MHS Enhanced Service Advantage Cartridge HD Secondary Belt Cleaner

Installation, Operation and Maintenance Manual





Purchase Date:	
Purchased From:	
Installation Date:	

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

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Section 1 - Important Information

1.1 General Introduction

We at Flexco are very pleased that you have selected an MHS SAC 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 visit our website or contact our Customer Service Department:

Customer Service: 612-8818-2000

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 MHS ESAC 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.

Before installing and operating the MHS SAC 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
- Blade replacement

• Cleaning

Tension adjustments

A DANGER

It is imperative that 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

Repairs

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. Unforeseeable 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)

Section 3 - Pre-installation Checks and Options

3.2 Optional Installation Accessories

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



76071Standard Mounting Bracket KitFor most secondary cleaner installs.

- For most secondary clear
 325mm W x 388mm L
- Includes 2 brackets



76072

Long Mounting Bracket Kit

- For installations that require extra length legs.
- 325mm W x 538mm L
- Includes 2 brackets



76073

Optional Top Angle Kit

- Used with both standard and long mounting bracket kits for additional mounting options.
- 325mm L
- Includes 2 brackets

76024

- Pole Extender Kit
- Provides 750mm of extended pole length
- Includes 2 pole extenders



Optional Mounting Kits

Description	Ordering Number	ltem Code	Wt. Kgs.
Standard Mounting Bracket Kit *	SSTSMB	76071	15.5
Long Mounting Bracket Kit *	SSTLMB	76072	19.7
Optional Top Angle Kit *	SSTOTA	76073	4.8
Pole Extender Kit	MAPEK	76024	9.9

*Hardware Included

Lead time: 1 working day



Section 4.1 - Installation Instructions - Single Cartridge

MHS Service Advantage Cartridge HD Secondary Belt Cleaner



- 2. Install the SST mounting base. On the cartridge access (service) side of the conveyor, make a mark on the long bracket 75mm below the belt line (Fig. 2a); this will be needed in Step 3. On the opposite side, bolt the SST tensioner mounting base into position so the top flange of the base is 45mm below the belt line (Fig. 2b). Adjust the tension nut to the top of the adjusting rod.
- **NOTE:** For chute mounting, a belt location line must be drawn on the chute wall so the mounting bases can be aligned with the belt. Cut an access hole as shown for the CST tensioner (Fig. 2c). Also cut an access hole as needed for the SST tensioner.



3. Install the pole. Remove the cartridge from the pole. Slide the pole into the SST torsion pole mount as far as needed. Then locate the other end into the CST tensioner torsion pole mount and attach the mounting base to the long bracket, aligning the flanges with the previously marked position (Fig. 3). Adjust tension nuts to the tops of the adjusting rods.





Section 4.1 - Installation Instructions - Single Cartridge

- Knuckle Handle 4. Different Cartridge Installation Methods. Option A: Handle always on cartridge. Set screw 1. Slide the handle into the already installed knuckle, then tighten with supplied bolt/nut hardware. 2. Slide the cartridge onto the pole and lock down the knuckle onto the pole. Tighten nut and bolt 3. Slide the lock plate onto the pole, over the handle, then lock with the set screw. Lock Plate Knuckle **Option B: Handle stored inside pole.** 1. Set the cartridge onto the pole, then slide the handle into the already installed knuckle. Handle removed and 2. Lock down the knuckle onto the pole, then remove stored in pole end handle and place into open pole end. 3. Using the lock pins provided, lock the knuckle and the Lock Pin handle in place.
- 5. Set the blade angle. Center the pole/blades on the belt. Rotate the pole until the tips align with the white "MHS Standard" side of the tip setup gauge provided (Fig. 5a). Tighten the two locking bolts on each torsion pole mount to lock the pole in place (Fig. 5b). 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.





Spring Length Chart for SST Spring Tensioner

BLADE WIDTH	WHITE SPRING	SILVER SPRING	BLACK Spring
600mm	78mm	99mm	N/A
750mm	72mm	97mm	N/A
900mm	N/A	94mm	98mm
1050mm	N/A	91mm	95mm
1200mm	N/A	88mm	93mm
1350mm	N/A	86mm	91mm
1500mm	N/A	83mm	89mm
1800mm	N/A	N/A	84mm

Shading indicates preferred spring option



6.	Set the blade tension. Loosen the top tension jam
	nuts on both sides. Tighten the tension nuts until the
	correct spring compression is reached (Fig. 6). Spring
	compression is determined by belt width. See chart below
	for the correct spring length for your belt width. Tighten
	top tension jam nuts.

Spring Length Chart for CST Spring Tension

for Cor opring tensioner				
BLADE WIDTH	WHITE SPRING	SILVER SPRING	BLACK Spring	GOLD SPRING
600mm	78mm	99mm	N/A	N/A
750mm	72mm	97mm	N/A	N/A
900mm	N/A	94mm	98mm	N/A
1050mm	N/A	91mm	95mm	N/A
1200mm	N/A	88mm	93mm	N/A
1350mm	N/A	86mm	91mm	N/A
1500mm	N/A	83mm	89mm	103mm
1800mm	N/A	N/A	84mm	101mm
2100mm	N/A	N/A	80mm	99mm
2400mm	N/A	N/A	N/A	97mm
3000mm	N/A	N/A	N/A	93mm



Shading indicates preferred spring option



7. Set adjusting rod sleeve (SST Tensioner only). After setting the blade tension, screw the adjusting rod sleeve into the UHMW bushing until 13mm is showing (Fig. 7). Tighten the adjusting rod sleeve jam nut.

8. IMPORTANT: Apply the Spring Tension Labels to the conveyor structure for future blade retensioning.

9. 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 compression adjustments on the tension springs.

SEE PAGE 16 FOR CARTRIDGE REPLACEMENT INSTRUCTIONS.



Section 4.2 - Installation Instructions - Dual Cartridge

MHS Enhanced Service Advantage Cartridge HD Secondary Belt Cleaner



Fig. 1b

- 2. Install one CST mounting base. On both sides of the conveyor, make a mark on the long brackets 75mm below the belt line (Fig. 2a); this will be needed in Step 3.
- NOTE: For chute mounting, a belt location line must be drawn on the chute wall so the mounting bases can be aligned with the belt. Cut an access hole as shown for the CST tensioner (Fig. 2b).



3. Install the pole. Remove the cartridges from the pole. Slide the pole into one CST torsion pole mount as far as needed. Then locate the other end into the other CST tensioner torsion pole mount and attach the mounting base to the long bracket, aligning the flanges with the previously marked position (Fig. 3). Adjust tension nuts to the tops of the adjusting rods.





Section 4.2 - Installation Instructions - Dual Cartridge

- 4. Different Cartridge Installation Methods. Option A: Handle always on cartridge.
 - 1. Slide the handle into the already installed knuckle, then tighten with supplied bolt/nut hardware.
 - **2.** Slide the cartridge onto the pole and lock down the knuckle onto the pole.
 - **3.** Slide the lock plate onto the pole, over the handle, then lock with the set screw.
 - 4. Repeat for other side.

Option B: Handle stored inside pole.

- 1. Set the cartridge onto the pole, then slide the handle into the already installed knuckle.
- **2.** Lock down the knuckle onto the pole, then remove handle and place into open pole end.
- **3.** Using the lock pins provided, lock the knuckle and the handle in place.
- 4. Repeat for other side.
- 5. Set the blade angle. Center the pole/blades on the belt. Rotate the pole until the tips align with the white "MHS Standard" side of the tip setup gauge provided (Fig. 5a). Tighten the two locking bolts on each torsion pole mount to lock the pole in place (Fig. 5b). 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.







6. Set the blade tension. Loosen the top tension jam nuts on both sides. Tighten the tension nuts until the correct spring compression is reached (Fig. 6). Spring compression is determined by belt widt h. See chart below for the correct spring length for your belt width. Tighten top tension jam nuts.

Spring Length Chart for CST Spring Tensioner

	- I J				
BLADE WIDTH	WHITE SPRING	SILVER SPRING	BLACK Spring	GOLD Spring	
600mm	78mm	99mm	N/A	N/A	
750mm	72mm	97mm	N/A	N/A	
900mm	N/A	94mm	98mm	N/A	Ton of Washer to
1050mm	N/A	91mm	95mm	N/A	Mounting Base
1200mm	N/A	88mm	93mm	N/A	(hoth springs)
1350mm	N/A	86mm	91mm	N/A	
1500mm	N/A	83mm	89mm	103mm] <u> </u>
1800mm	N/A	N/A	84mm	101mm]
2100mm	N/A	N/A	80mm	99mm	
2400mm	N/A	N/A	N/A	97mm	
3000mm	N/A	N/A	N/A	93mm	



7. IMPORTANT: Apply the Spring Tension Labels to the conveyor structure for future blade retensioning.

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 compression adjustments on the tension springs.

SEE NEXT PAGE FOR CARTRIDGE REPLACEMENT INSTRUCTIONS.



Section 4.3 - Cartridge Replacement Instructions

MHS Enhanced Service Advantage Cartridge HD Secondary Belt Cleaner



Section 4.3 - Cartridge Replacement Instructions

4. Replace the worn tips. NOTE: If using a dual cartridge cleaner, please use the provided Cartridge Tip Alignment Tool to ensure the tips on both cartridges are located at the same height. It is recommended to use a second cartridge with new tips and cushions already installed for a quick change-out. However, new cleaner tips can be installed on the pulled cartridge on-site if needed.

Single Cartridge:

- **1.** Remove all tips with hardware from the used cartridge.
- **2.** Install all new tips and hardware without fully tightening.
- 3. Tighten one of the tips on one end of the cartridge.
- 4. Visually align all others while tightening remaining tips, ensuring a flat profile across all tips. Check with a straightedge. When finished, all tips should move freely without catching on the next tip and have no gaps larger than 1mm (approximate thickness of a credit card).





- **1.** Remove all tips with hardware from the used cartridges.
- **2.** Install all new tips and hardware without fully tightening.
- **3.** On one cartridge, place the Cartridge Tip Alignment Tool on the end with the notch and alignment holes. Using those alignment holes, tighten the tool to the cartridge with wing nut (Fig. 1).
- **4.** Set the tip height gauge on the Cartridge Tip Alignment Tool so that the loosely installed tip can push up into the corner of the tool (Fig. 2).
- **5.** Tighten the first tip while holding it tight to the Cartridge Tip Alignment Tool (Fig. 2).
- 6. Visually align all others while tightening remaining tips, ensuring a flat profile across all tips. Check with a straightedge. When finished, all tips should move freely without catching on the next tip and have no gaps larger than 1mm (approximate thickness of a credit card).
- 7. Repeat Steps 3, 5 and 6 for second cartridge, making sure to keep the tip height gauge locked in place so that both cartridges will be aligned when assembled to the pole.





DO NOT RESET TIP HEIGHT GAUGE WHEN SWITCHING TO SECOND CARTRIDGE



Section 4.3 - Cartridge Replacement Instructions

- 5. Insert the reconditioned or replacement cartridge. Option A: Handle always on cartridge.
 - 1. Slide the cartridge onto the pole and lock down the knuckle onto the pole.
 - **2.** Slide the lock plate onto the pole, over the handle, then lock with the set screw.
 - 3. If using dual cartridge, repeat for other side.

Option B: Handle stored inside pole.

- 1. Set the cartridge onto the pole, then slide the handle into the already installed knuckle.
- **2.** Lock down the knuckle onto the pole, then remove handle and place into open pole end.
- **3.** Using the lock pins provided, lock the knuckle and the handle in place.
- 4. If using dual cartridge, repeat for other side.



6. Retension the cleaner tips to the belt. Turn the tension nuts until the correct spring length is reached for your blade width. See Spring Length Charts at right (or on the cleaner).

Spring Length Chart for SST Spring Tensioner





WIDTH	SPRING	SPRING	SPRING
600mm	78mm	99mm	N/A
750mm	72mm	97mm	N/A
900mm	N/A	94mm	98mm
1050mm	N/A	91mm	95mm

Spring Length Chart

for CST Spring Tensioner

BLADE WHITE SILVER



BLACK

GOLD

SPRING

N/A

N/A



Shading indicates preferred spring option

Shading indicates preferred spring option

Shading indicates preferred spring option

7. 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 compression adjustments on the tension springs.

Section 4.4 - Push-up Tensioning Instructions

For SST Tensioner/Single-Side Access Only



1. Reconfigure the standard pull-up tensioner to the push-up style. Remove the 3 tension nuts, the flat washer, 2 bushings, the spring, the sleeve and the hat bracket; reassemble (Fig. 1) with 2 tension nuts, the flat washer, 2 bushings, the spring and the hat bracket on the upper end of the adjusting rod. Add washer (from instruction packet) and 3rd tension nut to bottom of adjusting rod.

- **2. Install the tensioner mounting bases.** Mount the bases to the structure or chute so that the tops of the base legs are 83mm below the belt (Fig. 1).
- **3.** Install the cleaner pole and set the blade angle. Follow the installation steps from the cleaner instructions on Page 8 . Note: be sure the lock bolts on the torsion pole mount have been securely tightened to lock the pole in place before moving to Step 4.
- 4. Set the blade tension. Remove the bottom tension nut and washer from the adjusting rod. Turn the 2 upper tension nuts until the spring is compressed to the length shown on the Spring Length Chart at right. Tighten the 2 tension nuts together to prevent loosening.



Spring Length Chart for SST Spring Tensioner

BLADE WIDTH	WHITE SPRING	SILVER SPRING	BLACK Spring
600mm	78mm	99mm	N/A
750mm	72mm	97mm	N/A
900mm	N/A	94mm	98mm
1050mm	N/A	91mm	95mm
1200mm	N/A	88mm	93mm
1350mm	N/A	86mm	91mm
1500mm	N/A	83mm	89mm
1800mm	N/A	N/A	84mm



Shading indicates preferred spring option

5. Replace the sleeve. Position the sleeve over the adjusting rod and turn it until it is in the middle of the bushing. Replace the bottom tension nut and tighten until it locks the sleeve in place (Fig. 5).



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.

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 MHS ESAC HD 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 ones on Page 11.
- When maintenance tasks are completed, test run the conveyor to ensure the cleaner is performing properly



Section 6 - Maintenance

6.4 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:			

Section 6 - Maintenance

6.5 Cleaner Maintenance Checklist

Belt Cleaner:	Serial Number:
Beltline Information: Beltline Number:	Belt Condition:
Belt Width:	1050mm 1200mm 1350mm 1500mm 1800mm 2100mm 2400mm 3000mm
Belt Speed:fpm	Belt Thickness:
Belt Splice Condition	on of Splice Number of splices Skived Unskived
Material conveyed	
Days per week run	_ Hours per day run
Blade Life: Date blades installed: Are blades making complete contact with	_ Date blades inspected: Estimated blade life:
Blade wear: 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: Slide 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:	



Problem	Possible Cause	Possible Solutions
	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 (1°-3° into belt)
Material buildup on cleaner	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
	Cleaner over-tensioned	Ensure cleaner is correctly tensioned
Democrad helt sever	Cleaner blade damage	Check blade for wear, damage and chips, replace where necessary
Damaged beit 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 conforming	Belt tension too high	Ensure cleaner can conform to belt (introduce hold-down roller), or replace with alternate Flexco secondary cleaner
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 blades worn/damaged	Check blades for wear, damage and chips, replace where necessary
Material passing cleaner	Cleaner being overburdened	Introduce Flexco precleaner
	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 in belt	Cupped Belt	Install hold-down roller and reset blade angle with gauge
center only	Cleaner blade worn/damaged	Check blade for wear, damage and chips, replace where necessary
Missing material on outer	Cupped Belt	Install hold-down roller and reset blade angle with gauge
edges only	Cleaner blade worn/damaged	Check blade for wear, damage and chips, replace where necessary

8.1 Specs and Guidelines

VERSION	CLEANER SIZE	BLADE WIDTH	POLE LENGTH	MAXIMUM Conveyor Span
	mm	mm	mm	mm
	600	600	1950	1650
	750	750	2100	1800
	900	900	2250	1950
Single	1050	1050	2400	2100
	1200	1200	2550	2250
	1350	1350	2700	2400
	1500	1500	2850	2550
	1800	1800	3150	2850
	1500	1500	3000	2700
	1800	1800	3300	3000
Dual	2100	2100	3600	3300
	2400	2400	3900	3600
	3000	3000	4500	4200





*For special extra long pole length requirements a Pole Extender Kit (#76024) is available that provides 750mm of extended pole length. Pole Diameter - 73mm

Clearance Guidelines for Installation

VERSION	HORIZONTAL CLEARANCE REQUIRED	VERTICAL CLEARANCE REQUIRED	
	mm	mm	
Single	114	279	
Dual	114	318	



Aluminum Content

	PERCENT		
	Mg	Ti	
ALLOT THE	Magnesium	Titanium	
6061	1.0%	0.0%	

Spring Length Chart for SST Spring Tensioner

BLADE WIDTH	WHITE SPRING	SILVER SPRING	BLACK Spring	Top of Washer to
600mm	78mm	99mm	N/A	Mounting
750mm	72mm	97mm	N/A	Base
900mm	N/A	94mm	98mm	
1050mm	N/A	91mm	95mm	I T
1200mm	N/A	88mm	93mm	
1350mm	N/A	86mm	91mm	
1500mm	N/A	83mm	89mm	<u> </u>
1800mm	N/A	N/A	84mm	

Shading indicates preferred spring option

Spring Length Chart for CST Spring Tensioner

BLADE WIDTH	WHITE SPRING	SILVER SPRING	BLACK Spring	GOLD SPRING				
600mm	78mm	99mm	N/A	N/A				
750mm	72mm	97mm	N/A	N/A				
900mm	N/A	94mm	98mm	N/A				
1050mm	N/A	91mm	95mm	N/A				
1200mm	N/A	88mm	93mm	N/A				
1350mm	N/A	86mm	91mm	N/A				
1500mm	N/A	83mm	89mm	103mm				
1800mm	N/A	N/A	84mm	101mm				
2100mm	N/A	N/A	80mm	99mm				
2400mm	N/A	N/A	N/A	97mm				
3000mm	N/A	N/A	N/A	93mm				



Shading indicates preferred spring option

Specifications:

- Maximum Belt Speed6M/sec ٠
- Temperature Rating.....-35°C to 82°C
- Useable Blade Wear Length9mm
- •
- Blade Materials.....C-Tip: Impact Resistant Tungsten Carbide (works with mechanical fasteners) V-Tip: Long Life Tungsten Carbide (for vulcanized belts only)
- Available for Belt Widths......600 to 3000 mm. Other sizes available upon request.

Patent Pending





D.56

5.00

[216] 8.50

Section 8 - Specs and CAD Drawings

8.2 CAD Drawing - MHS SAC with C-Tips - Single Cartridge



8.2 CAD Drawing - MHS SAC with V-Tips - Single Cartridge

Section 8 - Specs and CAD Drawings

CODE

ORDER NUMBER

CODE

ORDER NUMBER

CODE

ORDER NUMBER

OF BLADES

POLE LENGTH 'B' (in) (mm)

BELT WIDTH 'A' (in) (mm)

SPECIFICATIONS

SA CARTRIDGE

SA CARTRIDGE POLE

SAC MHS V CLEANER

Section 8 - Specs and CAD Drawings

8.2 CAD Drawing - MHS SAC with C-Tips - Dual Cartridge







Section 8 - Specs and CAD Drawings

SAC MHS V CLEANER

SPECIFICATIONS

8.2 CAD Drawing - MHS SAC with V-Tips - Dual Cartridge

Section 9 - Replacement Parts

9.1 MHS SAC HD Mild Steel Secondary Cleaners



Replacement Parts

REF	DESCRIPTION	ORDERING NUMBER	ITEM CODE	Wt. kgs.
	SAC Cartridge Pole 600 mm	SACPL-24/600	77887	29.7
	SAC Cartridge Pole 750 mm	SACPL-30/750	77888	32.3
	SAC Cartridge Pole 900 mm	SACPL-36/900	77889	35.0
	SAC Cartridge Pole 1050 mm	SACPL-42/1050	77890	37.6
	SAC Cartridge Pole 1200 mm	SACPL-48/1200	77891	40.3
	SAC Cartridge Pole 1350 mm	SACPL-54/1350	77892	42.9
1	SAC Cartridge Pole 1500 mm	SACPL-60/1500	77893	45.6
	SAC Cartridge Pole 1800 mm	SACPL-72/1800	77894	50.9
	SAC Cartridge Center Pole 1500 mm (Dual)	SACPL2-60/1500	77895	35.1
	SAC Cartridge Center Pole 1800 mm (Dual)	SACPL2-72/1800	77896	40.6
	SAC Cartridge Center Pole 2100 mm (Dual)	SACPL2-84/2100	77897	46.2
	SAC Cartridge Center Pole 2400 mm (Dual)	SACPL2-96/2400	77898	51.8
	SAC Cartridge Center Pole 3000 mm (Dual)	SACPL2-120/3000	77899	64.5
1a	Extender Pole (for use with Dual Cartridge Center Pole)	MHP-EP	76392	24.5
	SAC Cartridge 600 mm	CART-24/600	77900	1.6
	SAC Cartridge 750 mm	CART-30/750	77901	2.0
	SAC Cartridge 900 mm	CART-36/900	77902	2.3
	SAC Cartridge 1050 mm	CART-42/1050	77903	2.7
	SAC Cartridge 1200 mm	CART-48/1200	77904	3.0
	SAC Cartridge 1350 mm	CART-54/1350	77905	3.4
2	SAC Cartridge 1500 mm	CART-60/1500	77906	3.8
	SAC Cartridge 1800 mm	CART-72/1800	77907	4.5
	SAC Cartridge 1500 mm (Dual)	CART2-60/1500	77908	3.9
	SAC Cartridge 1800 mm (Dual)	CART2-72/1800	77909	4.6
	SAC Cartridge 2100 mm (Dual)	CART2-84/2100	77910	5.3
	SAC Cartridge 2400 mm (Dual)	CART2-96/2400	77911	6.0
	SAC Cartridge 3000 mm (Dual)	CART2-120/3000	77912	7.6
3	C-Tip*	CT6	74535	0.3
3a	V-Tip* (for vulcanized belts only)	RSA150	73628	0.6
4	PowerFlex™ Cushion*	SPFC	78701	1.9
5	SST HD Mounting Base Kit* (includes 1 mounting base and 2 slide guides)	SSTHDMK	77870	4.6
6	SST Spring - White (1 ea.) for belts 450-750 mm	STS-W	75846	0.2
6a	SST Spring - Silver (1 ea.) for belts 900-1200 mm	STS-S	75843	0.4
6b	SST Spring - Black (1 ea.) for belts 1350-2100 mm	STS-B	75844	0.5
7	SST Adj Rod Kit*(incl. 1 rod, 2 nuts, 2 bushings, 1 washer) for belts 450-1500 mm	STAK	75847	1.3
7a	SST HD Adj Rod Kit*(incl. 1 rod, 2 nuts, 2 HD bushings, 1 washer) for belts 1800-2100 mm	STAKHD	75892	1.4
8	SST HD Torsion Pole Mount* (1 ea.)	SSTHDPM	77868	6.8

REF	DESCRIPTION	ORDERING NUMBER	ITEM CODE	Wt. kgs.
9	SST Bushing Kit - White/Silver	SSTBK-W	76636	0.1
9a	SST Bushing Kit - Black	SSTBK-B	76637	0.1
10	ST Slide Guide Kit	STGK2	77867	0.5
-	SST HD Cartridge Tensioner - White (includes 1 ea. item 5, 6, 7, 8) for belts 450-750 mm	SST1HDM-W	78517	13.7
-	SST HD Cartridge Tensioner - Silver (includes 1 ea. item 5, 6a, 7, 8) for belts 900-1200 mm	SST1HDM-S	78518	13.9
-	SST HD Cartridge Tensioner - Black (includes 1 ea. item 5, 6b, 7a, 8) for belts 1350-2100 mm	SST1HDM-B	78519	14.1
11	CST HD Mounting Base Kit*	CSTHDMK	77871	3.9
12	CST Spring - White (1 ea.) for belts 450-750 mm	CTS-W	77742	0.2
12a	CST Spring - Silver (1 ea.) for belts 900-1200 mm	CTS-S	77743	0.2
12b	CST Spring - Black (1 ea.) for belts 1350-2100 mm	CTS-B	77744	0.3
12c	CST Spring - Gold (1 ea.) for belts 2400-3000 mm	CTS-G	77745	0.4
13	CST Adj Rod Kit (incl. 2 rods, 4 nuts, 4 bushings, 2 washers)	CSTAK	77031	1.5
14	CST HD Torsion Pole Mount* (1 ea.)	CSTHDPM	77869	7.4
15	CST Bushing Kit (includes 4 bushings)	CSTBK	77037	0.0
-	CST HD Cartridge Tensioner - White (incl. 1 ea. item 11,13,14 and 2 ea. item 12) for belts 450-750 mm	CST1HDM-W	78513	13.7
-	CST HD Cartridge Tensioner - Silver (incl. 1 ea. item 11,13,14 and 2 ea. item 12a) for belts 900-1200 mm	CST1HDM-S	78514	13.7
-	CST HD Cartridge Tensioner - Black (includes 1 ea. item 11,13,14 and 2 ea. item 12b) for belts 1350-2100 mm	CST1HDM-B	78515	13.7
-	CST HD Cartridge Tensioner - Gold (includes 1 ea. item 11,13,14 and 2 ea. item 12c)for belts 2400-3000 mm	CST1HDM-G	78516	13.9
16	SAC Removal Knuckle	SACRKN	77882	1.5
17	SAC Removal Handle	SACRH	77883	1.4
18	SAC Handle Lock Plate	SACRHL	77884	0.8
19	Knuckle Retainer Pin	SACKRP	77885	0.1
20	SAC Chute Seal Kit	SACSK	77052	1.8
21	SAC Chute Seal Replacement Cover	SACSRC	77065	0.2
22	SAC Cartridge Tip Alignment Tool (Dual)	SAC2-TIP-TL	77866	1.1

*Hardware Included Lead Time: 1 working day

9.2 MHS SAC HD Stainless Steel Secondary Cleaners

				(1) (9)
12	Tip Alignment Tool for Dual Cartridge Cleaners	2	63	

Replacement Parts

KGS. 1 29.7 2 32.3 3 35.0 1 37.6
2 32.3 3 35.0 1 37.6
2 32.3 3 35.0 1 37.6
3 35.0 1 37.6
1 376
07.0
5 40.3
6 42.9
7 45.6
3 50.9
35.1
) 40.6
2 43.9
46.2
2 51.8
2 6/ 5
J 04.J
24.5
6 4.5
7 5.6
3 6.7
7.8
) 8.9
1 10.0
2 11.3
3 13.5
1 11.2
5 13.4
5 14.5
5 15.6
/ 1/.8
3 22.6
0.4
5 0.5
5 1.2
6 1.2
1 3.8
3 3.8
2 1.5
7 1.4
3 0.8
0.1
4.1
3 11





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 250mm 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

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

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

Flexco Slider/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

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 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



The Flexco Vision

To become the leader in maximising belt conveyor productivity for our customers worldwide through superior service and innovation.

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