CODE	WT. KG
	450mm (18") Pole	PP450	73003	10.2
	600mm (24") Pole	PP600	73005	11.8
	750mm (30") Pole	PP750	73007	14.7
	900mm (36") Pole	PP900	73009	15.0
1	1050mm (42") Pole	PP1050	73011	19.5
	1200mm (48") Pole	PP1200	73013	21.5
	1350mm (54") Pole	PP1400	73015	24.9
	1500mm (60") Pole	PP1500	73016	26.3
	1800mm (72") HD Pole	PPHD1800	74597	29.0
1a	2100mm (84") HD Pole	PPHD2100	A2803	-
	2400mm (96") HD Pole	PPHD2400	74557	-
	450mm (18") LS Pole	PLSP450	75595	14.7
	600mm (24") LS Pole	PLSP600	75596	16.3
	750mm (30") LS Pole	PLSP750	75597	17.6
-	900mm (36") LS Pole	PLSP900	75598	-
	1050mm (42") LS Pole	PLSP1050	75599	-
	1200mm (48") LS Pole	PLSP1200	75600	-
	1350mm (54") LS Pole	PLSP1350	75601	-
2	P2 C-Tip Cushion*	PHA	73626	0.9
2a	P V-Tip Cushion Polyurethane	PHA-PU85	17743	1.0
2b	P Flextreme™ Cushion*	PXTC	107137	0.8
3	P Polyshield	PPS6	73024	0.05
3a	P SS Polyshield	PSSS	74773	0.2
4	C-Tip* Kit (1 ea.)	ICT6	74535	0.3
5	P V-Tip* (for vulcanized belts only)	PSA150	73156	0.5
5a	P SS V-Tip* (for vulcanized belts only)	PVT6 (S/S)	75420	0.5
6	Adjusting Bracket Kit* (1 ea.)	PAB	75513	0.7
7	Pole Clamp Kit Left* (1 ea.) (incl. item 9)	CCKL	79224	3.1
8	Pole Clamp Kit Right* (1 ea.) (incl. item 9)	CCKR	79228	3.1
9	Cradle Clamp Top Strap (1 ea.) (for use on left or right Pole Clamp Kit)	CCKTS	79232	0.5
10	Mounting Bracket Kit (1 Right and 1 Left)	EZS2MBK	75666	5.9
-	Cradle Clamp Mounting Kit* (incl. (2) ea. items 6 & (1) ea. items 7, 8, 10)	ССМК	78919	15.0
-	HD Cradle Clamp Mounting Kit* for sizes 1350–2400mm (54–96") (incl. (2) ea. items 6 & (1) ea. items 7, 8, 10)	ССМКНО	78920	16.6

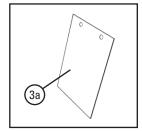


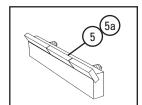
#### **Tips Required per Cleaner Size**

beedaea b											
mm	450	600	750	900	1050	1200	1350	1500	1800	2100	2400
in.	18	24	30	36	42	48	54	60	72	84	96
No. C-Tips or V-Tips Required	3	4	5	6	7	8	9	10	12	14	16









### **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 Precleaner**



- Extra cleaning power right on the head pulley
- A 250 mm (10") TuffShear<sup>™</sup> 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<sup>™</sup> in order to better protect the belt
- Slide-Out Service<sup>™</sup> 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<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 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

