Flexco Elevate™ i3 Device

Belt Conveyor Intelligence™

Installation, Operation and Maintenance Manual

for product models 91600, 91601, 91602, 104261 108731, 109042



FLEXCO eleVate®

Product Registration

Device Number*:_____

Purchase Date:_____

Installation Date: _____

Installation Customer Name:_____

Installation Location:_____

Installation Conveyor No.:_____

* Device number can be found on a label at the bottom of the device.

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

Table of Contents

Section 1 – Important Information 2
1.1 General Introduction 2
1.2 User Benefits 2
1.3 Appropriate Applications 3

Section 2 – Safety Considerations and Precautions 4
2.1 Stationary or Operating Conveyors 4
2.2 Equipment Shipping 4
2.3 Battery Storage and Handling 5
2.4 Battery Recycling 5
2.5 Pole Extenders 5

Section 3 – Pre-Installation Checks and Options 6
3.1 Checklist 6
3.2 i3 Device Setup 6
3.3 i3 Mobile App Setup 7
3.4 Optional Installation Accessories 7

Section 4 – Installation Instructions 8

Section 5 – i3 Dashboard Setup 13

Section 6 – Maintenance 14
6.1 Routine Inspection 14
6.2 Battery Replacement 14
6.3 Removing an i3 Device 15
6.4 Remote i3 Device Software Updates 15
6.5 i3 Dashboard and i3 Mobile App Updates 15

Section 7 – Troubleshooting 16
7.1 i3 Device LED Alerts 16
7.2 i3 Device Troubleshooting 17
7.3 i3 Mobile App Troubleshooting 18
7.4 i3 Dashboard Troubleshooting 19

Section 8 – Specifications 20
8.1 i3 Device Specifications 20
8.2 Digital Tools Specifications 20

Section 9 – Replacement Parts 21

Section 10 - Glossary 22

Section 11 - Warranty 23

Section 12 - Regulatory Statements 23
12.1 United States 23
12.2 Europe and Canada 24

Section 13 – Other Flexco Cleaner Replacement Parts 25

Section 1 – Important Information

1.1 General Introduction

We at Flexco are very pleased that you have selected a Flexco Elevate™ i3 Device for your conveyor system.

"i3" stands for "Information, Intelligence & Insights". Information is collected as the foundational layer for insights. Through analytical, science-driven, intelligent augmentation of the information, meaningful insights are delivered.

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 at *www.flexcoelevate.com* or contact our Customer Service Department.

Visit www.flexco.com, www.flexco.com.au, www.flexco.co.uk, or www.flexco.co.za 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 device and its tools. While we have tried to make the installation and service tasks as easy and simple as possible**, this product does however require correct installation and regular inspections and maintenance to maintain top working condition.**

1.2 User Benefits

The industry is increasingly becoming insights driven to improve safety measures, increase productivity and reduce costs. To realize these advantages, the i3 Device provides these key benefits:

- Remotely monitor multiple assets
- View current and historical performance of your assets and conveyor systems
- Digital record of asset information and service
- Potential to minimize the number of physical inspections required
- Potential to minimize unscheduled downtime
- Use insights to plan maintenance versus react to problems
- Hold service teams accountable for their work

Section 1 – Important Information (cont.)

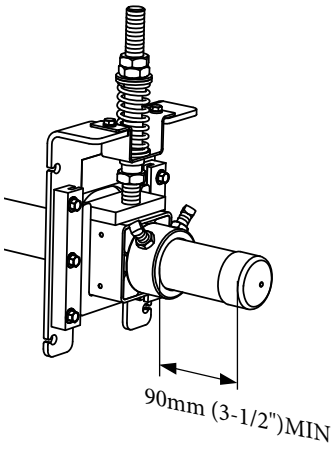
1.3 Appropriate Applications

Environment and Location Requirements

Description	Requirement
Temperature Range	-30°C to +65°C (-20°C to +40°C in explosive environments) -22°F to +149°F (-4°F to +104°F in explosive environments)
Environmental and Operating Conditions	Relative humidity range: 0-100% Maximum operating altitude: 5000m (16,400ft) Intended for outdoor use and in wet locations
Cellular coverage	United States: AT&T Australia: Telstra Europe and Canada: roaming between in-country providers
Regulatory, Certifications, Standards, Explosive Environments	United States: FCC, IP66, RoHS Australia: RCM, IP66, RoHS, IECEx* Europe and Canada: CE, ISED, IP66, RoHS, ATEX*

*Contact Flexco regarding specific standards

I M1 Ex ia I Ma Ta = -20 to +40°C IP66
II 1G Ex ia IIA T4 Ga Ta = -20 to +55°C IP66



Cleaner Requirements

Description	Requirement
Flexco Cleaners	Attach only to Flexco branded cleaners
Precleaner	EZP1, MSP, MMP, MHCP, MHP, H-Type
Secondary Cleaner	EZS2, Y-Type, R-Type, P-Type, FMS, MHS, U-Type, MDWS
Tensioner	Compatible with all Flexco-provided tension systems
Pole Diameter	73mm (2-7/8") or 60mm (2-3/8") with adapter
90mm (3-1/2") Pole Length outside the tensioner	Requires pole extender for poles that have been cut off outside the tensioner

User Requirements

Description	Requirement
Smartphone or Tablet use	Android or iOS with Bluetooth® wireless communication
Browser	Any (optimized for Google Chrome)
Language	English (US)

Section 2 – Safety Considerations and Precautions

2.1 Stationary or Operating Conveyors

Before installing and operating the i3 Device, it is important to review and understand the following safety information.

Setup, maintenance and operational activities for the i3 Device can be performed on operating or stationary conveyors. Please reference the appropriate cleaner manual before performing any work on the cleaner.

Five tasks that can be performed while the conveyor is running or stationary:

- Installation
- De-installation
- Powering device on and off
- Diagnostic status check
- Establish Bluetooth® wireless communication connection for service documentation

Battery replacement should NOT be performed on an operating conveyor. De-install the entire device from the cleaner pole before replacing the battery.

⚠ DANGER

Every belt cleaner is an in-running nip hazard. Conveyor hazards can cause instantaneous amputation and entrapment.

⚠ WARNING

Conveyors contain moving hazards. Stay as far from the conveyor as practical and **use Personal Protective Equipment (PPE):**

- Safety eyewear
- Gloves
- Hardhats
- Safety footwear

Handle screws and tools with care as these items may become projectiles if coming into contact with moving conveyor components.

2.2 Equipment Shipping

- Shipments of i3 Devices and spare batteries are governed by regulations UN3091 and UN3090, respectively. Please reference your region's shipping guidelines for additional shipping information.
- It is advised to have devices and spare batteries shipped to a location where they may be ground transported as needed to their final destination to avoid transit overhead and hazardous materials paperwork.

2.3 Battery Storage and Handling

- Battery packs may be replaced by the customer.
- This product contains Tadiran TL-5930 battery cells operating at 3.6Vdc, non-rechargeable, lithium metal thionyl chloride ($Li/SOCI_2$) cell battery. The battery cells are hermetically sealed units which are not hazardous when used as recommended in this operating manual.
- For optimal life, recommended storage is in a room temperature (+20°C ± 5°C ; +70°F ± 10°F), dry (relative humidity below 80%) and ventilated area that is subject to little temperature change.
- Do not place the battery near heating equipment.
- Do not expose the battery to direct sunlight or store in high humidity environments for long periods.
- Do not store batteries where any liquids may spill onto the batteries or packaging.
- Keep replacement batteries in original packaging until ready to use.

Section 2 – Safety Considerations and Precautions

2.3 Battery Storage and Handling (cont.)

- Do not puncture, crush or immerse the battery in any liquids.
- Batteries should be activated in a device within five years after manufacturing when properly stored. Batteries include a date of manufacture printed on the label.
- If devices are stored for an extended period of time (over 12 months) with batteries installed, then disconnect the battery plug from the jack to prevent a potential short circuit.
- Storing batteries for longer than five years may result in loss of operable life once installed.
- Additional safety information can be found here (reference battery cell TL-5930 by Tadiran): *https://tadiranbat.com/wp-content/uploads/2022/03/t-36-05_socl2_general_rev-u_wois.pdf*

⚠ WARNING

- **Fire, Explosion, and Severe Burn Hazard.** Do not recharge, disassemble, heat above 100°C (212°F), incinerate, or expose contents to water.
- Do not replace battery when an explosive atmosphere is present.
- Keep at least 3.5 m (11') away from explosives, blasting circuits, and detonators.
- Do not leave an expended/discharged battery in a device for more than one year.
- Never attempt to disassemble, machine or otherwise alter the battery as personal injury or environmental harm may result.

2.4 Battery Recycling

- Do not crush or incinerate batteries as this may cause cells to rupture and increase the risk of fire.
- Battery recycling and disposal guidelines constantly evolve and regulations change from country to country. Battery recycling should be done in authorized facilities through licensed waste management organizations. Please consult with your country's environmental or recycling services governing body for more information and recycling locations.
- Check with your waste management provider or hazardous waste handler about accepting lithium batteries. You may also consider these resources to identify a recycling method or location.
  - US and Canadian customers: Retriev Technologies *https://www.retrievtech.com*
  - Australia customers: BusinessRecycling (recycling locator) *https://businessrecycling.com.au*
  - Australia customers: MRI e-cycle solutions: *https://mri.com.au/services/e-waste-and-battery-recycling/*
  - UK customers: Aceleron *https://www.aceleronenergy.com/en/services*
- If your organization is authorized to ship hazardous/dangerous goods, then any used batteries may be returned to a Flexco facility for recycling. (Lithium batteries are often classified as hazardous waste by transporters, and classifications and requirements may vary by country.)
- Batteries do not contain mercury, lead, manganese or cadmium.

2.5 Pole Extenders

- 60 mm (2-3/8") and 73 mm (2-7/8") pole extenders (item codes #91596 and #91595, respectively) are NOT intended to be a replacement for pole extender kits (item codes #77423 and #76024).
- #91596 and #91595 pole extenders are only available for use with the i3 Devices.
- i3 Devices may be attached to #77423 and #76024 pole extender kits, and an additional #91596 or #91595 pole extender may be affixed to a pole extender kit.

Section 3 – Pre-installation Checks and Options

3.1 Checklist

- Necessary tools: T40 and T25 Torx (star-bit) drive bits or wrench/spanner, Android or iOS smartphone or tablet with Bluetooth® wireless communication, installed i3 Mobile Application.
- Necessary preparation data: site name, conveyor names, belt speed, material being conveyed, tonnage, splice type (mechanical or vulcanized), and number of splices.
- If possible, discard packaging before going to the installation location (peripheral packaging on site is a safety hazard).
- Ensure that the correct device model was received – regions are specified in the part name located on the upper left corner of the back panel label:



- United States: 91600
- Australia: 91602
- Europe & Canada (global): 91601

- Explosive Environment Approved Model:
  - Australia: 109042
  - Europe: 108731

- Check the device for damage and missing parts.
- Prepare the device for installation:
  - Loosen the screws so the top cap is loosely connected to the body.
  - Remove the cellophane wrap over the keypad.
- Identify and note where the devices will be installed.

3.2 i3 Device Setup



- Before going to the installation site, power on each device to ensure it connects to the local cellular provider (you must be in the same country as the installation site).
- Power on each device and wait for the Connectivity LED on the keypad to display solid green.
- In the event that the Connectivity LED turns red, turn the device off and on for a second attempt. If the issue persists, refer to Section 7.
- Power off each device when finished.

3.3 i3 Mobile App Setup

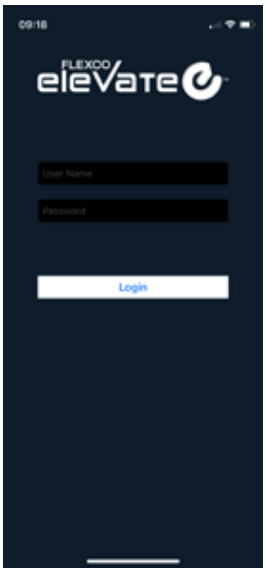
- The i3 Mobile App setup process will be initiated and managed by Flexco. Flexco will request email addresses for authorized users from the customer administrator. You will receive an email authorizing you to create an account with password when you are granted access.
- The i3 Mobile App is available for download through the Apple App or Google Play stores, but only authorized users will be able to log into the application.
- The i3 Mobile App requires Android or iOS operating system and Bluetooth® wireless communication capability.

3.3 i3 Mobile App Setup

- Cleaner IDs will be needed for all installed devices.
- Cleaner IDs will be emailed to the customer administrator.
- Cleaner IDs will be available on Elevate Dashboard, listed on the specific company's site conveyors' respective pages under "view details".



1. After connection to i3 device is established, user credentials will be prompted for the user to input.
2. Enter the username and password used for the Elevate Dashboard (both are case sensitive).
3. Once logged in, you are ready for device installation.





3.4 Optional Installation Accessories

- If the application uses a 60 mm (2-3/8") diameter pole, an adapter will be required for installation (item code #91597). The adapter will slide onto the 60 mm (2-3/8") pole to increase the outside diameter to 73 mm (2-7/8"). The adapter is a compression fitting that clamps to the pole as the device tightens around the adapter.
- If the application uses a pole that has been cut off allowing less than 90 mm (3-1/2") of pole outside of the tensioner, an extender will be required during installation (item code #91595 and #91596). Clean the burrs off the inside diameter of the pole if necessary. The extender draws a wedge outward against the inside diameter of the pole as the set screw is turned.
- Customers that will use a Wi-Fi® connection versus cellular must record the network and password credentials for the installation.



Pole Adapter



Pole Extender

Section 4 – Installation Instructions



i3 Device Components

ADVISORY: Devices should not be stored in extreme temperatures prior to installation. Prolonged exposure to extreme temperature may shorten the battery life. Please reference Section 2.3 for proper storage requirements.

Before You Begin:

- Plan on a 5-minute installation per device if all cleaner profile information has been pre-entered during the Site Registration and the cleaner is easily accessible.
- Ensure that the cleaner will not jolt or twist suddenly which may cause injury (it may be advantageous to back the cleaner away from an operating belt to minimize vibration and decrease the chance of a sudden movement).
- Download the i3 Mobile App and ensure that you can log in.
- Ensure the list of Cleaner IDs is readily available.

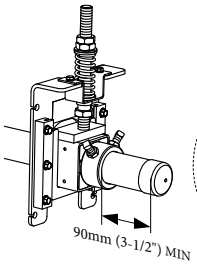
Conveyor Site Preparation:

- Identify where the device will be installed.
  - The device requires 90 mm (3-1/2") pole length outside the tensioner (Fig. A).
  - Placement outside OR inside the tensioner on the pole is acceptable, but it is advised to add a pole extender to the pole instead of placing the device inside the tensioner.
  - If using a pole extender, use care that it does not cause an undue tripping or safety hazard on a catwalk.
  - Placement inside a chute wall is NOT acceptable due to increased risk of damage to the device and inaccessibility for maintenance.
  - Place the device where it can be serviced.
  - On precleaners, make sure you attach the device so it has enough room to rotate 360° around the pole (Fig. B).
  - On secondary cleaners, make sure you attach the device so it has enough vertical space to travel as the cleaner moves (Fig. C).

Tools Needed:

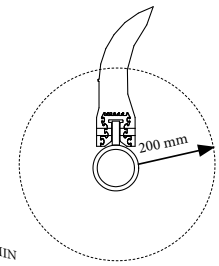
- i3 Device(s). It is advised to bring an extra device with you to each cleaner in case an issue arises.
- T40 and T25 Torx (star bit) wrench/spanner
- Android or iOS smartphone or tablet with Bluetooth® wireless communication
- i3 Mobile App
- Optional tools depending on application and availability of information for the cleaner profile:
  - Pole Adapter (item code #91597)
  - Pole Extender (item code #91595 or #91596)
  - Brush or rag to clean the pole
  - Hammer (for fitting the pole extender)
  - 13 mm (1/2") socket wrench/spanner (for fitting the pole extender)
  - Headlamp/torch
  - Tape measure
  - Belt speed reader (not needed if belt speed is known)

Fig. A



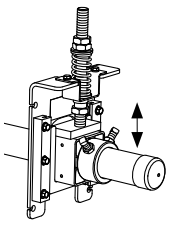
Pole length requirement outside tensioner

Fig. B



Precleaner 200mm (8") clearance radius around pole

Fig. C



Secondary cleaner travel clearance

Section 4 – Installation Instructions (cont.)

4.1 Installation Steps

Fig. 1



Top cap can be removed completely from the body

1. **Prepare the pole.**
   - **a.** Adjust the spring, bolt or air tensioner to its recommended tension level.
   - **b.** Clean end of pole to remove dirt and debris.
   - **c.** If using a pole extender (optional), push or hammer the extender into the pole and turn the bolt to 9.0 Nm (80 ft-lbs). If using a pole adapter, slide the adapter over the pole.

2. **Affix the i3 Device.**
   - **a.** Depending on the location of the device on the pole, slide the device onto the pole or remove the top cap completely (Fig. 1) and reattach around the pole so the keypad faces outward toward the installer (Fig 2). **NOTE:** Do not affix the device so the keypad faces the conveyor as this will inhibit your ability to use the Bluetooth® wireless communication button, information button and LEDs for routine maintenance.
   - **b.** If using a pole adapter (item code #91597) or pole extender (item code #91595 or #91596), affix the device so the body clamps only to the adapter or extender. The device body cannot sit half on a pole extender and half on the cleaner pole.
   - **c.** Using a T40 Torx (star bit) wrench/spanner, tighten one screw on each side of the top cap, then tighten the remaining screws (Fig. 3). Do not exceed 8.1 Nm (72 in-lbs)torque.
   - **d.** Maintain an equal gap between the device body and the top cap on each side of the pole (Fig. 4).
   - **e.** Press the polyurethane cover over the screw heads when finished.
   - **f.** Reinstall the vinyl pole end cap, if removed.



Mount device facing outward on the pole



3. **Connect to the i3 Device.**
   - **a.** Power on the device by pressing the power button located under the center polyurethane plug on the back of the device.
   - **b.** Press the left Bluetooth® wireless communication button. The LED light will blink yellow as the device prepares to connect to the i3 Mobile App.
     - Do not press the Bluetooth® wireless communication button on more than one device at a time before you are ready to connect it to the i3 Mobile App. Enabling the wireless communication on multiple devices at the same time may cause interference in the i3 Mobile App.
     - When the LED begins to blink blue, then the device is ready to connect. The device will be in a 'prepared to connect' state for 1 minute, after which point you will need to press the button again.
     - To ensure uninterrupted connectivity between the i3 Mobile App and the device, turn off and on Bluetooth® wireless communication on your smartphone or tablet before connecting to a new device.



Ensure equal gap on both sides of pole

Section 4 – Installation Instructions (cont.)

3. Connect to the i3 device (cont.).

c. Open the i3 Mobile App and tap the "Pair with Device" button on the home screen (Fig. 1).

d. All available devices within range (approx. 10m (30')) will appear on the screen (Fig. 2). Connect to the appropriate device.

- The application will automatically find the device as long as the LED light on the device is blinking blue.
- The device name is predefined by the manufacturer. This name is only used to identify the device for Bluetooth® wireless communication connection in the field.
- The device numbers listed on the application screen will match the last 5 characters of the serial number printed on the sticker at the bottom of the i3 Device, followed by "EE" (Fig. 3).

e. Once the device is paired, the device's Bluetooth® wireless communication LED will change to solid blue, and you will receive a connection confirmation (Fig. 4). **NOTE:** If you receive a timeout error (Fig. 5), make sure the i3 Device LED is still blinking blue; close out of the i3 Mobile App; turn off your Bluetooth®; and then turn everything back on again.

Fig. 1



Tap "Pair with Device". (Visuals will vary between Android, iOS and tablet)

Fig. 2



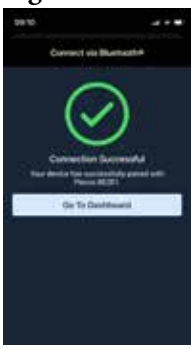
Application will find all available devices within range

Fig. 3



Serial number label on device

Fig. 4



Connection confirmation; Tap "Go to Dashboard"

Fig. 5



Timeout error

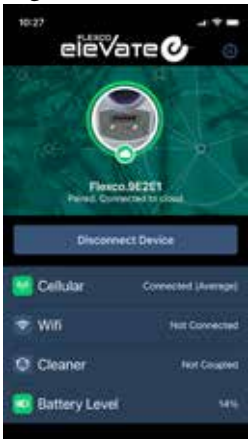
f. Tap the "Go to Dashboard" button. You are now paired with the i3 Device but not coupled to a cleaner.

g. Reference your list of Cleaner IDs and choose the ID that corresponds to the conveyor and position where you are installing the i3 Device.

- Cleaner IDs were established when the customer administrator submitted the Site Registration form.
- Cleaner IDs are tied to site, conveyor and cleaner specific information.
- The i3 Mobile App will connect the pre-entered information to a physical i3 Device (data will pre-populate in the Mobile App once the Cleaner ID is entered).
- Each Cleaner ID is unique and it can only be used once, but specific conveyor and cleaner information can be edited in the i3 Mobile App and Elevate Dashboard.

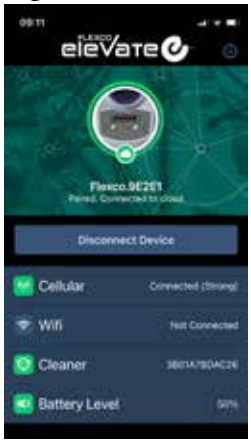
h. Tap the "Not Coupled" text, and you will be prompted to enter a Cleaner ID (Fig. 6). When a valid Cleaner ID is entered, the i3 Mobile App will give you the option to enter cleaner profile information or disconnect from the device (Fig. 7).

Fig. 6



Enter Cleaner ID

Fig. 7

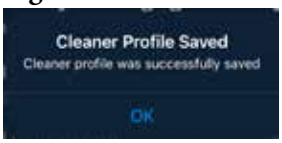


Enter cleaner profile info or disconnect

Section 4 – Installation Instructions (cont.)

4. Enter conveyor and cleaner information.

Fig. 1



a. In the i3 Mobile App, tap the Cleaner ID text to access the cleaner information.

b. Type in or select from the dropdown fields your responses to each question.

c. Tap the "Save" button at the bottom of the screen once all information is entered. A confirmation screen will appear when information is successfully saved (Fig. 1).

d. Use the table below as a reference sheet to collect all conveyor and cleaner information.

Description	Selection Option	Description
Customer Name	Text response (pre-populated)	Adjustments to these pre-populated fields can only be made through the Site Registration process (changing the conveyor name is managed in the i3 Dashboard if the name was previously entered during the Site Registration)
Site/Location Name	Text response (pre-populated)	
Plant Area/Department Name	Text response (pre-populated)	
Conveyor Name	Select from a list (pre-populated)	
Conveyor Type	Options: Barge, Belt Tripper, Boom, Cake, Crusher, Filter, Overland (>1.5 k), Reclaimer, Reversing, Shiploader, Stacker, Standard, Telescoping Radial	Conveyor type information is used to signal operating alerts
Belt Width	Minimum: 300mm (12") Maximum: 3150mm (126") Intervals: 50mm (2")	
Belt Speed	Minimum: 0-1m/s (0-200fpm) Maximum: >10m/s (2000fpm) Intervals: 1m/s (200fpm)	Approximate speed
Splice – Type	Options: vulcanized, mechanical, both	Cleaners respond differently when a vulcanized versus mechanical splice makes contact
Splice – Number	1-50, >50	
Material Path	Minimum: 200mm (8") Maximum: 3150mm (126") Intervals: 50mm (2")	Absolute width of the material path on the belt
Material Conveyed	Options: Ash, Asphalt, Bauxite, Cement, Clinker, Coal, Coke, Copper, Glass/Cullett, Gold, Granite, Iron Ore, Limestone, Metal/Recycling, Nickel, Oil Sands, Platinum, Potash, Sand & Gravel, Silver, Sugar, Trona, Wood, Varies, Other	Choose the most common material running on the belt
Material Amount	interval changes above 1000, being in 1000 tons/hr intervals	Imperial or metric tons can be used to approximate tonnage of material moved – 1000kg (2,000lbs)
Material Frequency	Options: Continuous, Intermittent, Unknown	If the conveyor operates consistently for at least 1 shift per day, then choose continuous
Cleaner Position	Options: Precleaner 1, Precleaner 2, Secondary 1, Secondary 2, Secondary 3, Secondary 4, Secondary 5	Position 1 is closest to the discharge point; for reversing belts, choose the dominant direction or a well-known reference point
Basic Cleaner Type	Options: CBS, EZP1, EZS2, FMS, H-Type HXF, H-Type HV, MDWS, MHCP, MHP, MHS, MHS (FMS cushion), MMP, MSP, P-Type, P-Type (PowerFlex cushion), R-Type, U-Type, Y-Type	If the cleaner type is unknown, then sometimes an identification sticker is placed nearby the tensioner or reference the Flexco website to review cleaner photos
Cleaner Material	Options: mild steel, stainless steel, aluminum	Mild steel is powder coated purple and stainless steel is not powder coated or painted; aluminum is typically exclusive to the Australia region
Pole Style or Type	Options: 1 piece, 3 piece, cartridge, dual cartridge, curved	

Table continued on Page 12

Section 4 – Installation Instructions (cont.)

4. Enter conveyor and cleaner information (cont.)

Description	Selection Option	Description
Cleaner Tensioner Type	Options: cradle/bolt, spring (compression), spring (SST-compression), spring (J-bolt), air, other	
Blade Coverage	Minimum: 200mm (8") Maximum: 3150mm (126") Intervals: 50mm (2")	Polyurethane blade/cartridge or carbide tip total width
Blade Type	Options: ATEX/FRAS Urethane (Blue), C-Tip Carbide, Drywipe Urethane (Black), Food/Chem Resist Urethane (White), High Temp Urethane (Yellow), Ultra High Temp Urethane (Red), V-Tip Carbide, V-Tip Extended Life Carbide - 15mm, V-Tip Extended Life Carbide - 25mm, V-Tip Protected Carbide	Use the color of the polyurethane blades to determine the type
Last Inspection	"Inspected" On/Off Toggle	Selection automatically timestamped when saved
Remaining Blade Life	Options: 0%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%, Unknown	Use your best judgment for remaining blade life; use blade wear lines as reference as well. Your selection will not adversely impact calculated insights from the i3 Device
Last Blade Replacement	"Blade Replaced" On/Off Toggle	Selection automatically timestamped when saved
Last Tension	"Tensioned" On/Off Toggle	Selection automatically timestamped when saved
Battery Change	"Battery Change" On/Off Toggle	Selection automatically timestamped when saved
Manually Disengaged	"Manually Disengaged" On/Off Toggle	When the cleaner is re-engaged, switch the toggle to "Off" or the dashboard will assume the cleaner is still disengaged from the belt
Manually Engaged	"Manually Engaged" On/Off Toggle	(This will likely be redundant in the future since "tensioned" will effectively engage the blade.)
Notes		Allows for user input of characteristics or observations not captured in the current option list, e.g. rusty spring(s)

5. Disconnect/Unpair i3 Mobile App. Once all information is entered and saved, disconnect/unpair the i3 Mobile App from the device by tapping the "Disconnect Device" button on the home screen and turn off/on Bluetooth® wireless communication on your smartphone or tablet.

NOTE: If you need to restart the i3 Device, then wait at least 30 seconds after saving the data in the i3 Mobile App to allow the cleaner profile information to save in the cloud.

6. Special conditions for safe use.

a. For mines susceptible to firedamp; The device does not pass the HIGH risk column impact test. It must only be installed and used in areas which have a LOW risk of mechanical danger.

b. The surface of the enclosure is susceptible to electrostatic accumulation. To avoid the risk of incendiary discharges, the device shall not be installed in locations where such an accumulation may occur. Additionally, cleaning of this surface shall only be permitted with a damp cloth.

c. For mines susceptible to firedamp; The device does not pass the test concerning "Resistance to chemical agents for Group I equipment". Do not expose the device to oils, greases, or hydraulic liquids for mining applications.

d. The battery pack must not be replaced when a hazardous atmosphere is present.

Section 5 – Pre-Operation Checklist and Testing

5.1 i3 Dashboard Setup

- The dashboard account creation process will be initiated and managed by Flexco. Flexco will request email addresses for authorized dashboard users, and each user will receive a unique invitation email with account setup instructions (Fig. 1).
- Each authorized user will be required to accept the terms of use and privacy policy when logging in to the dashboard for the first time (Fig. 2).
- View the online dashboard using Google Chrome on a computer or tablet for optimal performance.

Fig. 1

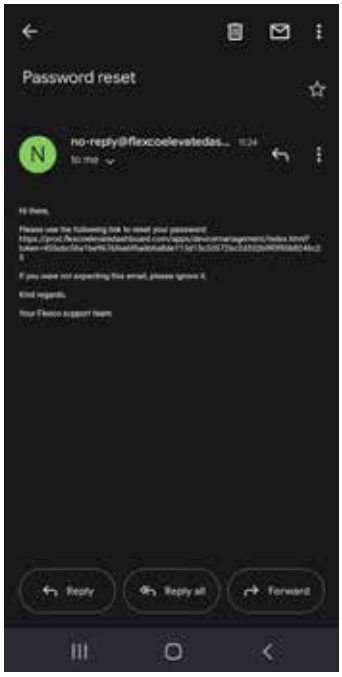


Fig. 2



- Once your account is verified, use the i3 Dashboard to view all insights generated from the i3 Device and i3 Mobile App.).
- Bookmark the URL for quick access. flexcoelevatedashboard.com

Section 6 – Maintenance

All installation safety procedures (Section 2.1) must be observed for inspection of equipment.

6.1 Routine Inspection

- A visual inspection of the cleaner can indicate underlying issues with the device. Reference the appropriate cleaner maintenance manual to correct all cleaner operating abnormalities.
- Inspect all i3 Devices for cracks, missing screws or deformities as these situations can impact the collection of data or short circuit the entire device.
- Press the right information button on the keypad. The Connectivity LED will light green if it is connected to the cloud; the Wrench LED will light green if the conveyor information has been entered; and the battery LED will indicate approximate remaining battery life (Fig. 1).
- Connect the i3 Mobile App to the device via Bluetooth wireless communication and view the same battery life and cellular connectivity information on the i3 Mobile App.
- The i3 Mobile App may take 30 seconds to populate previously entered cleaner profile information in the i3 Mobile App depending on cellular service strength. If the Wrench LED is green, the device has cleaner profile information.
- Make note of any service performed in the i3 Mobile App. Service records will be automatically time stamped (Fig. 2).
- You will not be required to re-enter a Cleaner ID because the Cleaner ID has already been linked to the i3 Device.
- Use the i3 Dashboard to remotely monitor the status of the device and cleaner.

Fig. 1

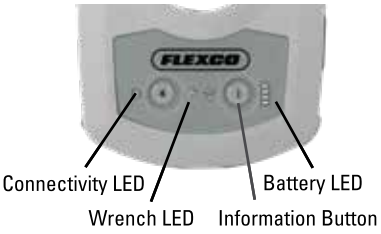


Fig. 2



6.2 Battery Replacement

Batteries must be routinely replaced to power the device. Battery life is highly dependent on temperature and use, and life can range between 3 to 6 months with Flexco recommended configuration. Leave the replacement battery in its original packaging until ready to use. Please reference the battery storage guidelines (Section 2.3). Only use Flexco replacement battery pack 91605.

- **Remove the i3 Device.** Completely remove the device from the cleaner to change the battery. DO NOT attempt to open the back panel of the device while the device is attached to the cleaner. Use a T40 Torx (star bit) wrench/spanner on the top cap screws.
- **Power down the i3 Device.** Power down the device using the power switch behind the center polyurethane plug on the back of the device.
- **Prepare your workspace.** Changing the battery requires opening the device body and therefore exposing the device to dust, water and more. Minimize the exposure of electronic components to potentially harmful agents as much as possible. While the internal device components have a second protection barrier, it is still advised to shield the internal housing.
  - Suggestion: return the device to a vehicle or shop before opening the back panel.
  - Suggestion: swap one device for a spare device to avoid battery changes in the field (follow Section 4 to couple the new device to the cleaner).
- **Open the back panel.** Clean the device to remove excess dirt and debris. On the back panel, remove the four screws using a T25 Torx (star bit) wrench/spanner.

Fig. 3



- **Remove the battery.** Unclip the battery connector. Remove the battery pack (Fig. 1). Please reference the battery recycling guidelines (Section 2.4).
- **Replace the battery.** Unpackage the spare battery. Clip the lead into the appropriate terminal so the battery label is showing (Fig. 2).
- **Wait.** Once the battery is plugged in, wait at least 30 seconds before powering on the device. Failure to wait may result in a false low-battery warning.
- **Power on the device.** Before replacing the back panel, turn the power on to ensure the device is functioning as expected. The battery LED will display 4 green bars.
- **Replace the back panel.** Place the battery pack in the housing. Position the back panel on the body so the edges are flush. Tighten the back pane screws and cover the screw heads with the polyurethane covers.
- **Reinstall the device.** Place the device back on the cleaner.
- **Inspect the application.** Adjust cleaner tension and inspect the application as needed. Connect to the device via Bluetooth® wireless communication and make a note in the mobile application that an inspection was made. If the entire device was replaced, the new cleaner profile information entered will act as a cleaner inspection.

Fig. 1



Fig. 2



6.3 Remove an i3 Device

- Whether you are permanently removing a device from a cleaner or replacing a battery, the exact device does not need to be reassigned to the same cleaner. However, to maintain data integrity, the removed device and the replacement device (if not new) must be reset in the i3 Mobile App.
- After connecting to the device with the i3 Mobile App (Section 4, Step 3), tap the "Decouple Device" button on the main screen. A warning will appear to ensure you want to reset the information associated with the device. Historical data associated to that cleaner will not be deleted.
- Follow Section 4 instructions to reinstall the device on a new cleaner.

6.4 Remote Device Software Updates

- On occasion, Flexco will push software updates to the device for bug fixes, security enhancements or feature upgrades. No action is necessary by the customer, nor will the updates interrupt the feed of insights to the online i3 Dashboard.
- Release notes available upon request.

6.5 i3 Dashboard and i3 Mobile App Updates

- On occasion, Flexco will push software updates to the online i3 Dashboard and i3 Mobile App for bug fixes, security enhancements or feature upgrades. Customer may experience minor inaccessibility to the digital tools during update periods, but notice about the update will be communicated. At times, the i3 Mobile App may require a new version to be downloaded through a unique link. While service to insight visualizations may be briefly interrupted, insights will continue to feed from the devices.
- Release notes available upon request.

Section 7 – Troubleshooting

In the event of issues with the i3 Device, i3 Mobile App or i3 Dashboard, please reference the troubleshooting guide below. If the issue is not resolved by the corrective actions below, contact your service partner or local Flexco customer service team. Please reference Section 11.1 for accompanying warranty information. Before contacting customer service, please locate one of the following so we may locate the device:



1. Unique product look-up number (number format XXXXXX-XXXX) or serial number on the label at the bottom of the device.



2. Partial product serial number found in the i3 Mobile App when connecting to the device via Bluetooth® wireless communication.



3. Product serial number found inside the device cavity under the battery pack.

7.1 i3 Device LED Alerts

Light/Alert	Light Color and Pattern	Description
Battery LED	Green	Green battery LED indicates approximate remaining battery life. The LED will display 2, 3 or 4 green bars.
	Red	Critical battery state. At this stage, the device will only have enough power to light the LED and establish a Bluetooth® wireless communication connection. No data will be transmitted.
Connectivity LED	Green	Green connectivity LED indicates that the device is connected to cellular or Wi-Fi® service and data can be transmitted to the platform.
	Flashing Yellow	Shown when the device has been recently powered on and the device is searching for a cell signal (proper connectivity may take up to 5 minutes).
	Red	No cellular or Wi-Fi® service was found, or the device cannot send data to the platform.
Wrench LED	Green	Green wrench LED indicates that the cleaner profile information has been entered and saved in the mobile application.
	Flashing Yellow	Shown when the device has been recently powered on and the device is attempting to fetch previously entered cleaner profile information.
	Red	No cleaner profile information has been assigned to the device.
Bluetooth® wireless communication LED	Blue	Blue Bluetooth® wireless communication LED indicates that someone has connected to the device with the mobile application.
	Flashing blue	Shown when the device is ready to connect via Bluetooth® wireless communication connection.
	Flashing yellow	Shown when the Bluetooth® wireless communication button has been recently pushed and the device is preparing to accept a Bluetooth® wireless communication connection

Section 7 – Troubleshooting (Cont.)

7.2 i3 Device Troubleshooting

Problem	Possible Cause	Possible Solution
i3 Device does not fit or screws will not tighten	Wrong size pole or non-Flexco pole	Attach the device to a 73 mm (2-7/8") Flexco cleaner pole or use a pole adapter for a 60 mm (2-3/8") pole.
	Wrong screws	Replace screws (item code #91604)
	Compacted debris in the screw holes	Use a screwdriver, needle or small tool to clean out the hole
	Stripped threads	The i3 Device can hold with as few as 2 screws until a new device is purchased. Make sure the screws are on opposite sides of the pole opening and in line with one another (both in the front or both in the back). THIS IS A TEMPORARY SOLUTION. Over time, there is increased risk that the device will shift if secured by less than all 4 screws. Replacing the device is the permanent solution.
	Cracked top cap	Replace top cap (item code #91608)
Battery plug cannot be removed from the jack	Broken battery plug spring	Use a small plastic object (the clip end of a pen cap will work) to wedge in between the broken plug and the jack wall; push the plastic wedge in as you pull the plug out
i3 Device will not power on	Missing or dead battery	Replace battery (item code #91605)
	Malfunctioning LEDs	Press the Bluetooth® wireless communication button (left button) on the device and attempt to connect to the device with the i3 Mobile App. If connection is successful, then LEDs may be malfunctioning, but the functionality of the device is not compromised. You can also check the approximate remaining battery life in the mobile application.
	Broken power switch or electronics failure	Replace device
Battery LED shows low battery life when I just changed the battery	Battery LED is reading the last battery life status	Power off the device for 30 minutes. Power on to reset the lights.
	Battery removed without powering off the device	Power off the device for 30 minutes. Power on to reset the lights.
	New battery has not fully charged the internal capacitor	Power off the device for 30 minutes. Power on to reset the lights.
Device will not connect to cellular	Service team removed or powered off the device	Re-install or turn on the device.
	Missing or dead battery	Replace battery (item code #91605)
	Malfunctioning LEDs	Connect to the device through the mobile application to see the connectivity status. If the application shows connectivity, then the LEDs are malfunctioning. If the application shows no connectivity, the issue may be addressed below.
	Device searching for cell tower	Clean off the device and move it to the end of the pole. Power the device off and on again. A green connectivity light means the device is operating as expected. If the device was recently powered on, then leave it alone for 5 minutes as it may be searching for a signal. Check the AT&T (US and global devices) or Telstra (Australian devices) cellular providers for system outages in your area. AT&T: https://www.att.com/outages/. Telstra: https://outages.telstra.com.au/.
	Wrong device for the country of installation	Check the back panel label to verify correct part number. 91600 is for US only; 91602 is for Australia only; 91601 is for every other country not the US or Australia. Replace device.
	Device was not provisioned during manufacturing	Replace device
	Material covering device due to spillage or material backup	Clean off the device

Section 7 – Troubleshooting (Cont.)

7.3 i3 Mobile App Troubleshooting

Problem	Possible Cause	Possible Solution
Cannot access the i3 Mobile App	No permission	Contact the authorized representative from your company to approve you for access to the i3 Mobile App
	Incompatible OS	The i3 Mobile App is only available for iOS and Android phones and tablets. Find another user with a compatible operating system.
	Authentication	Incorrect login credentials when trying to log in
	Unable to communicate with platform	Application token expiration; log out when connected to an i3 device, reconnect if needed, and try to log in again.
Cannot connect via Bluetooth® wireless communication	Delayed connectivity	Wait ~1 minute for the Bluetooth® wireless communication connection to establish. Power the device off and on again.
	Bluetooth® wireless communication failure on smartphone or tablet	Perform a smartphone check. Check the i3 Mobile App for software updates. Make sure your Bluetooth® wireless communication is enabled. Try connecting the smartphone to another Bluetooth® wireless communication enabled device (headphones, car, etc.). Try connecting to a different device. If issues persist, then call Flexco customer service.
	Bluetooth® wireless communication failure on device	Test Bluetooth® wireless communication connectivity to the device using another smartphone and i3 Mobile App. If issues persist, call Flexco customer service.
Cannot save conveyor and cleaner information	All required fields not completed	Fill in all required fields
	No cellular connectivity	Reference Section 7.2
No previously entered cleaner profile information is showing	Previous cleaner profile information not saved	Re-enter cleaner profile information and wait for a “save” confirmation
	Previous turned off before cleaner profile information was saved to the device	Re-enter and save cleaner profile information and wait for 30 seconds before shutting down the device
	Slow cellular service	Wait 2-3 minutes so the cleaner profile information can populate the previously entered information
	User entered cleaner profile information on the wrong cleaner	To prevent errors, only enable Bluetooth® wireless communication for one device at a time. Re-enter and save cleaner profile information.

Section 7 – Troubleshooting (Cont.)

7.4 i3 Dashboard Troubleshooting

Problem	Possible Cause	Possible Solution
No new data is populating	Dead battery	Check the battery status for your devices in the dashboard. Replace battery (item code #91605)
	Overloaded cache	Clear browser cache and history
	Mislabeled information	Connect to the device via Bluetooth® wireless communication in the field to ensure the data entered in the mobile application is as expected in the dashboard. Common errors include mislabeled conveyor names or mislabeled cleaner types.
	Lost cellular connectivity	Check the AT&T (US and global devices) or Telstra (Australian devices) cellular providers for system outages in your area. AT&T: https://www.att.com/outages/ Telstra: https://outages.telstra.com.au/
Cannot access the dashboard	No permission	Contact the authorized representative from your company to approve you for access to the dashboard
	Incompatible browser	While any browser can be used, the i3 Dashboard is optimized for Google Chrome. Due to the rapid updates and expansion of available browsers across the globe, the i3 Dashboard may not perform optimally without Google Chrome.
	Forgot password	Follow the on-screen password reset directions
Slow or misaligned webpage elements	Overloaded cache	Clear browser cache and history
	Browser or device limitations	The ideal dashboard viewing experience is using Google Chrome browser on a desktop. While other browsers may display data, the experience may be interrupted. The dashboard is not optimized for mobile viewing, and tablet users should view the dashboard in a landscape orientation.

Section 8 – Specifications

8.1 i3 Device Specifications

- Color: gray
- Body material: non-metallic composite, nylon resin
- Dimensions LxWxD: 200mm x 165mm x 90mm (7-7/8" x 6-3/8" x 3-1/2")
- Manufacturing Location: United States
- Compatible Pole Diameters: 60mm or 73mm (2-3/8"or 2-7/8")
- Compatible Precleaner Types: EZP1, H-Type, MHCP, MHP, MMP, MSP
- Compatible Secondary Cleaner Types: CBS, EZS2, FMS, MDWS, MHS, P-Type, R-Type, U-type, Y-Type
- Electrical: 3.6V DC, 340 mA
- Battery Pack & Replacement Battery Pack: non-rechargeable, lithium metal thionyl chloride (Li/SOCl2)
- Operating Temperature Range: -30°C to +65°C (-22°F to +149°F) (-20°C to +40°C (-4°F to +104°F) in explosive environments)
- Wireless Communication: Bluetooth® low energy wireless communication up to 10 m (30') range
- Cellular Communication:
  - LTE CAT-M1 on AT&T (item code #91600 US, #108731 global)
  - LTE CAT-M1 on Telstra (item code #91602, #109042 Australia)
  - 2G/3G on AT&T (item code #91601 global)
- Wi-Fi Versions: 802.11a, 802.11b, 802.11g, 802.11n, 802.11ac Wave 2 (WEP, WPA and WPA2 security protocols)
- Security: data encryption layer in OS and in transit
- Regulatory:
  - FCC (item code #91600 US)
  - RCM (item code #91602, #109042 Australia)
  - CE, ISED (item code #91601, #108731 global)



- Certifications, Standards: IP66, RoHS (all device models)
- Explosive Environments (contact Flexco regarding specific standards):
  - IECEx (item code #109042 Australia)
  - ATEX (item code #108731 global)

8.2 Digital Tools Specifications

- i3 Mobile App compatibility: Android, iOS
- i3 Mobile App security: permission-based
- i3 Dashboard: Optimized for Google Chrome, but accessible via preferred browser
- i3 Dashboard security: permission-based
- Languages: English (US)
- Units: Imperial/Metric

Section 9 – Replacement Parts

Replacement Parts

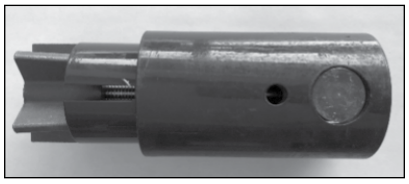
REF	DESCRIPTION	ORDERING NUMBER	ITEM CODE
1a	i3 Device Back Cover Kit, US*** (1 ea.)	DVCR-CLR-BC1US	91598
1b	i3 Device Back Cover Kit, Global*** (1 ea.)	DVCR-CLR-BC1G	91599
1c	i3 Device Back Cover Kit, Australia*** (1 ea.)	DVCR-CLR-BC1AU	91603
2	i3 Device Back Cover Screw Pack (4 screws)	DVCR-CLR-BC2	91604
3	i3 Device Battery (1 ea.)	DVCR-CLR-BTR1	91605
4	i3 Device Top Cover*** (1 ea. incl. screw & washer)	DVCR-CLR-TC2	91606
5	i3 Device Top Cap Screw Pack (4 screws, 4 washers)	DVCR-CLR-TC3	91607
6	i3 Device Top Cap Kit*** (incl. top cap & 1 ea. items 4 & 5)	DVCR-CLR-TC1	91608
7	i3 Device 60mm Pole Adapter (1 ea.)	DVCR-CLR-ADT	91597
8a	i3 Device 73mm Pole Extender*** (1 ea.)	DVCR-CLR-EX73	91595
8b	i3 Device 60mm Pole Extender*** (1 ea.)	DVCR-CLR-EX60	91596

***Hardware included

7

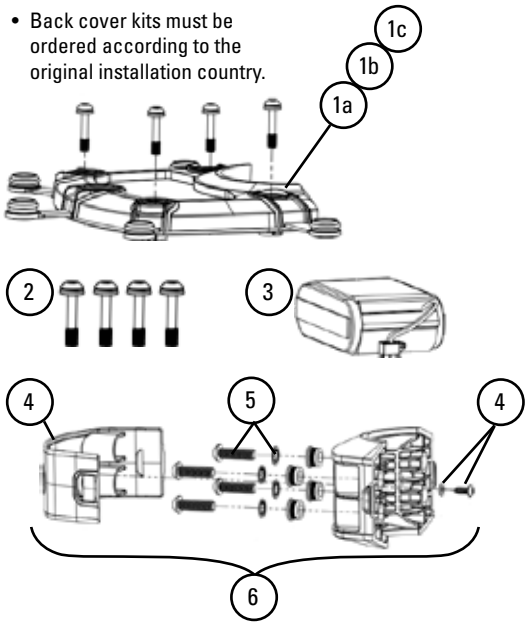


8a 8b



Note:

- Back cover kits must be ordered according to the original installation country.



Section 10 – Glossary

10.1 Glossary

- **Adapter:** A 60 mm (2-3/8") inside diameter to 73 mm (2-7/8") outside diameter steel slotted sleeve used to increase the diameter of a cleaner pole so the i3 Device may be attached (item code #91597).
- **Anonymization vs. Tokenization:** Anonymization strips meta data from a data point to make reassembly highly impractical. Tokenization assigns a random identification tag to a data point so reassembly of data is possible with a key or set of keys.
- **API:** An application programming interface is a command used to fetch or deliver a set of data from another source.
- **Artificial Intelligence:** The application of digital learning systems to accelerate the processing of big data.
- **Big Data:** The collection of any and all data points to provide data science a comprehensive set of information to derive learnings.
- **Cleaner ID:** An identification number for an installation location. Important customer and site information is tied to the Cleaner ID, which is why the number is required for the i3 Device installation.
- **Cloud or Server:** Secure, remote storage facilities used to protect your data and operate the i3 Dashboard among other product functions.
- **Coupling:** The digital connection between the i3 Device and the Cleaner ID. The act of coupling and decoupling the i3 Device to the Cleaner ID is managed in the i3 Mobile App. Coupling is not the same as pairing.
- **Data Science:** The process of augmenting raw data into meaningful insights. For example, a cleaner may rotate X°, but the useful insight is that X° of rotation equals X% of life remaining for that blade.
- **Data Security:** Programs, applications and features designed to protect data and manage access to data.
- **Data Lake:** A repository of raw and processed data typically at the broadest level. Subsets of a data lake can be referred to as data ponds.
- **Digital Transformation:** The process of digitalization within a company's culture, operations and market-facing solutions.
- **Extender:** A steel pole extension used to increase the length of a cleaner pole in the event that there is not enough space to attach an i3 Device (item code #91595 and #91596).
- **Ground Truth:** Observations collected in the field to validate or disprove data collected from sensors and potentially processed using artificial intelligence.
- **IoT: Internet of Things** – a general term meaning an interconnected web (via internet) of smart objects feeding data into a system.
- **IIoT: Industrial Internet of Things** – a general term meaning an interconnected web (via internet) of smart machinery feeding data into a system that attempts to make industrial processes more efficient.
- **i3:** meaning "Information, Intelligence, Insight". Information is collected as the foundational layer for insights. Through analytical, science-driven, intelligent augmentation of the information, meaningful insights are delivered.
- **Pairing:** The digital connection via Bluetooth® wireless communication that connects the i3 Mobile App to the i3 Device. The act of pairing and unpairing the i3 Mobile App to the i3 Device is managed in the i3 Mobile App and does not require a cellular or Wi-Fi connection. Pairing is not the same as coupling.
- **Product look-up number:** A unique product code located on the sticker at the bottom of the i3 Device. The product look-up number will be in the following format: XXXXXX-XXXX. The product look-up number should be used when referencing the device during troubleshooting.
- **Release notes:** A written explanation of the updates made to the i3 Device, i3 Dashboard or i3 Mobile App when a new software release is distributed.
- **Serial number:** A unique 18-digit product code located 1) on the sticker at the bottom of the i3 Device; 2) underneath the battery pack in the body cavity; and 3) in the i3 Mobile App (only the last 5 digits will be visible in the i3 Mobile App). The serial number is only used as a reference when locating which device to connect in the i3 Mobile App (section 4.3).
- **SaaS:** Software as a Service is often synonymous with a subscription business model where a third-party provides ongoing digital service to a customer.
- **Site Registration:** The form submitted to Flexco including customer, site, conveyor and cleaner information that is used to pre-populate the i3 Mobile App and customize the i3 Dashboard.

Section 11 – Warranty

11.1 Warranty

Flexco warrants that the product will function substantially as described in this document for 12 months. In the event of product failure or defects in materials, software, or workmanship, Flexco will upon its discretion, use commercially reasonable efforts to remedy the issue as requested and described by the client. The Warranty does NOT apply to damages due to improper use or normal wear. Flexco makes no representation of any kind that the software or system will be provided error-free, virus-free, or uninterrupted.

Section 12 – Regulatory Statements

12.1 United States (i3 Device item code #91600)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications made to this device that are not expressly approved by Flexible Lacing Company could void the user's authority to operate the equipment.

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2. This equipment complies with RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm (7-7/8") between the radiator and your body.

Class A

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Class B

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Section 12 – Regulatory Statements

12.2 Europe and Canada (i3 Device item codes #91601 and #108731)

EU Regulatory Statements

- Hereby, Flexible Steel Lacing Company declares that the radio equipment type identified by item codes #91601 and #108731 is in compliance with Directive 2014/53/EU.
- The full text of the EU declaration of conformity is available upon request.

ISED Regulatory Statements

This device complies with the ISED Canada license – exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference
2. This device must accept any interference received, including interference that may cause undesired operation

This Class A digital apparatus complies with Canadian ICES-003.

Changes or modifications made to this device that are not expressly approved by Flexible Lacing Company could void the user's authority to operate the equipment.

1. To comply with the Canadian RF exposure compliance requirements, this device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.
2. To comply with RSS 102 RF exposure compliance requirements, a separation distance of at least 20 cm (7-7/8") must be maintained between the antenna of this device and all persons.

Le présent appareil est conforme aux CNR d'ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. *l'appareil ne doit pas produire de brouillage*
2. *l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement*

Cet appareil numérique de classe A est conforme à la norme NMB-003.

Tout changement ou modification non expressément approuvé par Flexible Steel Lacing Company peut annuler le droit d'utiliser l'équipement.

1. *Pour se conformer aux exigences de conformité RF canadienne l'exposition, cet appareil et son antenne ne doivent pas être co-localisés ou fonctionnant en conjonction avec une autre antenne ou transmetteur.*
2. *Pour se conformer aux exigences de conformité CNR 102 RF exposition, une distance de séparation d'au moins 20 cm (7-7/8") doit être maintenue entre l'antenne de cet appareil et toutes les personnes.*

ATEX/IECEx Statements

USE ONLY REPLACEABLE BATTERY PACK: Flexco 91605

Battery Pack Capacity: 57 Ah

WARNING – DO NOT OPEN WHEN AN EXPLOSIVE ENVIRONMENT IS PRESENT

WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS

Ex Veritas 19 ATEX 0517 X

IECEx EXV 19.0043 X

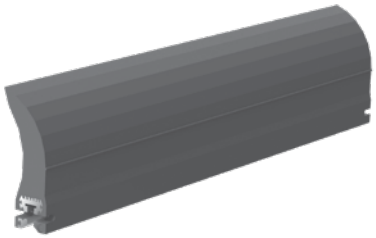


I M1 Ex ia I Ma Ta = -20 to +40°C IP66
II 1G Ex ia IIA T4 Ga Ta = -20 to +55°C IP66

Section 13 – Other Flexco Cleaner Replacement Parts

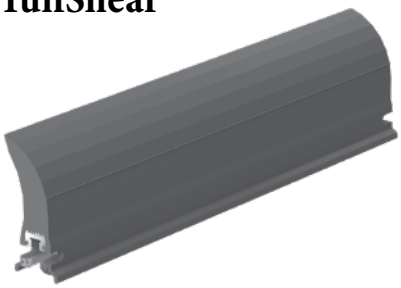
Flexco provides many conveyor products and replacement parts that help your conveyors to run more efficiently and safely. Here is a quick overview of replacement cleaner blades and tips that your i3 Device may be monitoring:

ConShear™



- Polyurethane replacement blade for EZP1 and MSP precleaners
- The ConShear™ blade has a faceted profile that renews the cleaning edge as it wears

TuffShear™



- Polyurethane replacement blade for MMP precleaners
- The TuffShear™ blade is made of special long-wearing polyurethane

MegaShear™



- Polyurethane replacement blade for MHP precleaners
- The MegaShear™ blade features quick blade replacement: pull one pin, remove the old blade and slide the new one in

V-Tips



- Carbide replacement tips for H-Type and HV2 precleaners, and P-Type, R-Type, FMS and MHS secondary cleaners
- Long-life tungsten carbide tips for vulcanized belts

C-Tips



- Carbide replacement tips for EZS2, P-Type, R-Type, FMS and MHS secondary cleaners
- Impact resistant tungsten carbide tips for mechanically fastened belts

Other Applications

- Flexco provides replacement blades, tips and cartridges for all cleaners
- Accommodate tight spaces, high temperatures, reversing belts, food grade applications, non-Flexco cleaners and more

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

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