

COVEYA

OPERATOR'S MANUAL

HC1000



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Danger

Failure to follow the instructions and safety advice in this manual could result in death or serious injury.

Do Not Operate The Conveyor Unless You:

1. Have read and understand the principles of safe machine operation contained in this manual.
2. Avoid hazardous situations.
3. Always check the conveyor/s before every use.
4. Inspect the workplace for hazards.
5. Only use the machine for the purpose it is intended.



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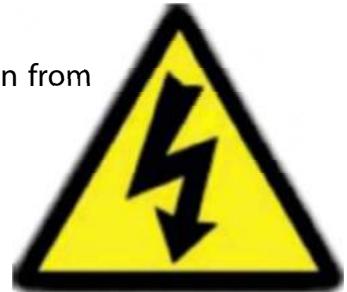
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Safety

Electrocution Hazards

- The conveyor is not electrically insulated and will not provide protection from contact with or proximity to electrical current.
- Do not use if cables are damaged.
- Do not operate during lightning or storms.
- Do not use the conveyor as an earth for welding.
- Ensure safe routing of power cables to minimise risk of electrocution.



Explosion & Fire Hazards

- Do not operate the machine in hazardous locations or locations where potentially flammable or explosive gases or particles may be present.



Setup Hazards

- Check work area for overhead obstructions and possible hazards such as unstable ground or other work activities taking place.
- Do not use the machine if you are under the influence of alcohol, drugs or prescribed medication that may affect your judgement.
- Ensure the conveyor is adequately supported.
- Do not alter or disable the conveyor components that affect its safety or stability - such as supports or guarding.
- Do not replace components that are supporting the conveyor with items of different weight or specification.
- Do not ride on the belt.
- Do not alter or disable the starter box, motor, power leads or plugs without prior consultation with the manufacturer.
- Do not alter or modify the conveyor frame construction, moving parts or belt without prior consultation with the manufacturer.
- Do not operate the conveyor in strong or gusty winds.
- Ensure the conveyor is adequately supported for the ground conditions.



Fall Hazards

- Do not allow access to the underside of the belt whilst in use, without suitable protection in place – material can drop from the belt and cause injury.
- Do not lean over the machine while the belt is moving.
- Do not ride conveyor.



Bodily Injury Hazard

- Take care when planning the installation and operating the conveyor.
- Keep hands & limbs away from moving components.
- Always wear correct PPE.



Component Damage Hazards

- When using a generator, ensure it is fitted with voltage regulator before use.
- Do not over load the belt. Max. Load 350kg per linear metre

Damaged Conveyor Hazard

- Do not use a conveyor with a damaged or malfunctioning component.
- Always check over the conveyor before each use. Isolate any conveyor that is damaged or malfunctioning.





Conditions of Use

Range of Intended Environmental Conditions:

Do not use the conveyor outside the following environmental conditions:

- Ambient temperature: -10°C --+40°C
- Wind Speeds: 0 – 50MPH

Prohibited Applications:

Do not use the conveyor if any part is:

- Submerged in water.
- In an explosive atmosphere.
- In a corrosive atmosphere or environment.

Prohibited Materials:

- Solely Liquids.
- Reinforcing bar or metal rod.
- Items longer than 800mm.
- Lumps weighing greater than 60kg or measuring greater than 600mm x 400mm x 400mm.
- Heated materials above 60°C.
- Substances corrosive to rubber or metal.
- Materials likely to puncture the belt.
- Polymers or lubricating substances.
- Asphalt or adhesive substances likely to stick to the conveyor following use.

Conveyor Sound Levels:

- Decibel Rating 60-65db.

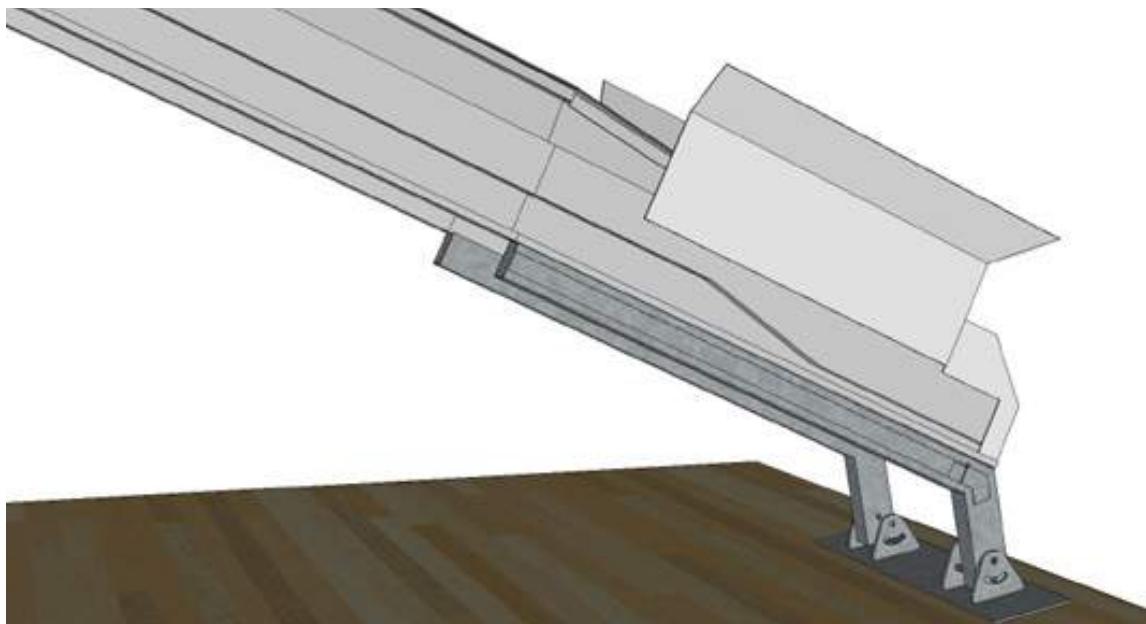


Conveyor Installation

Conveyor Stands

Conveyor stands are fitted as standard to every conveyor. The stands are height adjustable at the discharge end of the conveyor. To adjust the height - ensure the conveyor is safely slung and lift using appropriate means, once lifted to correct height, release the pins and lower the telescopic leg and re fit the pins. Diagram below shows the conveyor stands in position.

Fig. 5



Removing guarding for Maintenance

The guarding of the conveyor is to protect users from harm. Guards can be removed for maintenance purposes, but the power must always be isolated prior to removal.

Once the conveyor is cleaned, all guards must be refitted before the power is switched back on.

Starter Box

Ensure the starterbox is safely positioned on stable ground, in a dry place.

Operator Training

During installation the installation team will provide training of operations and ensure that each operator understands the vital safety aspects of the equipment. Only these trained personnel should operate the conveyor at all times.





Pre-Start Checks & Inspection

It is the responsibility of the operator to visually check the conveyor and surrounding area before starting the conveyor. This should be carried out before each work shift.

A damaged or modified conveyor should never be used. If any damage or modification is found, the conveyor should be disconnected from the power, tagged and removed from service.

The following components or areas should be inspected for damage, modifications and improperly installed or missing parts:

1. Electrical Components.
2. Wiring.
3. Power sockets.
4. Motor & gearbox.
5. Conveyor frame joints (between modular components).
6. Conveyor frame & hopper.
7. Belt condition & clip joints.
8. Hopper rubber condition.
9. Any hoarding to protect public areas.
10. Conveyor supports.

The following components should be checked for operational functionality:

1. Belt tension & tracking.
2. If a belt scraper is fitted, check it is making adequate contact with the belt.
3. Emergency Stops are operating.

The following areas should be checked for cleanliness:

1. Material jammed between belt & conveyor frame.
2. Build up on rollers.
3. Area under & adjacent to the loading/tail section.



Operating Instructions

Do not operate the conveyor unless you have read and understood the instructions.

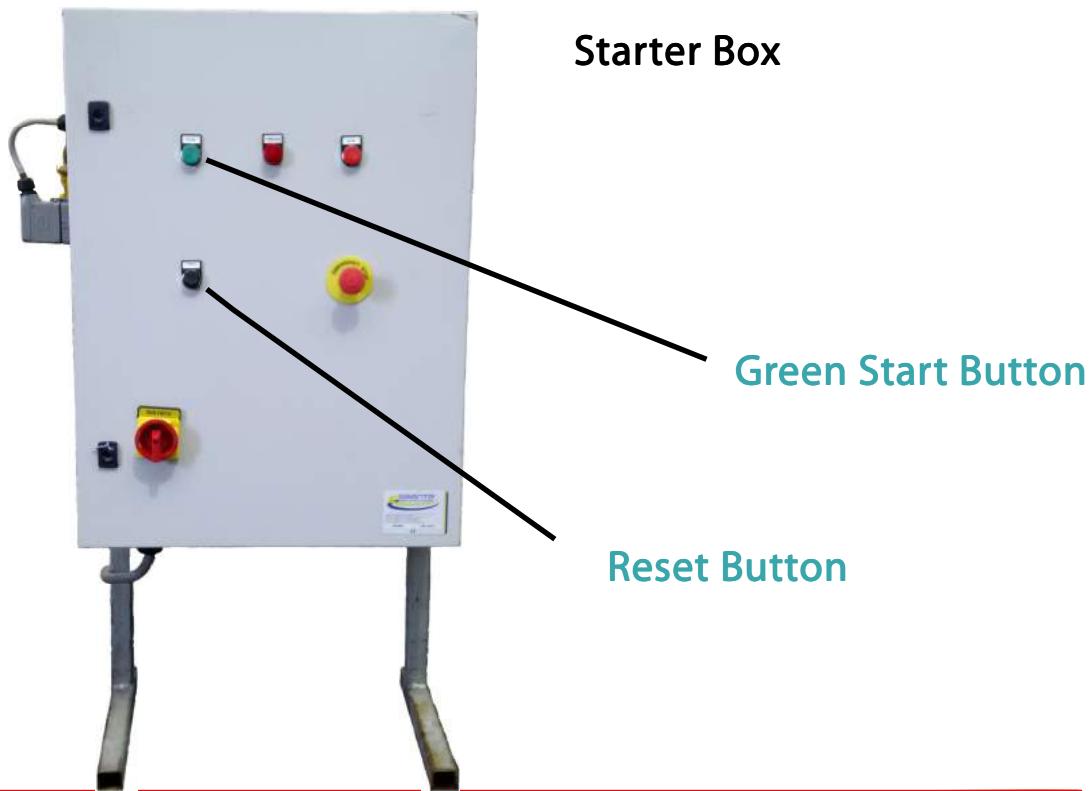
The operating instructions section provides instructions for the safe use of the conveyor. It is the responsibility of the operator to follow all the safety rules and instruction provided in this manual.

Only trained personnel should use the conveyor.

Start Up Procedure:

1. Connect starterbox power lead to site power supply.
2. Connect interconnecting lead to conveyor and starterbox
3. Switch on Power supply and press the "Reset" button
4. Check that the discharge area is clear.
5. Ensure nothing is leaning on the conveyor or likely to interfere with the belt running.
6. Give audible warning and press the green button on the starter panel.
7. Test emergency stop button or grab wire (where fitted) by pressing/pulling it and checking belt stops. Release button and begin operation.

Fig. 1





Operating Instructions (Continued)

Loading Methods:

The conveyor must only be loaded at the hopper or at designated loading points.

Loading must only commence once conveyor has been started.

The conveyor must be loaded evenly and smoothly.

NOTICE

OVERLOADING WILL CAUSE JAMMING AND BREAKDOWNS.



Remember you are feeding a moving belt, so feed accordingly and the conveyor will work well.

Ineffective loading or overloading can cause material to spill off the sides of the conveyor and build up around the conveyor. This can in turn get into the conveyor frame and jam the conveyor or damage the bearings.

When loading steeper conveyors some rollback will occur. Care must be taken to ensure injury cannot be caused to the operator or others by large lumps coming back down the belt. One way to reduce this risk is to fit baffles above the belt to break the fall of rolling back lumps.

Please ensure you do not use an excavator bucket wider than 1200mm

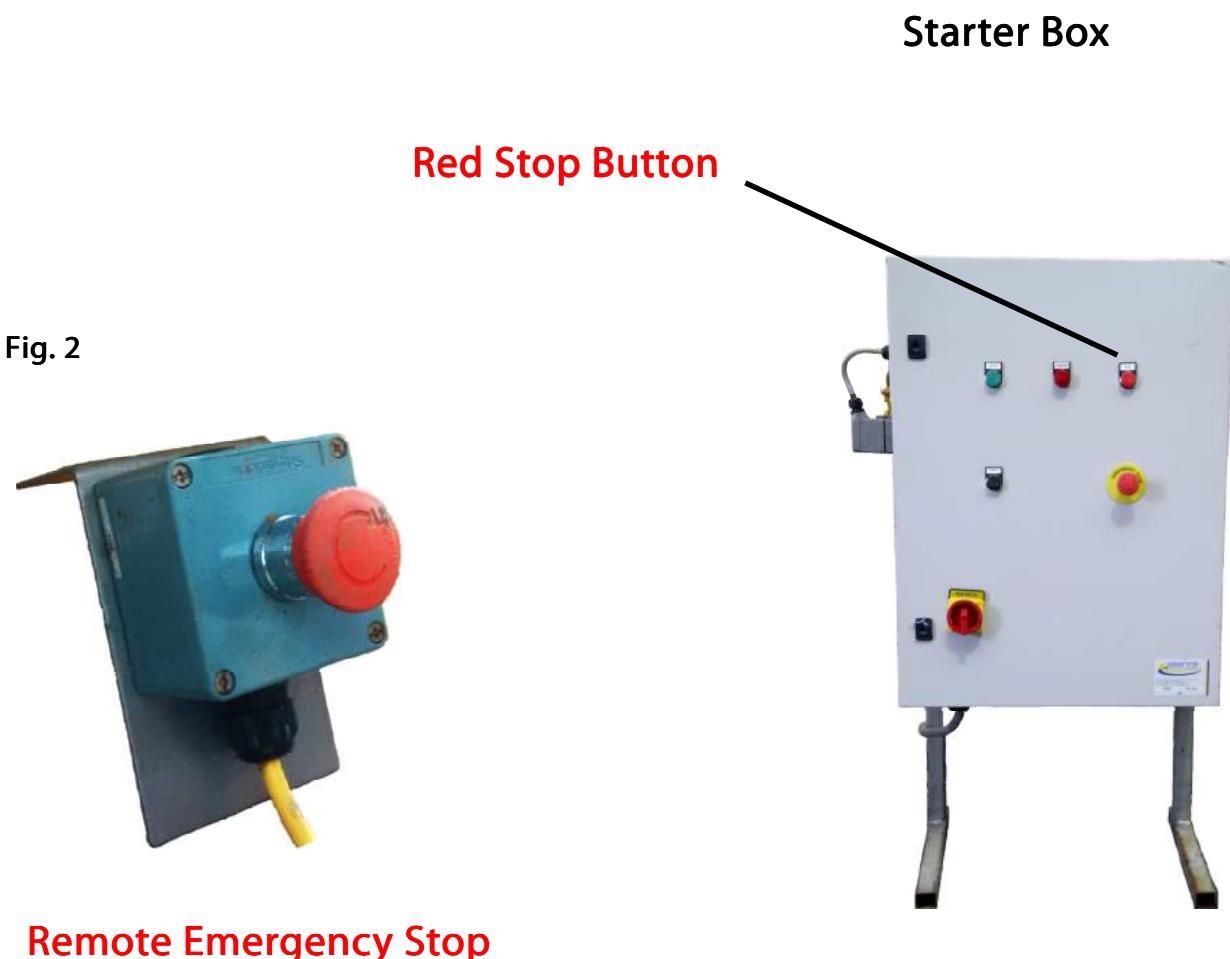
 **Engineer's Tip** – *The conveyor likes to be loaded little and often. You will achieve better throughput if you load the conveyor with 2 smaller machines rather than one big one.*



Operating Instructions (Continued)

Stopping Procedure:

1. Ensure belt is emptied, except in emergency stop conditions.
2. Press the red stop button.
3. Power down the starter box and remove the power lead.





Daily Maintenance Checks:

(DEPENDING ON CONVEYOR USAGE & SITE THIS MAY NEED TO BE DONE MORE FREQUENTLY THAN DAILY - i.e. BETWEEN LOADS)

1. Tail Section:

Check tail section of conveyor for build-up of material and debris each day.

2. Hopper Section:

Check the build-up around the hopper is clear and the belt is running free.

3. Checking belt tension and tracking:

- Maintaining the proper belt tension is essential to good machine performance and service life.
- Operating the machine with the incorrect belt tension can damage machine components.
- Check belt tension and adjust if necessary by evenly tightening adjusting nuts situated either side of the conveyor tail section. (see fig 1 on page 22)
- The correct tension is the minimum required to maintain drive to the belt.

4. Boarding (if applicable):

- If the conveyor has underguarding or is boarded in, check no material has built up and clear out if necessary.

5. Checking roller condition:

Ensuring no muck or debris is built up around the rollers is essential.

1. Isolate power
2. Lift belt at base and top of machine.
3. Inspect the condition of rollers.
4. Move along the machine checking the rollers are free moving and free of debris or build up.
5. If a roller is seized, apply lubricant. If the roller is still seized please contact our service department.



Week	Date	Name	Days					Defect Reported (✓/✗)
			M	T	W	T	F	
1	1-10-16	JOHN SMITH	✓	✓	✓	✓	✓	✗
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Weekly Maintenance Checks:

- 1)** Feed boot bolts – physically check tightness.
- 2)** Head guard bolts (if applicable) – physically check tightness.
- 3)** Return roller bolts (if applicable) – physically check tightness.
- 4)** Electric leads – physically check for damage to cable.
- 5)** Electric plugs & sockets – physically check cable entry and for any damage.
- 6)** Motor – check for and damage to terminal casing & cables etc...
- 8)** Run conveyor and check rollers are turning.
- 9)** Plus all daily checks.

Maintenance Information

Observe and Obey:

Only routine maintenance items specified in this manual shall be performed by the operator.

Scheduled maintenance inspections shall be completed by qualified service technicians, according to the manufacturer's specifications.

It is the responsibility of the user to keep the conveyor clean, particularly under and around the loading section. The frequency of cleaning depends on the material and weather conditions.

Cleaning can help ensure you have a trouble free operation.

Scheduled Maintenance

Maintenance performed monthly must be completed by a person trained and qualified to perform maintenance on this machine.

Machines that have been out of service for more than six months must receive a service inspection before they are used.



Week	Date	Name	Checked Item (✓/✗)									Defect Reported (✓/✗)
			1	2	3	4	5	6	7	8	9	
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Tensioning & Tracking Points

Fig. 1



To move the drum forward (decrease tension) tighten this nut and tighten opposite nut to secure in place when finished.

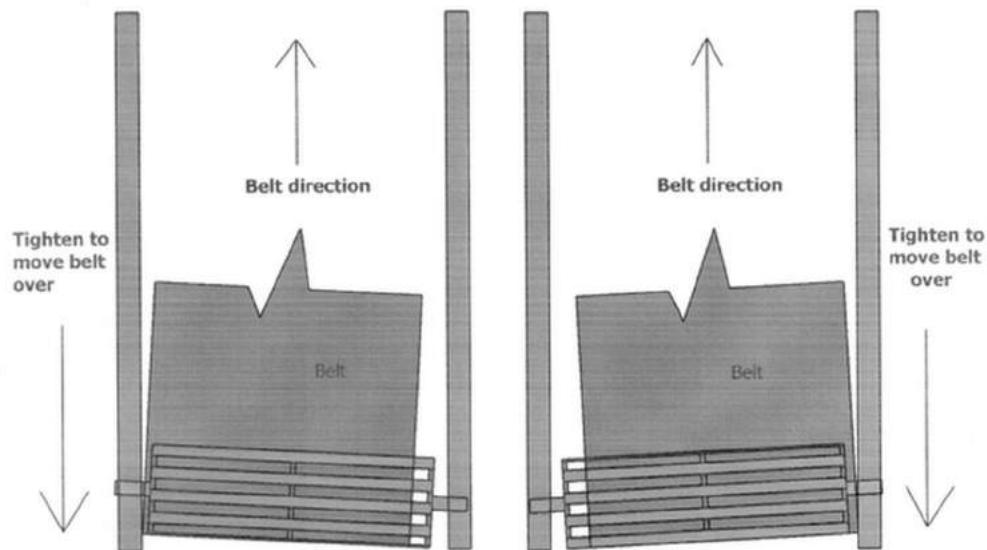
To move the drum back (increase tension) tighten this nut and tighten opposite nut to secure in place when finished.



Trouble Shooting

Belt tracking over to one side at the tail section:

Fig. 1



Stop the conveyor and **Isolate power supply**. Release the tension off of the belt (see fig 1 page 22) and ensure there is no build up around the tail drum or any stones trapped between the drum and framework, then test to ensure the drum runs freely.

Carry out visual check on bearing condition (any play or noise) and if you find there is a problem contact our service department who will arrange for a visit. If no problem is found, tension the belt and connect the power and switch on. Whilst the belt is running check the tracking and adjust as necessary to centralize the belt (see diagram above).

Drive turning, but the belt is stopped

Isolate power supply. Check moving parts are free from obstruction. Tension the belt by adjusting the tension bolts evenly on the tail section. (see fig 1 on page 22)

Restore the power and begin the start-up procedure, check belt tracking and adjust as necessary.





Trouble Shooting (Continued)

Motor cuts out:

Isolate power supply. Check that nothing has jammed any moving parts, particularly behind loading back guard. Contact our service department immediately.

UNDER NO CIRCUMSTANCE SHOULD YOU REPEATEDLY TRY TO START THE CONVEYOR, AS THIS WILL CAUSE SERIOUS MOTOR DAMAGE!

Starter does not work?

Isolate power supply. Check that the main fuse has not tripped. Check the power lead to ensure that no damage has occurred. Check the power source is adequate.

Unplug the lead from the power socket, a competent electrician could check for loose or disconnected wires within the plugs and sockets. If after this has been done and you have reconnected the power it still fails to work, contact our service department for assistance.

Material jammed in conveyor under the receiving boot?

Isolate power supply to the conveyor. If the item cannot be removed easily contact our service department for assistance.



Trouble Shooting (Continued)

Noise?

If the conveyor starts to make any form of noise other than the normal operational noise, **stop and isolate** the conveyor and check for something jamming the conveyor. If you find anything, remove it, if the noise persists, contact our service department for assistance.

What to do if the belt is fully loaded and stops:

Isolate the power and clear the belt of all material. Continuing to force the conveyor to start could cause damage to the motor. Once the belt is clear, check for any material block or similar that could have caused the belt to stop. Attempt to restart the belt.

If the belt does restart, attempt a small load and progressively increase this until the belt is running at full capacity.

 ***Engineer's Tip:*** - *There is always a reason for the belt to stop. It will normally be something jammed in the tail section, or inadequate power supply causing the machine to cut out.*



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