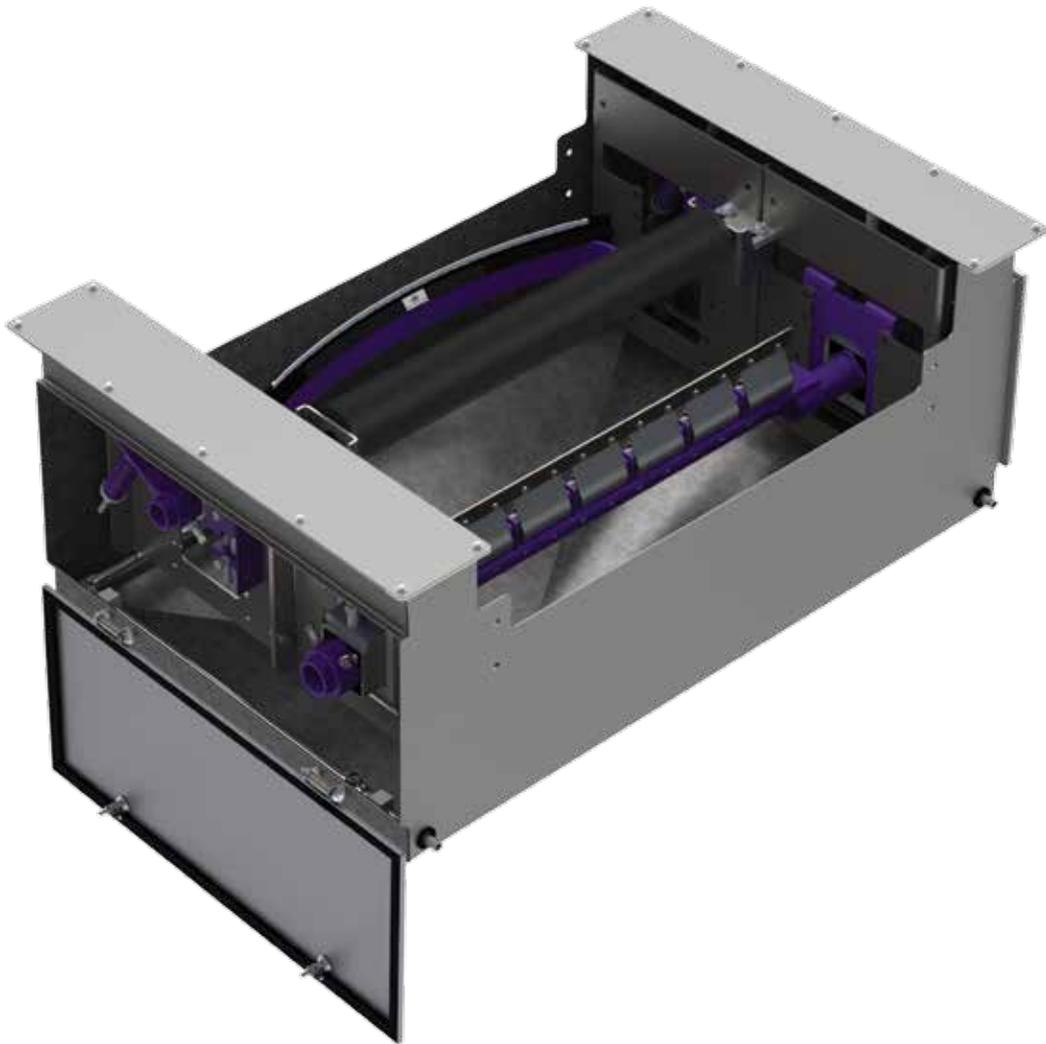


# Wash Box

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## Installation, Operation and Maintenance Manual

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# Flexco Wash Box

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

Serial number information can be found on the Serial Number Label included in the Information Packet shipped with the wash box components.

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 are very pleased that you have selected our Flexco Wash Box for your conveyor system.

This manual will help you to understand the installation, operation, and maintenance 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. In addition, please follow all standard approved safety guidelines when working on your conveyor.

If however, you have any questions or problems that are not covered, please visit our website or contact our Customer Service Department:

**Customer Service: 1-800-541-8028**

Visit [www.flexco.com](http://www.flexco.com) for other Flexco locations and products.

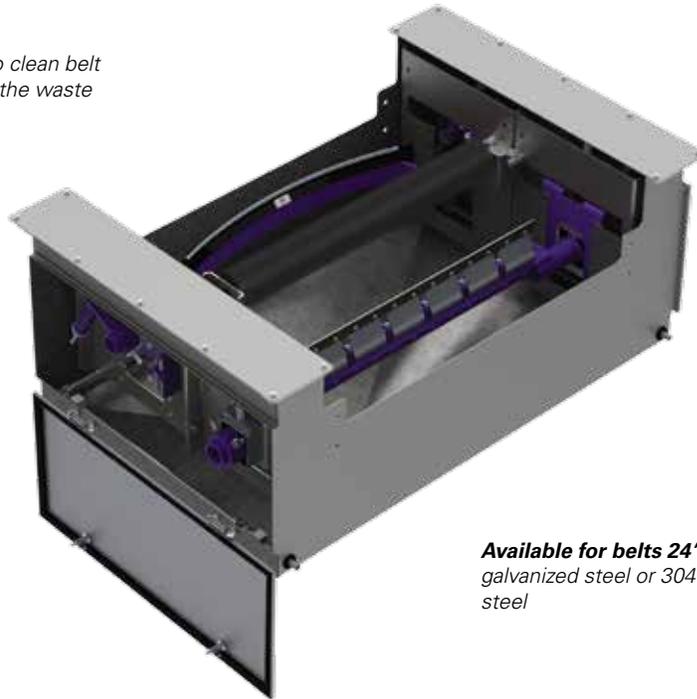
Please read this manual thoroughly and pass it on to any others who will be directly responsible for installation, operation, and maintenance of the Flexco Wash Box. While we have tried to make the installation and service tasks as easy and simple as possible, this product does however require correct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

# Section 1 - Important Information

## 1.2 User Benefits

The Flexco Wash Box is designed to deliver superior cleaning efficiency in applications where the conveyor must be very clean or when head-end cleaning is not possible. Mounted on the return side of the belt, Flexco Wash Boxes are available in galvanized or stainless steel and are equipped with an adjustable hold down roller. Purchased separately from the Wash Box, the two belt cleaners can be selected specifically for your application or your budget. The Flexco Wash Box system provides high-efficiency belt cleaning with customized solutions for even the toughest applications.

*Fully enclosed to clean belt and then contain the waste wash water*



*Configurable cleaner mounting plate accepts all of Flexco's superior belt cleaners*

*Hinged doors located on each side for easy service and inspection*

*Available for belts 24" – 60" in galvanized steel or 304 stainless steel*

### Features and Benefits

- **Mounts to existing structure** – Drill and bolt fitment minimizes installation and downtime. The bolted panel construction allows easy installation to existing structure, particularly in tight spaces and can be positioned along the conveyor as required
- **Versatile clean arrangements** – Configurable for two belt cleaners with adaptable mounting plates for custom configurations.
- **Simple inspection and maintenance** – The wash box has large maintenance service doors on each side of maximum accessibility and ease of cleaning.
- **Hold down roller** – The included hold down roller provides the proper tension for each cleaner.
- **Wet or dry cleaning** – Add Flexco Cleaner Spray Pole Systems for an enhanced cleaning system.
- **Customizable** – Wash boxes can be custom engineered to fit the job requirements if standard offering does not suite your application.

## 1.3 Installation and Service Option

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

# Section 1 - Important Information

## 1.4 Custom Wash Box System Spec Sheet

### Custom Wash Box System Spec Sheet

**CUSTOMER INFO:**

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_ Phone #: \_\_\_\_\_

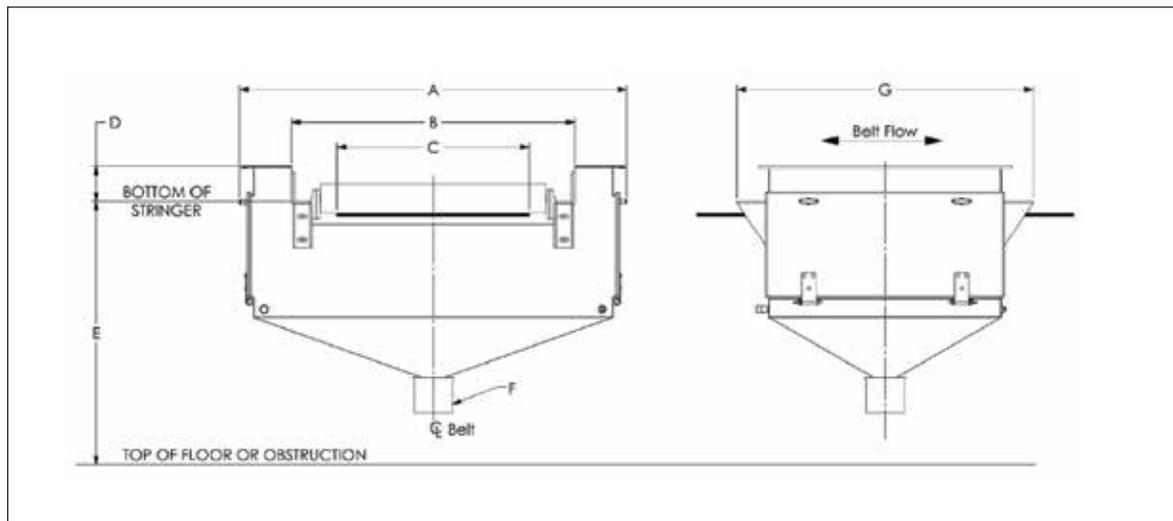
Contact Name: \_\_\_\_\_ Fax #: \_\_\_\_\_

Title/Position: \_\_\_\_\_ e-Mail: \_\_\_\_\_

**DIMENSIONS**

Value	Units	Dim	Description
		A	Total space available on side of stringer
		B	Stringer width
		C	Belt width
		D	Clearance on side of stringer from bottom
		E	Clearance below stringer
		F	Outlet pipe size
		G	Total space available along stringer
			Material
			Belt speed / velocity
			Tonnage /Throughput
			Belt incline to horizontal

Please return completed form to [FlexcoFirstTeam@flexco.com](mailto:FlexcoFirstTeam@flexco.com).



## Section 2 - Safety Considerations and Precautions

---

Before installing and operating the Flexco Wash Box, it is important to review and understand the following safety information.

There are setup, 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
- Cleaning
- Leakage Checking
- Repairs
- Cleaner Maintenance

#### **DANGER**

It is imperative that all local regulations and codes related to working on conveyors including adherence to lock out/tag out (LOTO) procedures prior to undertaking any work on the conveyor. Failure to adhere to safety standards including LOTO exposes workers to uncontrolled behavior of the Flexco Wash Box caused by movement of the conveyor belt. Severe injury or death can result.

Before working:

- Lockout/Tagout the conveyor power source
- Clear the conveyor belt in the area where the wash box will be installed

#### **WARNING**

Close quarters and heavy components create a worksite that compromises a worker's safety. It is important to perform a proper job hazard assessment and determine the appropriate personal protective equipment to safely install and maintain equipment.

---

### 2.2 Operating Conveyors

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

- Cleaner performance assessment
- Dynamic troubleshooting

#### **DANGER**

Every belt conveyor is an in-running nip hazard. To ensure personal safety, it is important to not place any body parts or equipment past the opening of the Wash Box's Hinged Doors. Conveyor hazards can cause instantaneous amputation and entrapment.

#### **WARNING**

Close quarters and heavy components create a worksite that compromises a worker's safety. It is important to perform a proper job hazard assessment and determine the appropriate personal protective equipment to safely install and maintain equipment.

## Section 3 - Pre-Installation Checks and Options

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### 3.1 Checklist

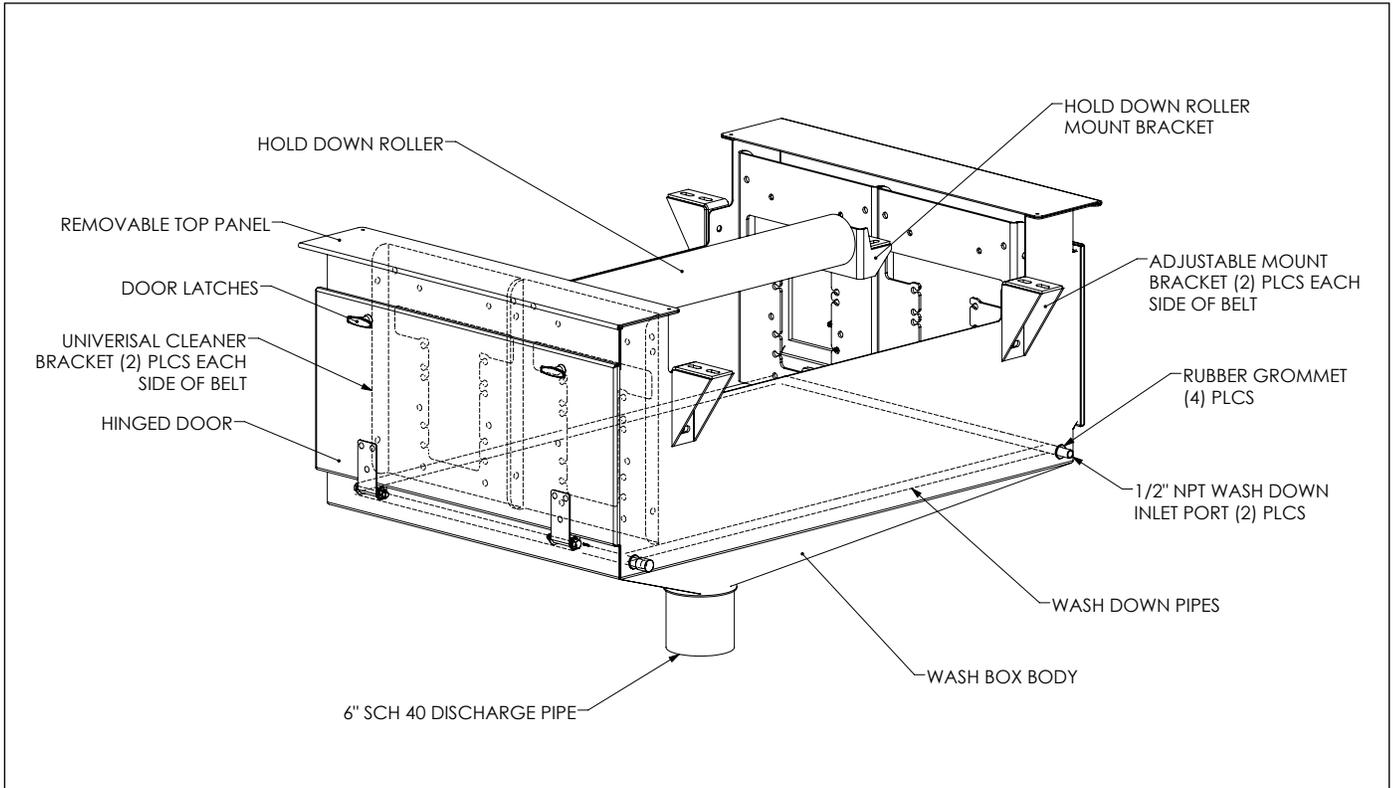
- Installation should only be done by qualified conveyor mechanics.
- Check the Flexco Wash Box to be sure all the parts are included in the shipment.
- Check for properly tracked belts before installing the Flexco Wash Box. An improperly tracked belt can damage cleaners or the Flexco Wash Box component.
- Prepare the conveyor site:
  - ▶ Inspect the conveyor structure for damage or misalignment. Make adjustments as necessary
  - ▶ Verify existing ancillary equipment will not be affected by the installation of the Flexco Wash Box.
  - ▶ Determine mount locations and methods. Prepare the areas for mounting.
  - ▶ If existing equipment must be adjusted or re-located to assist in installing the Flexco Wash Box, care should be taken to insure all affected equipment will remain fully functional after the installation of the new components.

# Section 4 - Installation Instructions

## 4.1 Standard Wash Box Installation

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

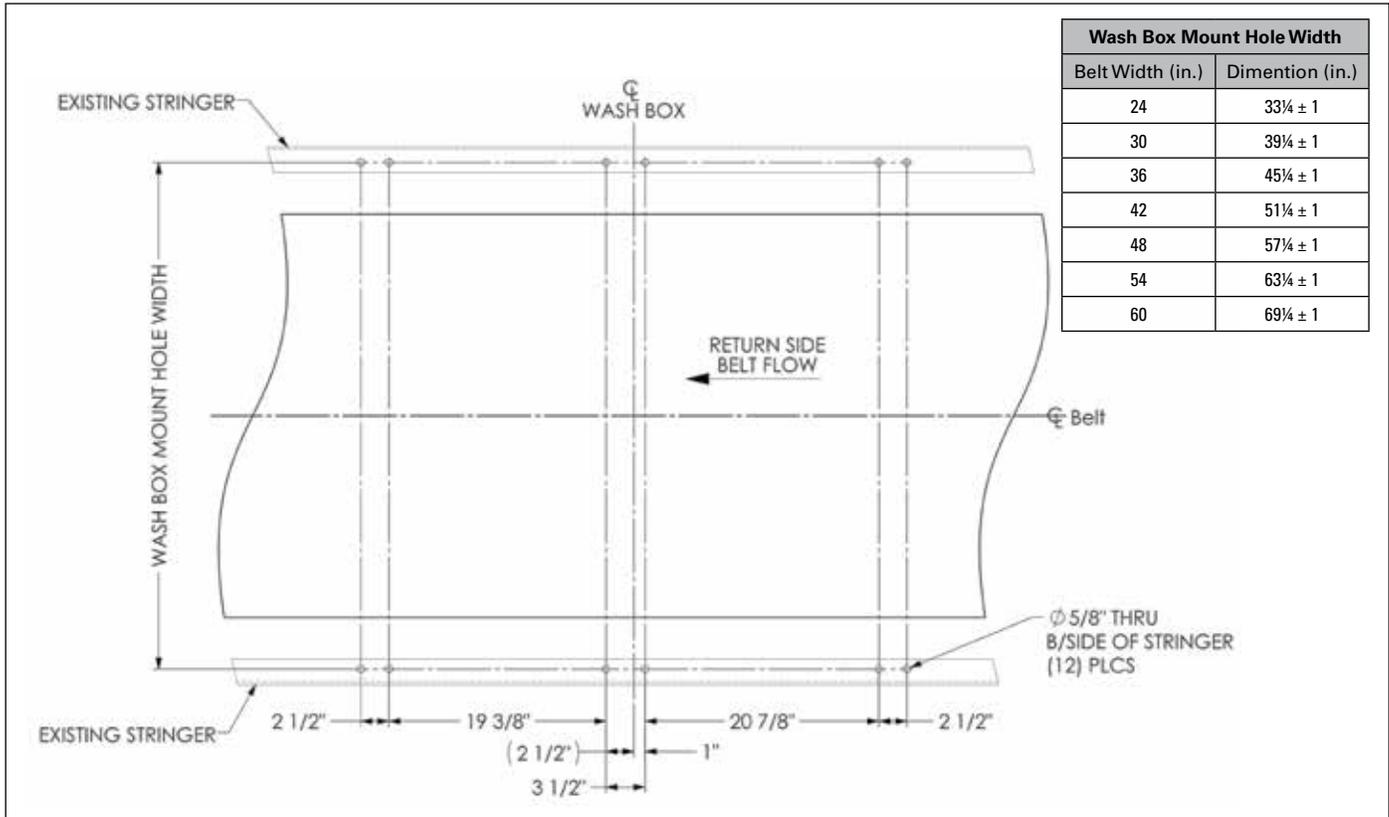
1. If applicable, remove any obstructions around the Wash Box area. Clearing existing stringer for adjustable mount brackets and hold down roller mount bracket. There needs to be approximately 52in. of clear stringer for the Flexco Standard Wash Box.



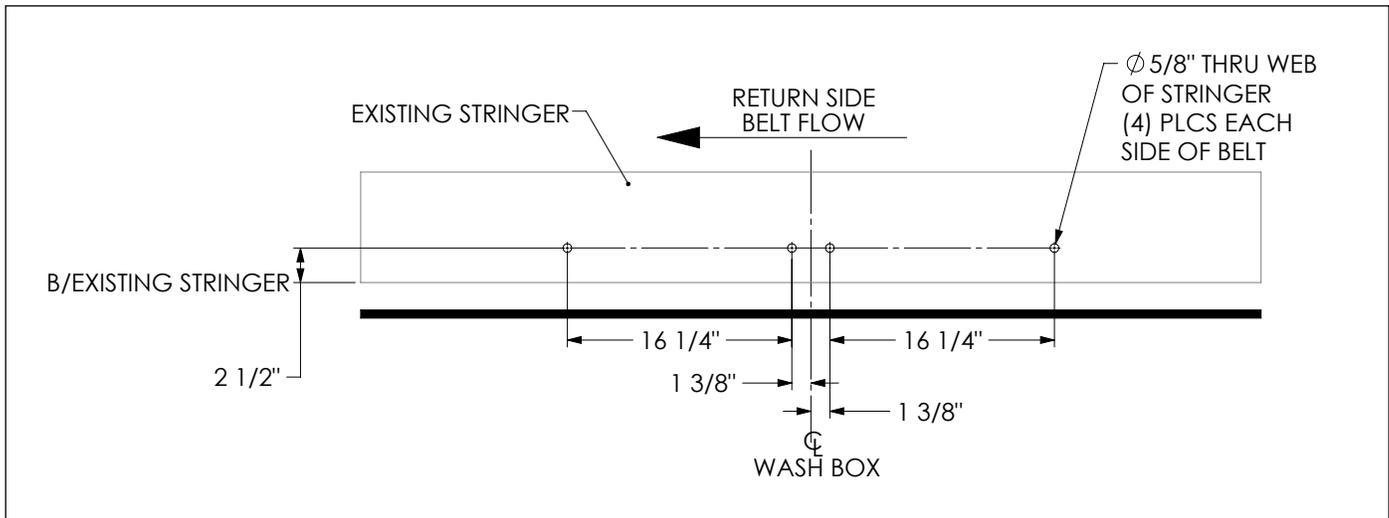
# Section 4 - Installation Instructions

## 4.1 Standard Wash Box Installation (cont.)

2. Layout and drill the hole pattern for the adjustable mount brackets and hold down roller mount brackets by following the below image and referencing the Wash Box Mount Hole Width table. Mark the center line of the Wash Box for later. It is important to use the appropriate flange gauge for when laying holes on your existing structure.



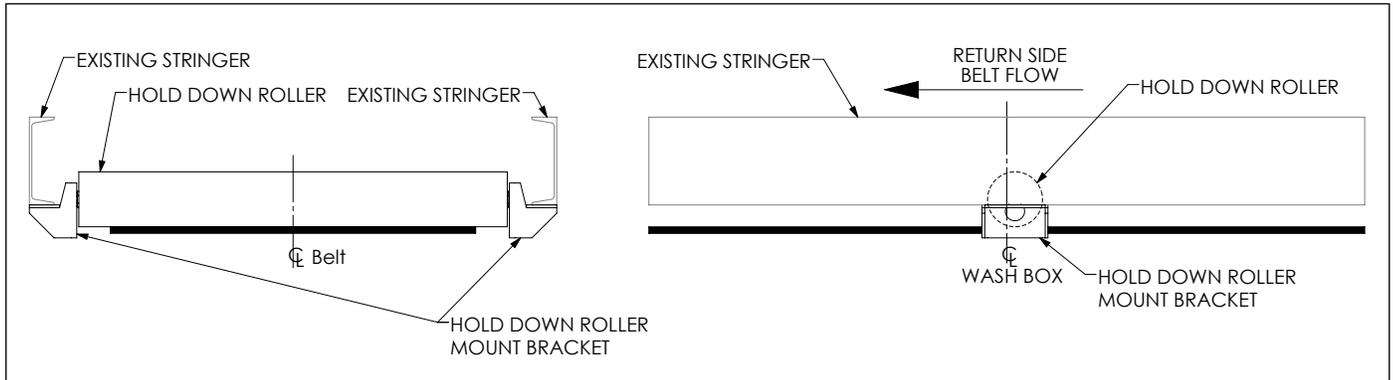
3. Using the marking of the center line of the Wash Box, layout and drill the hole pattern for the Universal Cleaner Brackets by following the image below.



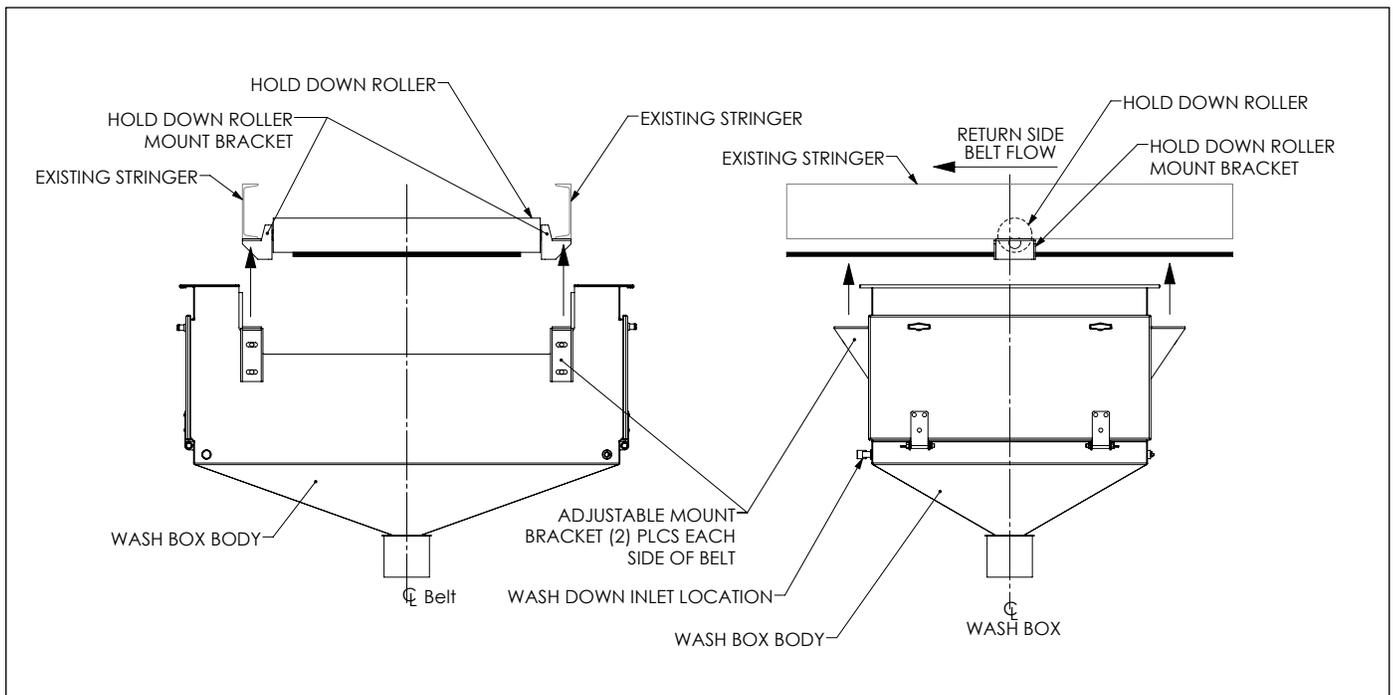
## Section 4 - Installation Instructions

### 4.1 Standard Wash Box Installation (cont.)

4. Bolt Hold Down Roller Mount Bracket to the bottom of the existing stringer. Take appropriate provisions to safely move the conveyor belt into the new position. It may be necessary to remove tension on the belt or to use belt lifting tools to alter the belt line.
5. Position the Wash Box Body below the newly installed Hold Down Roller.



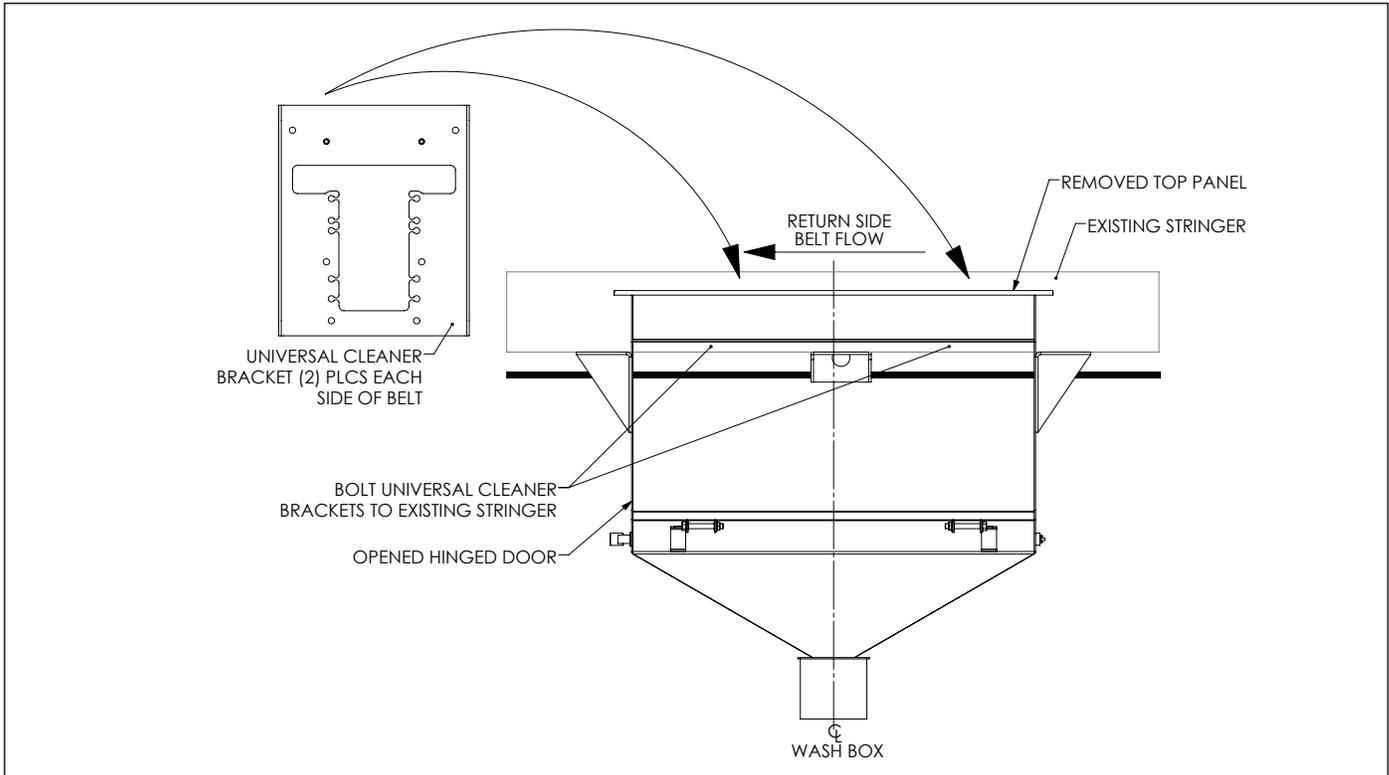
6. Lift the Wash Box Body into place, bolting the Adjustable Mount Brackets to Wash Box Body and existing stringer. Take appropriate precaution when positioning and lifting the Wash Box Body to avoid personal injury and damage to surrounding equipment. Use the slots of the Adjustable Mount Brackets to accommodate variable stringer widths as needed. Note that the Wash Box Body is symmetric in every way other than the location of the Wash Down Inlet location, rotating the Wash Box Body as needed.



## Section 4 - Installation Instructions

### 4.1 Standard Wash Box Installation (cont.)

7. Remove the top panels from the Wash Box body by unbolting them from the wash box body. Save these panels and hardware to be re-installed later.
8. Through the top opening position the Universal Cleaner Brackets into the Wash Box, bolting them to the each other and the existing stringer.

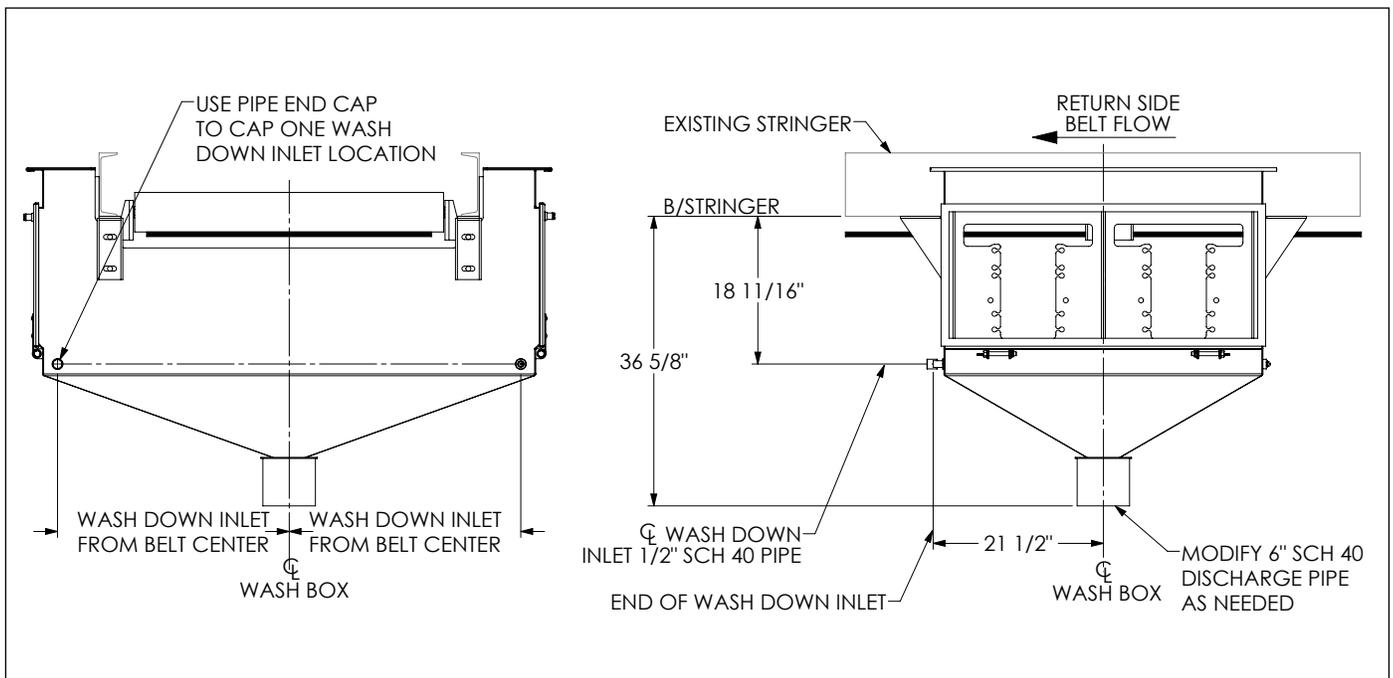


# Section 4 - Installation Instructions

## 4.1 Standard Wash Box Installation (cont.)

9. Connect appropriate drain piping to the 6" SCH 40 Discharge Pipe as needed to properly take the washed down water and belt scrapings away.
10. Connect the existing water connection to the Flexco Wash Box to the Wash Down Inlet location, using the pipe end cap on the opposite side location. Add water flow controls as needed, Refer to the below image and referencing the Wash Down Inlet from Belt Center table for the Wash Down Inlet location.
11. Sufficient controls should be implemented to ensure that wash down water is running when the conveyor belt is running to properly wet the cleaners. Wash down water should be run for a duration after the belt stops to clear scrapings from the wash box and drain piping.

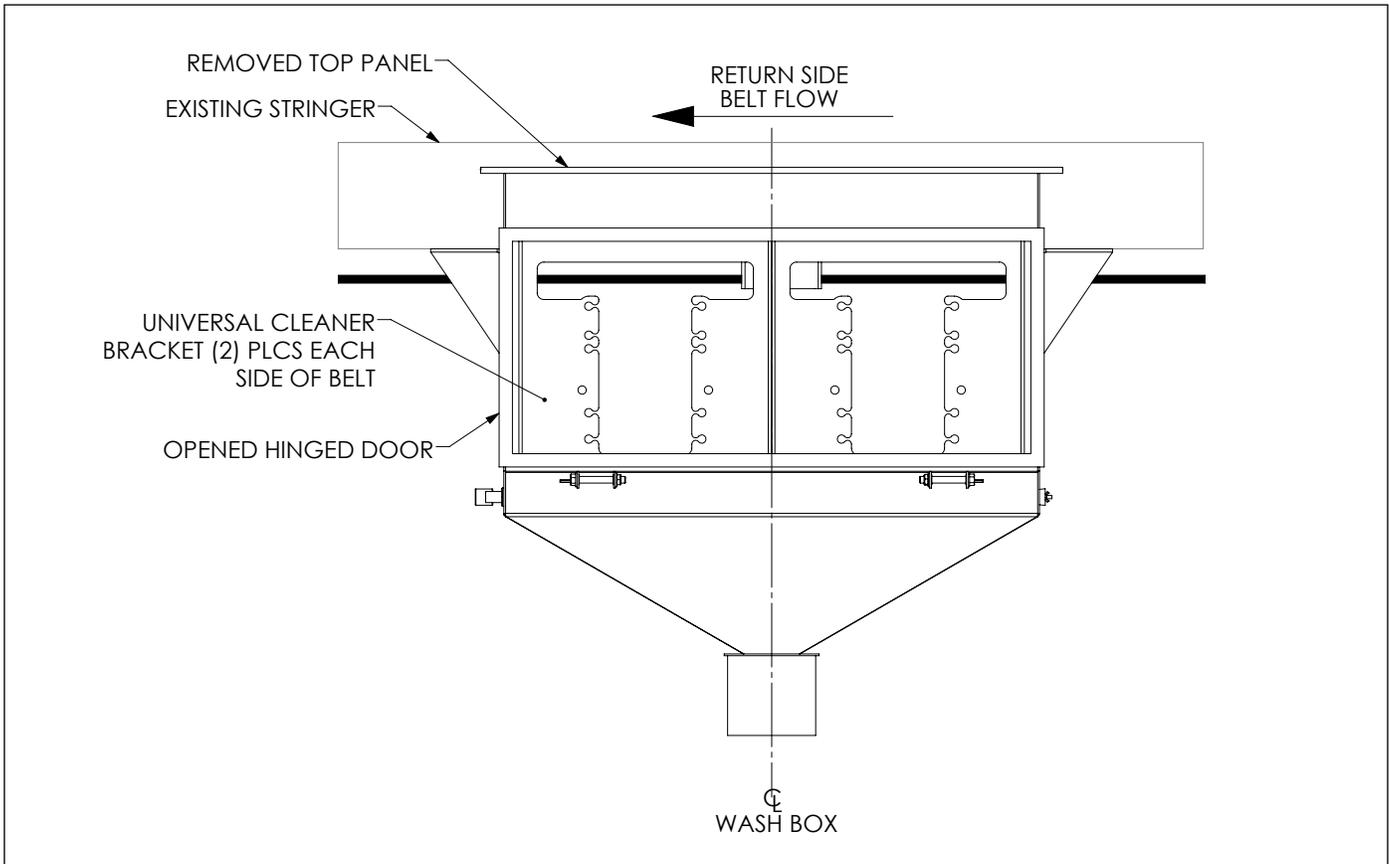
Wash Down Inlet from Belt Center	
Belt Width (in.)	Dimension (in.)
24	23¼
30	26¼
36	29¼
42	32¼
48	35¼
54	38¼
60	41¼



## Section 4 - Installation Instructions

### 4.1 Standard Wash Box Installation (cont.)

12. Following the instructions from the Installation, Operation, and Maintenance manuals for the respective cleaners, install the chosen Flexco cleaners, bolting them to the Universal Cleaner Bracket. Access the Universal Cleaner Brackets through the opened hinged doors and the removed top plate.



13. Re-install the Removable Top Panel removed in step 8 to the Wash Box Body and close any opened hinged doors.

## Section 5 - Pre-Operation Checklist and Testing

---

### 5.1 Pre-Op Checklist

- Check that all fasteners are tightened
- Ensure that the conveyor belt can run unobstructed and that nothing is touching its edge
- Be sure that all installation materials and tools have been removed from the belt and conveyor area

### 5.2 Test Run the Wash Down Pipes

- Turn on water to the Wash Down Pipes in the Flexco Wash Box
- Ensure water is sufficient to properly wet the belt (if using a Flexco Cleaner Spray Pole) and cleaners for effective cleaning and lubrication as appropriate for the cleaners installed.
- Ensure to make sure water is flowing around all of the bottom edges of the Wash Box
- Check for water leaks in the inlet piping and discharge piping, sealing or resealing them as needed

### 5.2 Test Run the Conveyor

- Run the conveyor for at least 15 minutes and check the following
  - ▶ Ensure that the conveyor is not mistracking
  - ▶ Ensure that the cleaners are operating properly, referencing their individual Installation, Operation, and Maintenance manuals
  - ▶ Check to make sure material is flowing down the discharge pipe, adjusting the water flow as needed

## Section 6 - Maintenance

---

Flexco's Wash Box is designed to operate with minimal maintenance. However, to maintain superior performance, some service is required. When the Flexco's Wash Box is installed, a regular maintenance program should be set up. This program will insure that the Wash Box operates at optimal efficiency. With a good maintenance program, problems can be identified and fixed before any damage is done to the conveyor belt, structures, or components.

All safety procedures for inspection of equipment (stationary or operating) must be observed. Flexco's Wash Box operates under a moving conveyor belt. Only visual observations can be made while the conveyor belt is running. Tasks must be done by qualified individuals only when the conveyor belt is stopped and workers have observed the correct lockout and tag-out procedures.

For the individual cleaners, follow their individual maintenance procedures to ensure that they operate properly.

### 6.1 New Installation Inspection

During the initial break-in period, inspect and monitor the Wash Box performance often to ensure the Wash Box is performing properly. Make adjustments as needed. Continue this close monitoring until the equipment is operating as expected with no adjustments needed.

### 6.2 Routine Visual Inspection (Every 1-4 weeks)

A visual inspection should be made of the Wash Box to determine if it is plugged or filled with material. If there not significant build up, open the hinged doors to inspect inside the Wash Box. To ensure personal safety, it is important to not place any body parts or equipment past the opening of the Wash Box's Hinged Doors. A visual inspection of the inside of the Wash Box can determine:

- If there is buildup inside of the Wash Box that requires additional clean out
- Check water pressure to the system and coming out of the Wash Down Pipes and if they are operating properly
- If the cleaners are operating properly
- If there is damage to the Wash Box, cleaners, conveyor belt, or other conveyor components

If any of the above conditions exist, the conveyor should be stopped for maintenance.

### 6.3 Routine Physical Inspection (Every 4-8 weeks)

When the conveyor is not in operation and properly locked and tagged-out, a physical inspection of the Wash Box can be made to perform the following tasks:

- Clean material buildup in and around the Wash Box and conveyor structure with pressured water or with scraping device
- Closely inspect each Wash Box body for wear and damage
- Check area, overall system, and conveyor belt for damage
- Inspect all fasteners for tightness and wear; tighten or replace as needed
- When maintenance tasks are completed, test run the conveyor to ensure the Wash Box 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: \_\_\_\_\_

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Date: \_\_\_\_\_ Work done by: \_\_\_\_\_ Service Quote # \_\_\_\_\_

Activity: \_\_\_\_\_

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Date: \_\_\_\_\_ Work done by: \_\_\_\_\_ Service Quote # \_\_\_\_\_

Activity: \_\_\_\_\_

---

Date: \_\_\_\_\_ Work done by: \_\_\_\_\_ Service Quote # \_\_\_\_\_

Activity: \_\_\_\_\_

---



# Section 6 - Maintenance

## 6.5 Standard Wash Box Maintenance Checklist

**Beltline Information:**

Beltline Number: \_\_\_\_\_ Belt Condition: \_\_\_\_\_

Belt Speed: \_\_\_\_\_ Belt Thickness: \_\_\_\_\_

Belt Width: 24"  30"  36"  42"  48"  54"  60"  66"  72"  84"  96"   
(600mm) (750mm) (900mm) (1050mm) (1200mm) (1350mm) (1500mm) (1600mm) (1800mm) (2100mm) (2400mm)

**Amount of build-up inside the Wash Box:**

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Overall Wash Box Condition:**

Good     Bent     Rusted

**Overall Wash Box Performance:** (Rate the following 1 - 5, 1= very poor, 5 = very good)

Appearance:     Comments: \_\_\_\_\_

Location:     Comments: \_\_\_\_\_

Maintenance:     Comments: \_\_\_\_\_

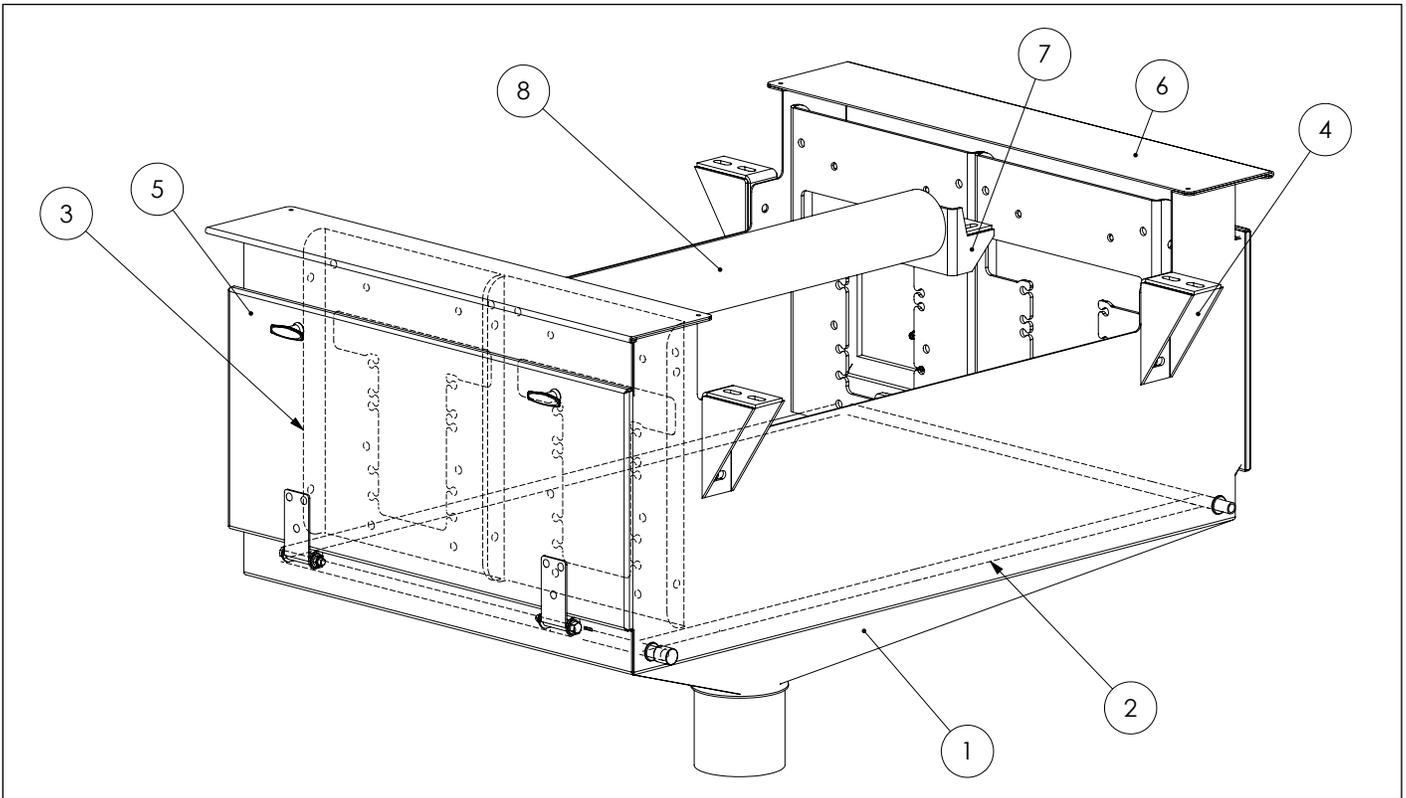
Performance:     Comments: \_\_\_\_\_

**Other Comments:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Section 7 - Troubleshooting

<b>Problem</b>	<b>Possible Cause</b>	<b>Possible Solutions</b>
Plugged Wash Box	Material build up in wash box	Clean wash box
	Plugged wash ports	Inspect & replace broken nozzles
		Clean plugged nozzle
	Excessive cleaner fines	Operate at design tonnage
Buildup of material in the Wash Box	Wet sticky material	Clean wash box
	Excessive cleaner fines	Operate at design tonnage

## Section 8 - Replacement Parts



REF	DESCRIPTION	ORDERING NUMBER	WT. LBS.
1	Wash Box Body	WB01v3.0-BB- <b>XX</b>	Varies
2	Wash Down Pipe	WB01v3.0-WP1- <b>XX</b>	Varies
3	Universal Cleaner Bracket	WB01v3.0-AA	27
4	Adjustable Mount Bracket	WB01v3.0-FF	5
5	Hinged Door	WB01v3.0-04	35
6	Removable Top Panel	WB01v3.0-01	16
7	Hold Down Roller Mount Bracket	WB01v3.0-DD	5
8	24" Hold Down Roller	77681	27
	30" Hold Down Roller	77682	32
	36" Hold Down Roller	77683	36
	42" Hold Down Roller	77684	41
	48" Hold Down Roller	77685	45
	54" Hold Down Roller	77686	47
	60" Hold Down Roller	77687	53
<b>XX</b>	Belt Width	From 24" to 96" in increments of 6"	N/A

## Section 9 - Other Flexco 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:

### Rockline® EZP1 Precleaner



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

### Flex-Lok™ Skirt Clamps



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

### Rockline® EZS2 Secondary Cleaner



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

### 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 seize or 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

## **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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