SCREW CONVEYOR

INSTALLATION, OPERATION & MAINTENANCE MANUAL

SCREW CONVEYOR GEN - 9/9/26

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FRONT MATTER

Important Safety & Advisory Information

Read this manual and all supplied component/manufacturer instructions before installing, operating, or maintaining the conveyor.

DANGER - LOCKOUT/TAGOUT

Disconnect and lock out/tag out all power and eliminate stored energy before opening the conveyor, removing covers or guards, clearing a jam, or performing inspection, maintenance, or repair.

CEMA Advisory Disclaimer

The information provided in CEMA Standard No. 352-2012 is advisory only. CEMA recommendations are general in nature and are not a substitute for professional advice. Users should seek the advice, supervision and/or consultation of qualified engineers, safety consultants, and other qualified professionals.

Use of this publication or the information contained in it is made with the understanding that the user and the user's company assume responsibility for the design, safety, specifications, suitability and adequacy of any conveyor system, component, mechanical device or electrical device designed or manufactured using the information.

CEMA and its member companies make no representations or warranties, expressed or implied, that the information or recommendations conform to all federal, state or local laws, regulations, guidelines or ordinances.

Reference: CEMA Standard No. 352-2012, Screw Conveyor Safety, Operation & Maintenance Manual, 2012.

FRONT MATTER

Introduction

This manual provides a common basis for the safe installation, operation, inspection and maintenance of Orthman Conveying Systems screw conveyors. It combines the CEMA safety and maintenance guidance included in the supplied CEMA 352-2012 material with practical installation and service information from the legacy OCS screw conveyor manual.

Reliability and service life depend on correct receiving, handling, alignment, assembly, lubrication, startup and routine inspection. Equipment drawings, drive and bearing supplier manuals, and project-specific instructions remain part of the required installation and maintenance information.

BEFORE WORK BEGINS

Review the safety section before startup. Inspect the shipment, verify the installation layout, confirm the conveyor is properly supported and aligned, and verify that all guards, covers and warning labels are in place.

Scope

- Receiving, unloading, lifting and moving conveyor sections and components.
- Trough, screw, drive, thrust, hanger, cover and seal installation.
- Initial startup, normal operating practices and motor-load checks.
- Preventive maintenance, shutdown, storage and troubleshooting.
- General bolt tightening guidance for screw conveyor assembly fasteners.

SECTION A

Safety

Screw conveyor safety begins with a plan that considers possible dangers and hazards. Operation and maintenance personnel must be trained in safe operating procedures, recognition of hazards, and maintenance of a safe area around screw conveyors.

- Operate the conveyor only when all conveyor covers, guards and drive guards are installed and secured.
- If the conveyor is opened for inspection, cleaning, maintenance or observation, lock out/tag out the power so the conveyor cannot be restarted until covers and guards are replaced.
- Where an open housing is required by the application, guard the exposed conveyor with a railing or fence in accordance with applicable requirements.
- Protect manual or mechanical feed openings with grating where practical. If grating cannot be used, guard the exposed section with a railing or fence and post warning signs.
- Do not place hands, feet or any part of the body in the conveyor.
- Never walk or stand on conveyor covers, grating or guards.
- Do not use the conveyor for a purpose other than its intended service.
- Do not poke or prod material through openings with a bar, stick or similar object.
- Keep the area around the conveyor drive and control station free of debris and obstacles.
- Eliminate stored energy before opening the conveyor, and never clear a jam until power is locked out/tagged out.
- Do not attempt field modification of the conveyor or components without appropriate engineering review.
- If hazardous materials or internal/external pressure are involved, consult the equipment manufacturer before modifications.
- Warning labels must remain visible and legible. Replace damaged or illegible labels.

SAFETY DEVICES DO NOT REPLACE LOCKOUT/TAGOUT

Interlocks and other secondary safety devices can supplement a safe system, but they do not replace disconnecting and locking out the power before removing guards or covers.

SECTION A

CEMA Safety Labels

CEMA STANDARD NO: 352-2012

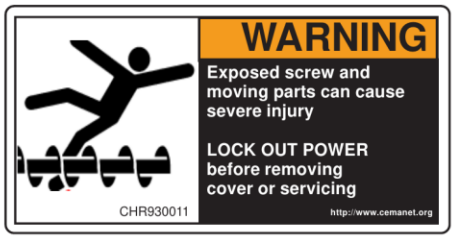
CEMA Safety Labels

CEMA Document: SC 2004-01

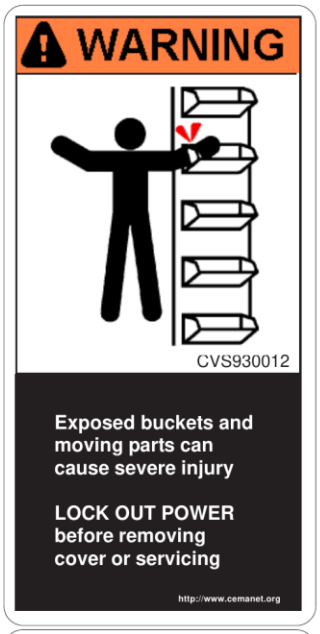
The CEMA safety labels shown below should be used on screw conveyors, drag conveyors, and bucket elevators. Safety labels should be placed on inlets, discharges, troughs, covers, inspection doors & drive guards. See CEMA Safety Label Placement Guidelines on CEMA Web Site: http://www.cemanet.org

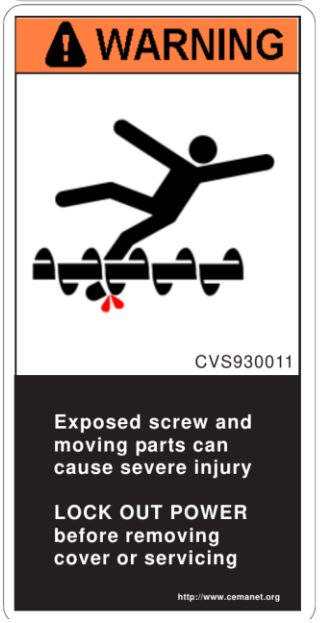












PROMINENTLY DISPLAY THESE SAFETY LABELS ON INSTALLED EQUIPMENT

SEE PREVIOUS PAGE FOR SAFETY REMINDERS

Note: Labels alone do not substitute for a thorough in-plant safety training program centered on the hazards associated with operating your installed equipment.

Contact CEMA or Your Equipment Manufacturer for Replacement Labels

CONVEYOR EQUIPMENT MANUFACTURERS ASSOCIATION
5624 Strand Court, Suite 2., Naples, Florida 34110
239-514-3441
http://www.cemanet.org

SECTION A

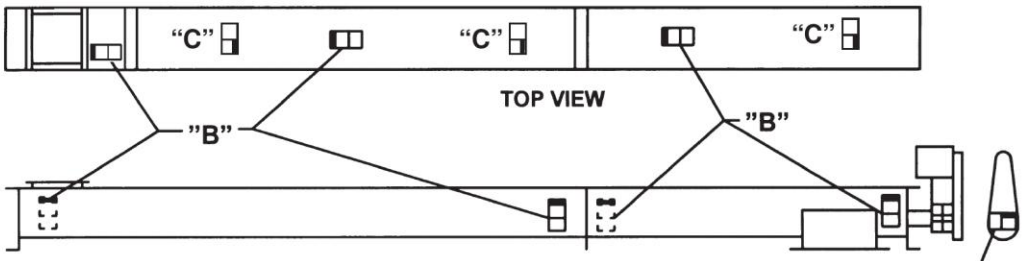
Screw Conveyor Safety Label Placement

CEMA STANDARD NO: 352-2012

CEMA Safety Labels *Placement Guidelines*

Product: Bulk Handling Equipment

Equipment: Screw Conveyor





"B"

To be placed on inlets and discharges, troughs, covers, and inspection doors of screw conveyors to provide warning against exposed moving parts while in operation.



"A"



"C"

To be placed on removable guards to warn that operation of the machinery with guards removed would expose chains, belts, gears, shafts, pulleys, couplings, etc. which create hazards

NEAR SIDE
FAR SIDE

USE LABEL "A" ON BELT GUARD
USE LABEL "B" ON ENDS OF TROUGH, MIDDLE OF COVERS AND AT INLET OPENING.
USE LABEL "C: ON TOP OF COVERS

SC-2

SECTION A

Vertical Screw Conveyor Label Placement (If Applicable)

CEMA STANDARD NO: 352-2012

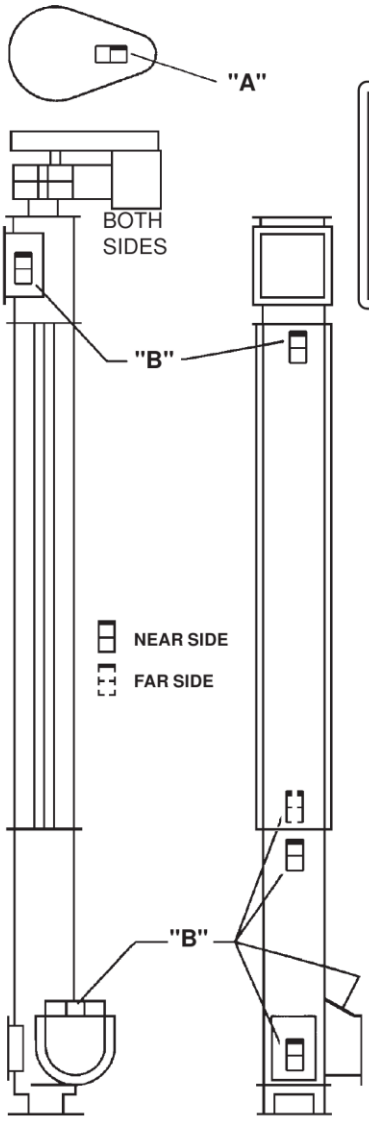
CEMA Safety Labels ***Placement Guidelines***

Product: Bulk Handling Equipment

Equipment: Vertical Screw Conveyor

USE LABEL "A" ON BELT GUARD

USE LABEL "B" ON ENDS OF TROUGH,
ON INTAKE INSPECTION DOOR,
AND
BOTH SIDES OF DISCHARGE SPOUT





"A"

To be placed on removable guards to warn that operation of the machinery with guards removed would expose chains, belts, gears, shafts, pulleys, couplings, etc. which create hazards



"B"

To be placed on inlets and discharges, troughs, covers, and inspection doors of screw conveyors to provide warning against exposed moving parts while in operation.

SC-3

SECTION A

Screw Conveyor Safety Poster

CEMA STANDARD NO: 352-2012

Screw Conveyor Safety

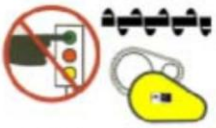




Do Not Climb, Sit, Stand or Walk, On Conveyor At Any Time



Do Not Perform Maintenance on Conveyor Until Electrical, Air, Hudraulic and Gravity Energy Sources Have Been Locked Out and Blocked



Operate Equipment Only With All Approved Covers and Guards in Place



LOCK OUT ALL Power and Block Gravity Loads Before Servicing



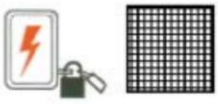
Ensure That All Personnel Are Clear of Equipment Before Starting



Allow Only Authorized And Trained Personnel To Operate or Maintain Conveyors and Accessories



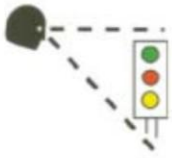
Keep Clothing, Body Parts, and Hair Away from Conveyors



Clean Up Spillage Near Moving Parts ONLY When the Power Is Locked Out AND Guards Are In Place



DO NOT Modify Conveyor Controls



Ensure That All Controls are Visible and Accessible



Operate Equipment Only With All Approved Covers, Guards, and Safety Labels In Place



Report All Unsafe Conditions

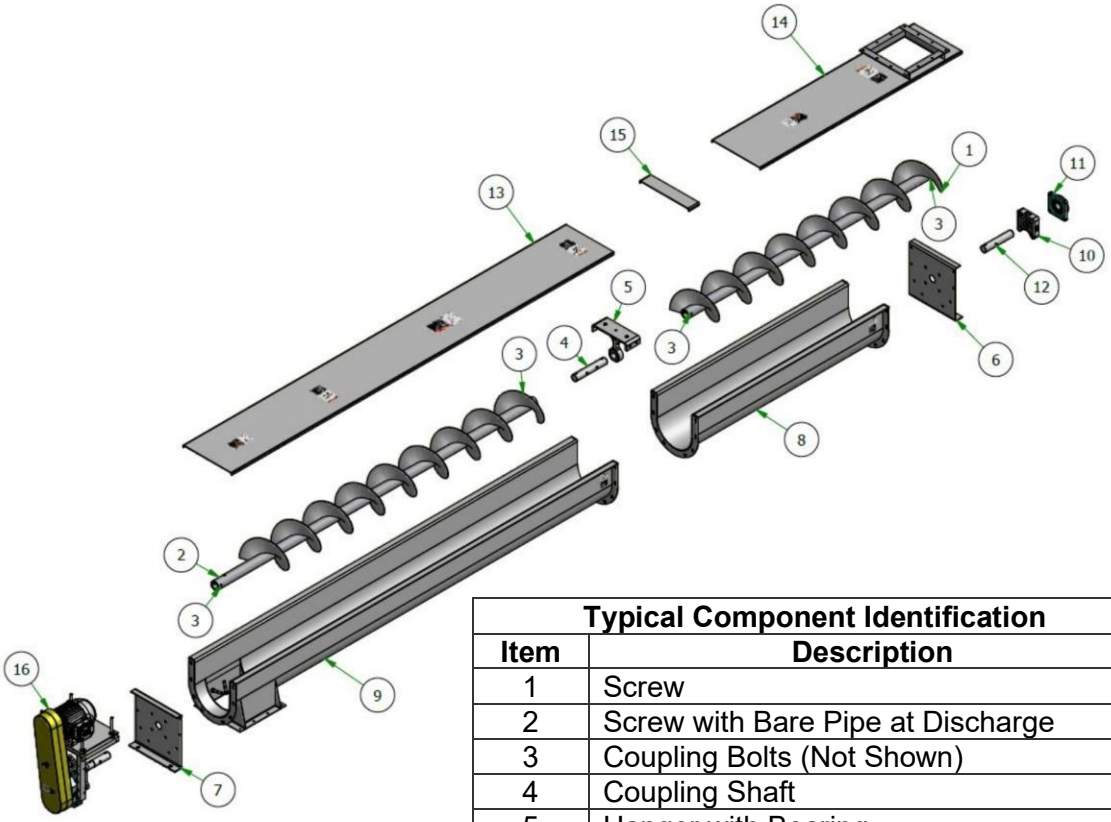
POST IN PROMINENT AREA

SECTION B

Screw Conveyor Components

The following exploded view identifies the principal components used in a typical screw conveyor assembly. Actual equipment may vary by application, material of construction, drive arrangement and accessory selection.

SCREW CONVEYOR COMPONENTS



Typical Component Identification	
Item	**Description**
1	Screw
2	Screw with Bare Pipe at Discharge
3	Coupling Bolts (Not Shown)
4	Coupling Shaft
5	Hanger with Bearing
6	Tail End Trough End
7	Trough End for Screw Conveyor Drive
8	Trough
9	Trough with Discharge Spout
10	Seal
11	Bearing
12	Tail Shaft
13	Flanged Cover
14	Flanged Cover with Inlet
15	Buttstrap
16	Screw Conveyor Drive Unit with Motor Mount, V-Belt Drive, and Guard

SECTION C

Receiving & Lifting

Receiving and Inspection

1. Check all items against shipping papers immediately upon receipt for shortages and damage.
2. Inspect troughs, screws, covers, drive units and other shipped components.
3. Do not attempt to install damaged components or assemblies.
4. Long factory-assembled conveyors may be separated into practical shipping lengths and match marked for reassembly.

Lifting and Moving

1. Use extreme care to prevent damage when moving assembled conveyors or individual components.
2. Use spreader bars with slings as the recommended support method for lifting.
3. Keep unsupported span to 12 feet or less unless project-specific lifting instructions state otherwise.
4. Never lift a conveyor with only one support point.
5. Account for heavy components such as drives or gates when selecting lifting points because they affect load balance and bending.
6. When withdrawing a conveyor lengthwise from a truck, support the trailing end at the same elevation as the leading end. Add support as the overhang approaches approximately 10 feet.

LIFTING CAUTION

Never lift only one end of a conveyor assembly or screw when the length exceeds 12 feet. Select lifting points to control bending and maintain balance.

SECTION D

Installation

Install the conveyor straight, true and adequately supported before installing and aligning the screw assembly.

Trough Erection and Alignment

1. Verify that the mounting surface is level and true.
2. Place trough sections in the proper sequence with the discharge spout and inlet locations correctly oriented.
3. Connect trough joints loosely. Do not tighten the flange bolts yet.
4. Assemble the trough ends to the correct conveyor ends.
5. Attach a piano wire the full length of the conveyor at the centerline and pull it tight.
6. Tighten trough flange bolts while keeping the trough assembly true to the piano wire. Check both horizontal and vertical alignment. Maximum deviation at any point along the conveyor is 1/8 inch.
7. Anchor the trough assembly to the mounting surface. CEMA recommends supporting trough assemblies every 10 to 12 feet; saddles or feet may be required.

Drive and Thrust Location

When conveying material, the screw tends to move opposite the direction in which it pushes the material. The end shaft therefore must be fixed through a suitable thrust bearing or a screw conveyor drive capable of carrying the conveyor thrust load.

Whenever practical, locate the thrust at the discharge end. This places the screw in tension during conveying. If the thrust is located at the inlet end, the screw is in compression and can tend to buckle under heavy loading, increasing hanger-bearing loads and potentially bending the conveyor pipe.

The drive may be located at either end, but the discharge end is preferred. When a conveyor drive unit is directly mounted and its bearings are designed to accommodate conveyor thrust, a separate thrust bearing may not be required.

SECTION D

Screw & Hanger Assembly

1. Mount the drive or thrust unit on the correct trough end. Center the shaft in the seal and trough-end openings and tighten mounting bolts to the proper torque.
2. Place the first screw section in the trough starting at the drive or thrust end. Install the screw so the end lugs are opposite the carrying side of the flight.
3. Insert the screw onto the drive shaft and install the coupling bolts. Do not fully tighten the coupling bolts during initial assembly.
4. Insert the coupling shaft into the opposite end of the screw and install the coupling bolts without final tightening.
5. Pull the screw section away from the drive/thrust unit to seat the thrust connection.
6. Install the hanger on the coupling shaft. Position the screw for proper trough clearance and locate the hanger with approximately 1/16 inch running clearance from the adjacent screw pipe where applicable.
7. Use the hanger as the mounting-hole template. Install the hanger bolts hand tight. For inside-mounted hangers, install bolt heads on the inside of the trough; for top-mounted hangers, install bolt heads on top through the trough flange.
8. Continue installing screw sections, couplings and hangers. Rotate each screw section so the end flight is approximately 180 degrees from the adjacent screw section.
9. Install the end shaft, seal and end bearing at the opposite trough end. Do not fully tighten the final coupling bolts until the complete screw assembly has been aligned.
10. Center hanger bearings between screw sections, remove accumulated slack progressively away from the thrust end, and tighten hanger mounting bolts.
11. Rotate the entire screw assembly by hand to check alignment and free rotation. Re-align hangers or end bearings if binding occurs.
12. Torque all coupling bolts. CEMA recommends coupling-bolt tightening to 75 percent of the values in the Bolt Torque Guide to reduce the risk of tension failure from over-tightening.

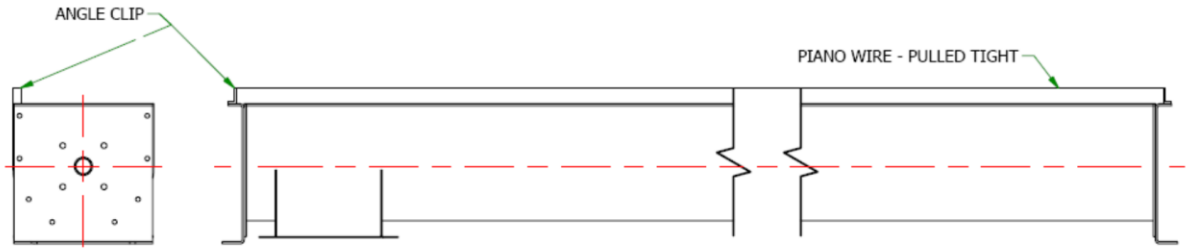
FINAL ROTATION CHECK

The complete screw assembly should rotate freely by hand before covers are installed and before power is applied.

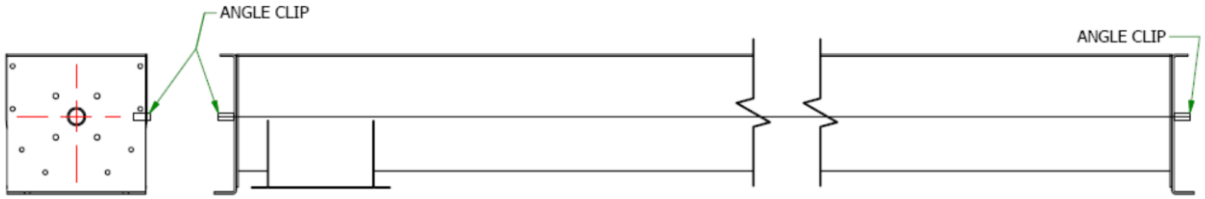
SECTION D

Piano Wire Alignment

Use a tight piano wire to verify trough alignment during erection. Alignment must be checked in both horizontal and vertical directions before the conveyor is anchored and before the screw assembly is finalized.



CEMA COMMONLY USED PIANO WIRE SETUP
PIANO WIRE ATTACHED TO TOP OF CONVEYOR ON SIDE



OPTIONAL PIANO WIRE SETUP
PIANO WIRE ATTACHED TO CENTERLINE OF CONVEYOR ON SIDE

CEMA commonly used and optional piano-wire setup diagrams.

SECTION D

Covers, Seals & Final Installation Checks

Trough Covers

1. Place cover sections on the assembled trough in the proper sequence, beginning at the inlet end.
2. Where gaskets are supplied, place the gasket between the cover and the trough flange.
3. Secure the covers with the provided fasteners. Do not over-tighten fasteners when gaskets are used; excessive tightening can buckle covers and contribute to leakage.
4. If field drilling is required, clamp the cover to the trough and alternate drilling from one side of the conveyor to the other while securing the cover progressively.

Seals and Bearings

- Center shafts in seal and trough-end openings before tightening end-bearing or seal hardware.
- Adjust seals as required. Follow the specific seal instructions supplied with the conveyor when available.
- Lubricate bearings and the drive in accordance with the component manufacturer instructions.

Final Installation Checks

- Remove tools, debris and foreign material from the conveyor.
- Verify all assembly and mounting bolts are tightened to the proper torque.
- Verify all required CEMA safety labels are in the proper locations and are legible.
- Verify all covers, guards and safety devices are installed before power is applied.

WARNING: GEAR REDUCER LUBRICATION

Before startup, verify gearbox lubricant type, fill level and mounting-position requirements using the supplied gearbox manufacturer documentation.

Depending on gear reducer manufacture, gear reducers do not ship from Orthman Conveying Systems filled with oil.

Gear reducers must be positioned, verified and filled to the proper level by the installer or user before startup.

SECTION E

Initial Startup

Before Initial Startup

1. Lock out/tag out all power.
2. Lubricate bearings in accordance with manufacturer instructions.
3. Verify gear reducer lubrication in accordance with the reducer manufacturer instructions.
4. Confirm all tools and foreign materials have been removed from the conveyor.
5. Turn the drive unit by hand to check alignment and obstructions.
6. Confirm covers, guards and safety devices are installed and operating properly.
7. Attach gates to inlet and discharge chutes where applicable.

Initial Startup - Without Material

1. Reenergize power and momentarily start the conveyor to confirm correct screw rotation. If rotation is incorrect, shut down promptly and have a qualified electrician correct the wiring.
2. Operate the conveyor without material for a break-in period while observing for excessive bearing temperature, unusual noise, vibration or drive misalignment.
3. Stop the conveyor and lock out/tag out all power.
4. Remove covers and recheck coupling-bolt tightness. Torque coupling bolts as specified and reinstall covers.
5. Check all assembly and mounting bolts, and verify the discharge is clear.

Initial Startup - With Material

1. Start the conveyor and operate without material for several minutes.
2. Feed material gradually until design capacity is reached.
3. Do not exceed the conveyor design speed, capacity or material density.
4. Operate for 4-8 hours and check motor amperage at design capacity against motor full-load amperage. Verify supply voltage is within normal operating limits.
5. During the break-in operation regularly check external bearing temperatures for excessive heat, if temperatures are very hot, stop and verify proper greasing and alignment of shafts.
5. Stop and lock out/tag out the conveyor. Recheck coupling bolts, hanger alignment, assembly bolts and mounting bolts, then reinstall covers. Final check bearing greasing and reducer oil level.

SECTION F

Normal Operation

NORMAL OPERATING RULE

Unless the conveyor was specifically designed for loaded starting, start the conveyor empty and allow it to clear before shutdown. Repeated or routine starting under load can damage equipment and reduce service life.

Operating Practices

- Operate only with all approved covers, guards and safety labels in place.
- Operate within the design material loading, speed, capacity and density. Excessive trough loading can accelerate wear and increase loads on bearings and drive components.
- Monitor for unusual noise, vibration, bearing temperature, leakage or visible movement of components.
- Check motor amperage when conveying at design capacity. Excessive amperage can indicate overload, low voltage or another mechanical/electrical problem.
- Keep the discharge clear so material can leave the conveyor without restriction.
- Keep the drive and control area clean and accessible.
- Do not open covers, clear jams, inspect internal components or make adjustments until power and stored energy are locked out/tagged out.

If Abnormal Operation Is Observed

Stop the conveyor as conditions require, lock out/tag out all power, inspect the equipment, and use the troubleshooting section of this manual to identify likely causes. Do not continue operating a conveyor with binding, excessive heat, repeated overload, abnormal noise, damaged guarding or visible component failure.

SECTION G

Preventive Maintenance

Practice good housekeeping and establish routine periodic inspection of the complete conveyor. Lock out/tag out all power before inspection or maintenance.

Inspection Items

Component	Inspection / Maintenance
Bearings	Check lubrication, alignment and wear. Replace hanger bearings when wear exceeds 1/8 inch. See Lubrication Guide Below.
Gear Reducers	Check lubricant condition/level and maintain in accordance with the supplied reducer manual.
Drives	Check belts for wear and proper tension; check chains for lubrication and proper tension. Replace worn belts or chains.
Screws	Check for damage, excessive wear and material buildup. Replace screw sections as necessary.
Troughs	Check for damage, excessive wear and material buildup. Verify trough alignment using the piano-wire method when alignment is in question.
Shafts	Check bolt-hole elongation, wear and runout. Replace shafts when wear exceeds 1/8 inch.
Seals	Check for leakage. Adjust the seal or replace packing as required.
Coupling Bolts	Check for wear. Replace worn coupling bolts and lock nuts as required. Replace coupling bolts and lock nuts when replacing screw sections.
Assembly Bolts	Check for tightness and torque to the appropriate value.
Guards	Check clearance and bolt tightness. Where oil-tight guards are used, check oil level as applicable.

BEARING LUBRICATION

Some bearing materials may be self-lubricating while ball and roller bearings with grease fittings require periodic lubrication. Lubrication frequency varies with material, temperature, speed and operating time. Avoid over-greasing; excessive grease can damage seals and contribute to early bearing failure.

Suggested Lubrication Period in Weeks:

8 Hours Operation Per Day – Every 12 Weeks
16 Hours Operation Per Day – Every 8 Weeks
24 Hours Operation Per Day – Every 6 Weeks

SECTION G

Recommended Maintenance Schedule

Before inspection, disconnect and lock out/tag out power to the motor. Remove covers only after the conveyor is in a zero-energy state, then inspect for loose mounting bolts, damage and wear.

Item	Interval	Requirement
Seals	Every 100 hours	Inspect for leakage, damage and condition.
Drive	Every 1,500 hours	Inspect the drive. Maintain the gearbox in accordance with the enclosed supplier manual.
Trough Liners (if equipped)	Every 2,000 hours	Inspect for excessive wear.

Replacing Screw Conveyor Components

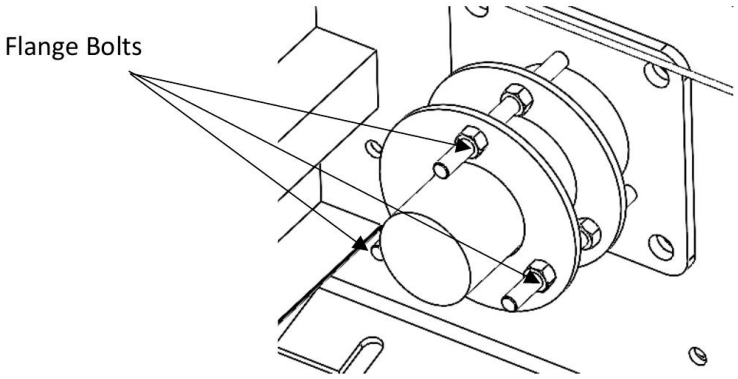
1. Lock out/tag out all power.
2. Remove a screw section from the end opposite the drive or thrust unit unless a project-specific quick-disconnect arrangement permits intermediate removal.
3. Remove the trough end, screw sections, coupling shafts and hangers until the damaged section is reached and removed.
4. Reassemble the conveyor in accordance with the installation section of this manual.

SECTION H

Seal Packing Replacement

Applies only when a flange gland or packing gland seal is equipped.

1. Disconnect and lock out/tag out power to the motor and remove the conveyor from service.
2. Remove the three bolts retaining the packing gland seal flange.
3. Discard the old packing and install new packing. Contact Orthman Conveying Systems for replacement material recommendations when required.
4. Reinstall the packing gland flange and bolts.
5. Retighten the gland only enough to press the packing against the shaft. Do not over-tighten; excessive compression can damage the shaft or gland.



Typical packing gland flange and retaining bolts.

SECTION I

Shutdown & Storage

Emergency Shutdown

1. Shut down and lock out/tag out all power.
2. Remove covers only after a zero-energy state has been established.
3. Remove obstructions and product from the conveyor.
4. Inspect components for damage or wear and replace damaged or worn components.
5. Turn the drive unit by hand to check alignment and obstructions.
6. Replace all covers and guards.
7. Restart in accordance with the startup section of this manual.

Extended Shutdown / Storage

1. Operate the conveyor until product has been removed, then lock out/tag out all power.
2. Clean the conveyor and inspect all components for damage or wear.
3. Lubricate the drive and bearings in accordance with manufacturer instructions.
4. Coat exposed metal surfaces with rust preventative as required.
5. Protect the conveyor from weather, moisture and extreme temperatures. Do not use coverings that promote condensation.
6. Rotate screws by hand every week during extended shutdown or storage. Screws may sag and permanently deform if not rotated.
7. When service is resumed, restart the conveyor in accordance with the startup section.

SECTION J

Troubleshooting

Use the following guide after the conveyor has been shut down and locked out/tagged out. Where the guide refers to CEMA 350, consult the applicable CEMA engineering guidance or contact Orthman Conveying Systems for assistance.

Problem	Possible Cause	Corrective Action
1. Accelerated flight wear	Flight thickness too light.	Increase flight thickness. Use abrasion-resistant material or hardfacing where appropriate.
1. Accelerated flight wear	RPM too high or trough loading too high.	Reduce speed. Consult CEMA 350 to determine recommended speed and trough loading.
2. Hanger bearing failure	Incorrect alignment; bent pipe or shaft deflection.	Realign trough assembly and hangers. Check screw/pipe straightness and correct the source of angular misalignment.
2. Hanger bearing failure	Improper speed/trough loading or incorrect bearing material.	Consult CEMA 350 for recommended loading and bearing material. Use a bearing with proven reliability for the application.
2. Hanger bearing failure	Bearing contamination or excessive wear.	Improve sealing or use an appropriate non-lubricated insert where applicable. Replace the hanger bearing when worn.
3. Premature trough failure	Trough thickness too light.	Increase trough thickness; consider abrasion-resistant material. Consult CEMA 350 for recommended thickness.
3. Premature trough failure	Screw deflection or bent screw/pipe.	Consult CEMA 350 for proper pipe size and screw length. Straighten or replace bent components.
4. Shaft-hole elongation	Insufficient coupling bolts, frequent stop/start, or frequent overloads.	Use the required coupling bolts. Reduce frequent loaded stop/start and overload conditions; increase shaft/coupling capacity where required.

SECTION J

Troubleshooting - Continued

Problem	Possible Cause	Corrective Action
5. Drive shaft breakage	Excessive torque or obstruction.	Consult CEMA 350 for proper torque rating. Correct overload/obstruction conditions and check screw straightness after severe events.
6. Motor overload	Motor undersized.	Consult CEMA 350 to determine proper horsepower requirements.
6. Motor overload	Upset loading condition.	Empty the trough, control feed, and operate within design specifications.
7. Trough-end bearing failure	Bearing contamination.	Upgrade or replace the seal; consider an outboard-bearing arrangement where appropriate.
7. Trough-end bearing failure	Insufficient lubrication.	Lubricate in accordance with the maintenance section and bearing manufacturer requirements.
7. Trough-end bearing failure	Improper shaft runout or misalignment.	Check screw straightness, bearing alignment and end-shaft condition; replace components as necessary.
8. Coupling shaft breakage	Excessive torque.	Consult CEMA 350 to determine proper torque rating and confirm the shaft has adequate torque capacity.
8. Coupling shaft breakage	Incorrect alignment.	Realign trough assembly and hangers in accordance with the installation section.
8. Coupling shaft breakage	Excessive shaft wear or unsuitable shaft/bearing combination.	Replace the coupling shaft and use the correct shaft/bearing combination for the application.

SECTION K

Bolt Torque Guide

The following general tightening torque values are for fasteners used to assemble screw conveyors. All bolted applications should be evaluated to determine the optimum tightening torque. The K factor in the formula below is an estimate; the commonly used K factor shown in the source guide is 0.20 for plain-finished bolts.

$$T = K \times D \times P$$

T = target tightening torque (in-lb) | K = friction coefficient/nut factor | D = nominal bolt diameter (in.) | P = desired tensile load (lb)

Bolt Dia.	Threads/In. UNC	Recommend Torque Spec (ft-lbs)			
		SAE 2	SAE 5	SAE 8	18-8 & 316 Stainless
1/4	20	5	9	12	6
5/16	18	11	18	25	11
3/8	16	18	31	44	20
7/16	14	28	49	69	29
1/2	13	44	73	105	40
9/16	12	63	108	149	52
5/8	11	96	147	212	86
3/4	10	158	252	351	115
7/8	9	219	389	552	180
1	8	316	589	784	240

COUPLING BOLT TORQUE

The Bolt Torque Guide does not directly list coupling-bolt torque. CEMA recommends tightening coupling bolts to 75 percent of the values in this guide to reduce the risk of tension failure caused by over-tightening.

COMPANY INFORMATION

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PARTS, SERVICE & TECHNICAL SUPPORT

When requesting support, provide the conveyor/job identification, component description, observed condition and any relevant motor/drive information so Orthman Conveying Systems can assist efficiently.