

# LongReach® Telescopic Belt Conveyor Operation Manual



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# **CONTENTS**

1	DOCUMENT CONTROL	3
2	IMPORTANT NOTES	3
3	SAFETY	4
3.1	Preliminary Remarks	4
3.2	General Information	4
3.3	Designated Use	4
3.4	Installation and Maintenance	4
3.5	Emergency Procedures	4
4	PRE OPERATIONAL CHECKS	5
5	CONVEYOR START UP AND SHUT DOWN	6
6	CONVEYOR OPERATION	7
6.1	Belt Start and Stop	7
6.2	Loading and unloading	8
6.3	Conveyor Extension and Retraction	9
6.4	Hydraulic Tilt Option (where fitted)	10
6.5	Side Traverse Manual Option	11
6.6	Side Traverse Powered Option	12
6.7	Longitudinal Traverse Manual Option	13
6.8	Longitudinal Traverse Powered Option	14
6.9	Operator Platform Option	15
7	TROUBLE SHOOTING	16

# 1 DOCUMENT CONTROL

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# 2 IMPORTANT NOTES

Please note the safety and warning notes in this publication.



#### **Electrical Hazard**

Could result in death or severe injuries.



# **Imminent Danger**

Could result in death or severe injuries.



# **Dangerous Situation**

Could result in slight or minor injuries.



# **Damaging situation**

Could result in damage to equipment or operating environment.



Operating hints and useful information.

Indicates a list of important points
 Indicates a list of important steps
 Indicates a important notation
 Indicates a important notation

Close adherence to the operating instructions is the prerequisite for fault-free operation and fulfilment of any rights to claim under guarantee. Please start by reading the operating instructions prior to operating the conveyor.

Keep operating instructions in the vicinity of the conveyor since it contains important information on service procedures.

#### 3 SAFETY

# 3.1 Preliminary Remarks

The following safety notes are primarily concerned with the general use of LongReach Telescopic Conveyor. Please ensure to take note of supplementary safety notes concerned with each function of the conveyor.

#### 3.2 General Information

LongReach have made every practicable attempt to eliminate and minimise the risk of injury which could be caused during the normal operation, installation, cleaning and maintenance of this plant, the associated risks are outlined in the appropriate Risk Assessment which is available on request. When using the conveyor the following safety practices must be adhered to help minimise the identified risks:

- DO NOT START conveyor without audible or visual "all clear"
- ONLY authorised personnel should operate the conveyor
- DO NOT OPERATE conveyor with guards or protective equipment removed
- DO NOT remove jammed freight or pop-out rollers with conveyor running or powered on
- Keep loose items, including, hair, fingers, clothing, gloves, neckties and jewellery clear of moving parts
- Know design limits. Do not overload conveyor
- Know location and function of emergency stops
- ONLY authorised maintenance personnel to service the conveyor
- Turn off all power before working on conveyor
- Keep areas around conveyor clear of obstructions and debris
- Report ALL unsafe conditions and practices to your supervisor
- DO NOT walk, ride, sit or climb on conveyor without turning off all power supplies

NOTE: ALL SAFETY FEATURES OF THE CONVEYOR MUST BE MAINTAINED IN SOUND WORKING CONDITION.

# 3.3 Designated Use

This LongReach Telescopic Conveyor is intended for industrial use. The design and manufacture of the equipment corresponds to the applicable standards and regulations. The maximum distributed load for the conveyor is displayed on the side of the conveyor. The maximum unit load of a product under normal operation should not exceed 100 kilograms.

# 3.4 Installation and Maintenance

Installation and Maintenance are not covered in this manual. Service and Installation instructions can be found in the Service and Installation Manual available on request.

# 3.5 Emergency Procedures

Do not render monitoring and protection equipment inoperative, even in test mode. Listen out for unusual noises as the conveyor operates. Immediately switch off the conveyor if in doubt whenever changes occur in relation to normal operation:

- Increase in temperature
- Increase in noise
- Increase in vibration
- Operator safety

# 4 PRE OPERATIONAL CHECKS

Prior to operation of the conveyor it is important that a pre operational checklist is completed. The completion of a pre operational checklist will reduce the risk of injury to plant, environment and operator. The following is supplied as a guide, however as applicable owners, hirers, lessees or sellers should provide a safe work practise for this piece of equipment, including a pre-operational checklist.

Supervisor Checklist		
	Ensure operators have been trained and completed a competency test in the use of LongReach Telescopic Conveyors	
	Ensure all operators have completed a safe work practise on the safe use of LongReach Telescopic Conveyors	
	Ensure Risk Assessment has been conducted on this piece of plant by OHS&W committee	
	Ensure all relevant personal protective equipment is made available to operators, <b>gloves must not be worn</b>	
	Ensure operators are wearing appropriate footwear, no loose clothing or jewellery, long hair is tied back and safety vests are worn	
Ope	rator Checklist	
	Check all emergency stops	
	Check for foreign objects jamming belt	
	Ensure all guards are fitted and are secure	
	Check extension stop bar for correct operation	
	Ensure the area is clear of obstructions	
	Ensure tracks are free from debris (if fitted)	

# 5 CONVEYOR START UP AND SHUT DOWN

The conveyor system has one main control panel generally located at the rear of one side of the conveyor. The cabinet features an isolations switch. The switch has two positions, "OFF" and "ON". Once the conveyors isolation switch has been turned on an audible warning siren may sound for a few seconds.



#### SAFE WORK PROCEDURE - START UP



- 1. Notify immediate workmates that you are about to turn on the conveyor.
- 2. Ensure conveyor is clear from obstructions prior to turning power on
- 3. Keep hands clear of conveyor belt when powering conveyor on
- 4. Turn isolation switch clockwise until it clicks into correct position
- 5. An audible siren may sound for a few seconds on activation of power

# SAFE WORK PROCEDURE - SHUT DOWN



- 1. Notify immediate workmates that you are about to turn off the conveyor.
- 2. Ensure conveyor is clear from obstructions prior to turning power off
- 3. Turn isolation switch anti-clockwise until it clicks into correct position

#### 6 CONVEYOR OPERATION

# 6.1 Belt Start and Stop

The conveyor is designed to transport parcels and cartons with smooth and regular bases in both directions.

The maximum distributed load for the conveyor is displayed on the side of the conveyor. The maximum unit load of a product under normal operation should not exceed 100 kilograms. Where unit loads exceed 50 kilograms the spacing between successive items must be increased to not exceed the maximum distributed load i.e. 50 kilograms at 1 metre = 100 kilograms at 2 metres.

# **OPERATION**

The LongReach has, at the operator's panel a pushbutton for belt "START" and a pushbutton for belt "STOP". Belt will start upon depressing of "START" pushbutton. Belt will stop upon depressing of "STOP" pushbutton, or activation of emergency stop, or front push bar.



# SAFE WORK PROCEDURE



- 1. Release all e-stop buttons
- 2. Switch lights on
- 3. Ensure front rollers are free and in correct position
- 4. Ensure conveyor is free of obstructions prior to starting
- 5. Notify immediate workmates that you are about to enable the belt start function
- 6. Press start
- 7. An audible siren may sound prior to belt start
- 8. On completion of task press stop

# **POTENTIAL HAZARDS**



- 1. Possible to become entangled in belt
- 2. Possible to become injured from items falling from belt
- 3. Possible to obtain burn from moving belt
- 4. Possible for operators to get struck by moving products on belt
- 5. Possible to obtain injury if belt is ridden

# 6.2 Loading and unloading

The telescopic conveyor is designed to enable operators to manually place cartons onto or remove cartons from the conveyor belt.

#### SAFE WORK PROCEDURE - LOADING ONTO BELT



- 1. Ensure conveyor belt is running (refer 5.1 belt start and stop)
- 2. Operator manually places carton or parcel onto conveyor using correct manually handling technique
- 3. Ensure freight is placed centrally onto rollers or belt
- 4. Small freight (e.g. envelopes, small cartons) should be placed on top of larger cartons
- 5. Ensure labels are facing in the required position

#### SAFE WORK PROCEDURE - UNLOADING FROM BELT



- 1. Ensure conveyor belt is running (refer 5.1 belt start and stop)
- 2. Operator to identify correct oncoming parcel via label
- 3. Operator manually removes carton or parcel from conveyor using correct manually handling technique
- 4. Ensure freight is placed centrally onto pallet or secondary conveyor (if applicable)
- 5. Ensure labels are facing in the required position

# **POTENTIAL HAZARDS**



- 1. Possible to become entangled in belt
- 2. Possible to become entangled in rollers
- 3. Possible to become injured from items falling from conveyor
- 4. Possible to obtain burn from moving conveyor
- 5. Possible for operators to get struck by moving products on conveyor
- 6. Possible to obtain injury if belt is ridden

#### **ADDITIONAL COMMENTS**



- Do not operate conveyor with guards or protective equipment removed.
- Do not remove jammed freight with belt running, or power on.
- Exceeding the maximum distributed load may cause failure of internal components or structural failure of the conveyor sections, and exceeding the unit load may result in excessive wear and damage to the conveyor.
- When loading the conveyor, the freight should be placed centrally on the rollers or belt. Small freight (envelopes etc.) which could become trapped at transfer points should not be placed on the belt but may be placed on top of larger products.

# 6.3 Conveyor Extension and Retraction

The conveyor is designed to extend and retract to the immediate work area within the container or trailer, increasing the efficiency and safety associated with manual handling.

#### **OPERATION**

The LongReach has, at the operator's panel a pushbutton for conveyor extension "EXTEND" and a pushbutton for conveyor retraction "RETRACT". Conveyor will move upon depressing of "EXTEND" and "RETRACT" pushbuttons. The extend and retract function is momentary, and will only operate while button is being depressed.



#### SAFE WORK PROCEDURE



- 1. Notify immediate workmates that you are about to either extend or retract the conveyor
- 2. Ensure conveyor is free of obstructions prior to extending or retracting
- 3. Keep hands clear of telescoping sections when extending or retracting
- 4. Do not operate conveyor with guards or protective equipment removed
- 5. Ensure operator(s) are on operator platform prior to operation (when fitted)
- 6. Press extend or retract button to move the conveyor to desired length
- 7. An audible siren may sound during conveyor extension
- 8. Conveyor will only move while button is being pressed

#### **POTENTIAL HAZARDS**



- 1. Possible to become entangled in gaps between moving stages
- 2. Possible to become trapped between moving stages
- 3. Possible to crush body behind moving stages
- 4. Possible to crush body in front of moving stages
- 5. Possible to crush body between operator platform and objects (when fitted)
- 6. Possible to be thrown from operator platform (when fitted)

#### ADDITIONAL COMMENTS



 The extension stop bar fitted to the front stage will stop all functions of the conveyor if activated.

# 6.4 Hydraulic Tilt Option (where fitted)

The hydraulic tilt option enables raising and lowering of the conveyor up from horizontal and is controlled from the operator's panel. The tilt function is designed to improve operator's ergonomics reducing the requirement to work above shoulder height.

#### **OPERATION**

The LongReach has, at the operator's panel a pushbutton for conveyor tilt-up "RAISE" and a pushbutton for conveyor tilt-down "LOWER". Conveyor will move upon depressing of "RAISE" and "LOWER" pushbuttons. The tilt function is momentary, and will only operate while button is being depressed.



# SAFE WORK PROCEDURE



- 1. Notify immediate workmates that you are about to raise or lower the conveyor
- 2. Ensure areas above and below are clear of operators and obstructions prior to raising or lowering
- 3. Do not operate conveyor with guards or protective equipment removed
- 4. Ensure operator(s) are on operator basket prior to operation (when fitted)
- 5. Press raise or lower to move the conveyor to desired height
- 6. An audible siren may sound during conveyor adjustment
- 7. Conveyor will only move while button is being pressed

# **POTENTIAL HAZARDS**



- 1. Possible to crush body in front of moving stages
- 2. Possible to crush body between operator platform and objects (when fitted)
- 3. Possible to be thrown from operator platform (when fitted)

# **ADDITIONAL COMMENTS**



The hydraulic system has flow control valves, which are set by the manufacturer to ensure controlled lowering of the conveyor. These should not be adjusted under any circumstance.

# **WARNING**

Under no circumstances should any person enter the area below the conveyor or attempt any service or adjustment to the hydraulic system without fitting securely positioned chocks. Failure to observe this warning could result in **SEVERE CRUSHING INJURY OR DEATH.** 

# 6.5 Side Traverse Manual Option

The traverse function is designed to enable the conveyor to be operated from multiple doors. This function is available manual and powered. This section discuses manual traverse only, for powered traversing units please refer to section 5.6 Side Traverse Powered Option.

# **OPERATION - Manual Traverse**

The LongReach has, underneath the conveyor free-wheeling wheels c/w footbrake. Ensure the footbrake is disengaged prior to moving the conveyor; reengage the brake once the conveyor is in the correct position.

#### SAFE WORK PROCEDURE



- 1. Notify immediate workmates that you are about to move the conveyor
- 2. Ensure the area is clear of operators and obstructions prior to traversing
- 3. Do not operate conveyor with guards or protective equipment removed
- 4. Ensure conveyor is fully retracted prior to moving
- 5. Ensure foot brake is disengaged prior to traversing (manual traversing units only)
- 6. Manually push conveyor into correct position using correct technique
- 7. Reengage foot once in correct position

#### POTENTIAL HAZARDS



- 1. Possible to become trapped between conveyor and objects
- 2. Possible to crush body between conveyor and objects
- 3. Possible to crush body between basket and objects (when fitted)

# **ADDITIONAL COMMENTS**



- Conveyor must be fully retracted prior to traversing
- The intended path must be clear and free of obstructions prior to moving conveyor
- Feet must be kept clear while in motion.
- Ensure the foot brake fitted to the manual traverse option is on before extending.

# 6.6 Side Traverse Powered Option

The traverse function is designed to enable the conveyor to be operated from multiple doors. This function is available manual and powered. This section discuses powered traverse only, for manual traversing units please refer to section 5.5 Side Traverse Manual Option.

#### **OPERATION - Powered Traverse**

The LongReach has, at the MCC a pushbutton for conveyor traverse "TRAVERSE". Conveyor will move upon depressing of "TRAVERSE" Pushbuttons. Direction is indicated by label on MCC, or when two buttons are fitted on either side of conveyor, direction is always away from operator. Action is momentary and will only operate when button is being depressed.



#### SAFE WORK PROCEDURE



- 1. Notify immediate workmates that you are about to move the conveyor
- 2. Ensure the area is clear of operators and obstructions prior to traversing
- 3. Do not operate conveyor with guards or protective equipment removed
- 4. Ensure conveyor is fully retracted prior to moving (powered traversing models will not traverse until conveyor is fully retracted)
- 5. Move conveyor into position by pressing the appropriate traversing button
- 6. An audible siren may sound during conveyor movement

#### **POTENTIAL HAZARDS**



- 1. Possible to become trapped between conveyor and objects
- 2. Possible to crush body between conveyor and objects
- 3. Possible to crush body between operator platform and objects (when fitted)

# **ADDITIONAL COMMENTS**



- Conveyor must be fully retracted prior to traversing
- The intended path must be clear and free of obstructions prior to moving conveyor
- Feet must be kept clear while in motion.
- An interlock is fitted to the powered traverse to inhibit movement while extended.
- A friction clutch is fitted to the powered traverse gear motor as a safety device, and enables the conveyor to stall should it encounter any obstacle.

# 6.7 Longitudinal Traverse Manual Option

The longitudinal traverse function is designed to enable the conveyor to be moved between the system and loading dock. This function is available manual and powered. This section discuses manual traverse only, for powered traversing units please refer to section 5.8 Longitudinal Traverse Powered Option.

# **OPERATION - Manual Traverse**

The LongReach has, at the rear of the conveyor a drop pin. To move the conveyor release the drop pin at the rear of the conveyor. Manually move the conveyor to the desired position and reengage the drop pin.



# SAFE WORK PROCEDURE



- 1. Notify immediate workmates that you are about to move the conveyor
- 2. Ensure the area is clear of operators and obstructions prior to traversing
- 3. Do not operate conveyor with guards or protective equipment removed
- 4. Ensure conveyor is fully retracted prior to moving
- 5. Ensure drop pin is disengaged prior to traversing
- 6. Move conveyor into correct position
- 7. Reengage drop pin once in correct position

# **POTENTIAL HAZARDS**



- 1. Possible to become trapped between conveyor and objects
- 2. Possible to crush body between conveyor and objects
- 3. Possible to crush body between operator platform and objects (when fitted)

# **ADDITIONAL COMMENTS**



- Conveyor must be fully retracted prior to traversing
- The intended path must be clear and free of obstructions prior to moving conveyor
- Feet must be kept clear while in motion.
- Ensure the foot brake fitted to the manual traverse option is on before extending.

# 6.8 Longitudinal Traverse Powered Option

The longitudinal traverse function is designed to enable the conveyor to be moved between the system and loading dock. This function is available manual and powered. This section discuses powered traverse only, for manual traversing units please refer to section 5.7 Longitudinal Traverse Manual Option.

# **OPERATION - Powered Traverse**

The LongReach has, at the rear of the conveyor a drop pin, and on the side of the conveyor a control panel marked "TRAVERSE". To move the conveyor release the drop pin, and press the desired traverse button. Direction is indicated by the label on the button station. The conveyor will automatically stop once in the correct position. Action is momentary and will only operate when button is being depressed. Reengage the drop pin once the conveyor is in the desired position. Conveyor will not extend unless drop pin is engaged.



# SAFE WORK PROCEDURE



- 1. Notify immediate workmates that you are about to move the conveyor
- 2. Ensure the area is clear of operators and obstructions prior to traversing
- 3. Do not operate conveyor with guards or protective equipment removed
- 4. Ensure conveyor is fully retracted prior to moving (powered traversing models will not traverse until conveyor is fully retracted)
- 5. Move conveyor into position by pressing the appropriate traversing button
- 6. An audible siren may sound during conveyor movement

# **POTENTIAL HAZARDS**



- 1. Possible to become trapped between conveyor and objects
- 2. Possible to crush body between conveyor and objects
- 3. Possible to crush body between basket and objects (when fitted)

#### **ADDITIONAL COMMENTS**



- Conveyor must be fully retracted prior to traversing
- The intended path must be clear and free of obstructions prior to moving conveyor
- Feet must be kept clear while in motion.
- An interlock is fitted to the powered traverse to inhibit movement while extended.
- A friction clutch is fitted to the powered traverse gear motor as a safety device, and enables the conveyor to stall should it encounter any obstacle.

# 6.9 Operator Platform Option

The operator platform option is utilised in conjunction with the hydraulic tilt function which enables the operator to raise and fall with the conveyor, it also enables the operator to move into and out of the container using the conveyors extend and retract function.



#### SAFE WORK PROCEDURE



- 1. Notify immediate workmates that you are about to raise, lower, extend or retract the conveyor
- 2. Ensure areas within the conveyor travel path are clear of operators and obstructions prior to moving
- 3. Do not operate conveyor with guards or protective equipment removed
- 4. Ensure operator(s) are on operator basket prior to operation
- 5. Press raise, lower, extend or retract to move the conveyor to desired position
- 6. Conveyor will only move while button is being pressed

#### **POTENTIAL HAZARDS**



- 1. Possible to become trapped between conveyor and objects
- 2. Possible to crush body between conveyor and tilt frame
- 3. Possible to crush body between operator platform and objects
- 4. Possible to be thrown from operator platform

#### **ADDITIONAL COMMENTS**



The hydraulic system has flow control valves, which are set by the manufacturer to ensure controlled lowering of the conveyor. These should not be adjusted under any circumstance.

#### **WARNING**

Under no circumstances should any person enter the area below the conveyor or attempt any service or adjustment to the hydraulic system without fitting securely positioned chocks. Failure to observe this warning could result in **SEVERE CRUSHING INJURY OR DEATH.** 

#### 7 TROUBLE SHOOTING

# If the belt ceases to operate:

- 1. Check all emergency stops
- 2. Check power supply
- 3. Check for foreign objects jamming belt
- 4. Check for belt slippage with motor running
- 5. Check for electrical or electronic overloads

# If the conveyor will not extend or retract:

- 1. Check all emergency stops
- 2. Check power supply
- 3. Check extension stop bar for correct operation
- 4. Check internally for foreign objects jamming path
- 5. Check for drive clutch slipping
- 6. Check extension drive chains for breakage
- 7. Check for electric overloads
- 8. Check for obstruction activating anti-grounding sensors (on operator basket if fitted)
- 9. Check the drop pin is in correct position (if fitted)

# If conveyor will not traverse (manual traverse option):

- 1. Check that foot brake is released
- 2. Check that conveyor is fully retracted
- 3. Check for obstacles in track
- 4. Check that the conveyor is not at track limit
- 5. Check that the drop pin is in the correct position (if fitted)

# If conveyor will not traverse (powered traverse option):

- 1. Check all emergency stops
- 2. Check power supply
- 3. Check that conveyor is fully retracted
- 4. Check for obstacles in track
- 5. Check that conveyor is not at track limit
- 6. Check drive clutch for slippage
- 7. Check for electrical overloads
- 8. Check that the drop pin is in the correct position (if fitted)

# If conveyor will not tilt up or down (hydraulic tilt option):

- 1. Check all emergency stops
- 2. Check power supply
- 3. Check for obstructions
- 4. Check for obstruction activating anti-grounding sensors (on operator basket if fitted)
- 5. Check height sensor (if fitted)
- 6. Check oil level in reservoir
- 7. Check for oil leaks
- 8. Check for electrical overloads