

MATERIAL HANDLING SOLUTIONS THAT WORK Tel: (905) 624-6499 • Fax: (905) 624-0228 • www.weconsystems.com

FLEXIBLE CONVEYOR OWNERS MANUAL

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FLEXIBLE INDUSTRIAL CONVEYORS

INTRODUCTION

Thank you for purchasing a Flexible Conveyor from Wecon Systems. This model is made of the finest materials available and is manufactured in Canada by skilled craftsmen. The conveyor is very easy to operate and to maintain, but we recommend that you read this owner's manual thoroughly before using the conveyor.

This manual provides set-up instructions, safety tips, a parts list and information regarding preventative maintenance, lubrication and general usage. This conveyor is durable and has been designed for a long service life.

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SAFETY WARNINGS

WARNING: DO NOT ATTEMPT MAINTENANCE ON ANY CONVEYOR WHILE IT IS IN OPERATION.

BEFORE STARTING MAINTENANCE

- Read and understand instruction manual and be aware of all warning stickers.
- Know where the emergency stop buttons are located.
- Know or have quick access to emergency telephone numbers in the unforeseen event that an emergency should arise.
- Maintenance functions are to be performed while the conveyor is off. The main power disconnect switch to the conveyor shall be locked out in accordance with proper written lockout procedures. This will prevent anyone from applying power to the system while maintenance personnel are at work.
- NEVER work on a conveyor while it is running unless the maintenance procedure requires the equipment to be running. When a conveyor must be operating to perform the maintenance, allow only properly trained maintenance personnel to work on the conveyor.
- > Wear safety glasses when in the proximity of the conveyor.
- NEVER allow personnel with long hair near the conveyor without the use of a protective hair net.

DURING MAINTENANCE

- Do not wear loose clothing, ties or jewelry while servicing or performing maintenance on any conveyor equipment.
- > Be aware of hazardous conditions, such as sharp edges and protruding parts.
- When using hoists, cables or other mechanical equipment to perform maintenance, use care to not damage conveyor components.
- Keep area clean. Clean up lubricants and other materials before starting conveyor.

AFTER MAINTENANCE

- Before starting the conveyor after any maintenance has been completed, walk around the equipment and make certain all safety devices and guards are in place, pick up tools, maintenance equipment and clear any foreign objects from equipment.
- Make certain all personnel are clear of the conveyor and made aware that the conveyor is about to be started.
- Only authorized personnel should be permitted to start any conveyor following maintenance or emergency shut-off.
- Never place any part of your body in or on any part of this conveyor while in operation.
- > Do not allow anyone to stand on the conveyor.
- > Do not allow horseplay around the conveyor.
- Do not remove guards, perform maintenance or clear obstructions without first locking out the main power disconnect switch.

PLEASE RECOGNIZE ALL WARNING STICKERS AND OBEY ANY SAFETY INSTRUCTIONS. WARNING STICKERS ARE PLACED ON THE EQUIPMENT FOR YOUR SAFETY – PLEASE DO NOT REMOVE THEM. CONDITIONS DO EXIST ON ANY CONVEYOR THAT CAN CAUSE INJURY OR DEATH TO PERSONNEL. NO MANUAL CAN COVER ALL THE HAZARDOUS CONDITIONS THAT MIGHT DEVELOP. ALL PERSONNEL INVOLVED IN THE OPERATION OF ANY CONVEYOR EQUIPMENT SHOULD BE CONSTANTLY AWARE OF ANY UNSAFE CONDITIONS AND USE ALL POSSIBLE CARE, ALONG WITH COMMON SENSE AND STRICT ADHERENCE TO ACCEPTED SAFETY STANDARDS TO AVOID INJURY.



FLEXIBLE WHEEL CONVEYOR

IMPORTANT

Wecon Systems does not warrant parts or components not manufactured by Wecon Systems. The manufacturers of electric motors and controls, air and hydraulic components and certain other items extend warranties, which may or may not be similar to that of Wecon Systems manufactured equipment. Defective material of this type should be reported by the customer to Wecon Systems whose sole responsibility is to notify the vendor of the defective material for action. Wecon Systems will not be responsible for units that have been tampered with or disassembled by anyone other than an authorized representative.

EQUIPMENT DESCRIPTION

EQUIPMENT DESCRIPTION

Flexible conveyors are ideal for environments with ever-changing material handling situations. They are ideally suited for shipping and receiving, or packaging and production. Flexible conveyors are available in either wheel or roller configuration, in a variety of widths, adjustable heights and lengths. Conveyor frames consist of plated lattice side frames with plated tubular steel leg assemblies. Products are conveyed along the surface of the skate wheel or roller. Conveyor sections are portable and provide space saving benefits by comparison to a permanent conveyor system that takes up useful space when not in use. The conveyor can be moved quickly and easily on its 5" diameter swivel casters that can be locked into position. Flexible conveyors can be stored away using minimal floor space.

Legs are fully adjustable and can be set and retained in that position for future usage or storage. The convenience of adjustable heights provides the operator with the ability to adjust the conveyor to suit optimum working conditions reducing operator fatigue.

The required width of a Wecon flexible conveyor is typically representative to the width of the product it conveys. Units are capable of safely handling products that marginally overhang the conveyor width under limited applications. We do however; strongly recommend that you stay within the recommended parameters of the unit.

Flexible conveyors are available in standard extended lengths from 5 to 25 feet. Longer lengths can be achieved by combining units. The total length of a flexible conveyor is reduced when going around corners or bends. In general, a fully extended length of 10 feet is required to go around a tight 90-degree curve.

Generally any boxes, cartons, packages, and totes with a flat rigid bottom can be conveyed along a flexible conveyor. When a flexible conveyor is extended to its maximum pitch (the distance between axles), a product smaller than 16 inches may not convey smoothly. If products are smaller, simply compress the pitch of the conveyor until the product is supported by a minimum of three axle centers. For maximum conveying capabilities, the pitch of the conveyor should be adjusted so that your smallest package is supported by a minimum of three axle centers. A retractable package stop is supplied on the discharge end of all flexible conveyors.



PACKAGE STOP

FLEXIBLE WHEEL CONVEYORS – Flexible wheel conveyors operate utilizing a series of 1.9" diameter plastic or steel wheels mounted on a 5/16" diameter axle and use spacers to locate the wheels in the correct locations. Axle centers range from 1-1/4" to 5-1/4" depending on how much the unit is extended. Center and End sections are assembled from a lattice type plated steel construction and configured to achieve any required length. Leg assemblies are individually adjustable and come with locking swivel casters. All units come standard with a retractable package stop. Fully extended flexible wheel conveyors with a 14" nominal width have a maximum capacity of 90 lbs per foot. Conveyors with 16" to 30" nominal width are capable of handling increased loads up to 175 lbs per foot.



FLEXIBLE WHEEL CONVEYOR

FLEXIBLE ROLLER CONVEYORS – Flexible roller conveyors operate utilizing either 2 or 3 1.9" diameter plastic or steel rollers mounted on a 5/16" diameter axle. Axle centers range from 2" to 5-1/4" depending on how much the unit is extended. Center and End sections are assembled from a lattice type plated steel construction and configured to achieve any required length. Leg assemblies are individually adjustable and come with locking swivel casters. All units come standard with a retractable package stop. Fully extended flexible roller conveyors are capable of handling loads up to 175 lbs per foot.



FLEXIBLE ROLLER CONVEYOR

INSTALLATION INSTRUCTIONS

SET-UP INSTRUCTIONS

Flexible units, both Wheel and Roller come completely assembled and ready to use. It is recommended that all set up procedures be performed by at least two qualified people. Set up for these units will consist of determining the required height, length and configuration and then simply setting the adjustable legs to the required elevations.

CAUTION: NEVER EXTEND THE UNIT TO A POINT WHERE THE AXLE CENTERS EXCEED THE RECOMMENDED 5-1/4" MAXIMUM DISTANCE.

Your new Flexible Conveyor is shipped with the leg assemblies locked in the fully collapsed position. When setting the working height of your Flexible Conveyor be sure to properly support the unit, loosen the required leg locks, set the desired elevation then relock the legs. When setting the working height of the units never exceed the maximum recommended height for your particular model.

Frame Number	Conveyor Height (to the top of wheel or roller)	
	Minimum	Maximum
FC3	16"	20"
FC4	20"	28"
FC5	25"	36"
FC6	28"	43"
FC7	36"	52"

RECOMMENDED HEIGHTS

All swivel casters are equipped with foot activated brakes and should be relocked before the unit is put into operation.

All flexible units are supplied with a retractable package stop on the discharge end of the unit. To use the package stop simply swing the stop up to the raised position and engage the lock on the preceding axle.

MAINTENANCE

WARNING: DO NOT ATTEMPT MAINTENANCE ON ANY CONVEYOR WHILE IT IS IN OPERATION.

Flexible conveyors are self-contained and almost maintenance free. The only suggested maintenance would be periodic lubrication of any moving components as well as a general inspection of all nuts and bolts for tightness. A light grade oil is all that is required.

Item	Schedule Service	Suggested Maintenance
Skate wheels	Monthly	Periodic lubrication
Rollers	Monthly	Periodic lubrication
Roller bearings	Weekly	Check for unusual noise or excessive wear, replace as required
Supports	Weekly	Check to ensure supports have not been damaged and fasteners are properly secure
Hardware	At set-up and every week of operation	Check to ensure all fasteners are in place and properly tightened

MECHANICAL MAINTENANCE

PARTS GUIDE

SKATE WHEELS

ТҮРЕ	PART NUMBER
Plastic - standard	FC-SW-P
Plastic – stainless steel bearings	FC-SW-PSS
Steel	FC-SW-S

1.9" DIAMETER PVC ROLLERS

CONVEYOR WIDTH (nominal)	PART NUMBER
(including bearings)	
16" (2 rollers required per axle)	FC-R07-P
18" (2 rollers required per axle)	FC-R08-P
20" (2 rollers required per axle)	FC-R09-P
24" (3 rollers required per axle)	FC-R07-P
30" (3 rollers required per axle)	FC-R09-P

1.9" DIAMETER STEEL ROLLERS

CONVEYOR WIDTH (nominal)	PART NUMBER
(including bearings)	
16" (2 rollers required per axle)	FC-R07-S
18" (2 rollers required per axle)	FC-R08-S
20" (2 rollers required per axle)	FC-R09-S
24" (3 rollers required per axle)	FC-R07-S
30" (3 rollers required per axle)	FC-R09-S

5/16" DIAMETER AXLES

CONVEYOR WIDTH (nominal)	PART NUMBER
14"	FC-AX-16
16"	FC-AX-18
18"	FC-AX-20
20"	FC-AX-22
24"	FC-AX-26
30"	FC-AX-32

LATTICE SIDE FRAMES

TYPE	PART NUMBER
Centre RH	FC-CL-RH
Centre LH	FC-CL-LH
End RH	FC-EL-RH
End LH	FC-EL-LH

LEG ASSEMBLIES

TYPE (FRAME NUMBER)	PART NUMBER
FC3 (16"-20" height)	FC-LA-16
FC4 (20" – 28" height)	FC-LA-16
FC5 (25" – 36" height)	FC-LA-16
FC6 (28" – 43" height)	FC-LA-19
FC7 (36" – 52" height)	FC-LA-19

LEG TUBES

LENGTH (nominal)	PART NUMBER
7"	FC-LT-3
10.5"	FC-LT-4
15"	FC-LT-5
18.5"	FC-LT-6
23"	FC-LT-7

CROSS TUBES

CONVEYOR WIDTH (nominal)	PART NUMBER
14"	FC-CT-11
16"	FC-CT-11
18"	FC-CT-11
20"	FC-CT-11
24"	FC-CT-17
30"	FC-CT-27

PACKAGE STOPS

CONVEYOR WIDTH (nominal)	PART NUMBER
14"	FC-PS-14
16"	FC-PS-16
18"	FC-PS-18
20"	FC-PS-20
24"	FC-PS-24
30"	FC-PS-30

MISCELLANEOUS COMPONENTS

ТҮРЕ	PART NUMBER
Top bracket	FC-TB
Bottom bracket	FC-BB
Leg lock	FC-4PK
Swivel caster (including brake)	Y580T-ECD-#11
5" x $1-1/4$ " – standard caster	
Swivel caster (including brake)	622PPB-SWB- #11
6" x 2" urethane – optional caster	

HARDWARE

ТҮРЕ	PART NUMBER
5/16-18 Acorn nut	FC-HW-1
5/16-18 Hex nut	FC-HW-2
5/16-18 x 1-1/2" Hex cap screw	FC-HW-3
3/8-16 x 3/4" Hex cap screw	FC-HW-4