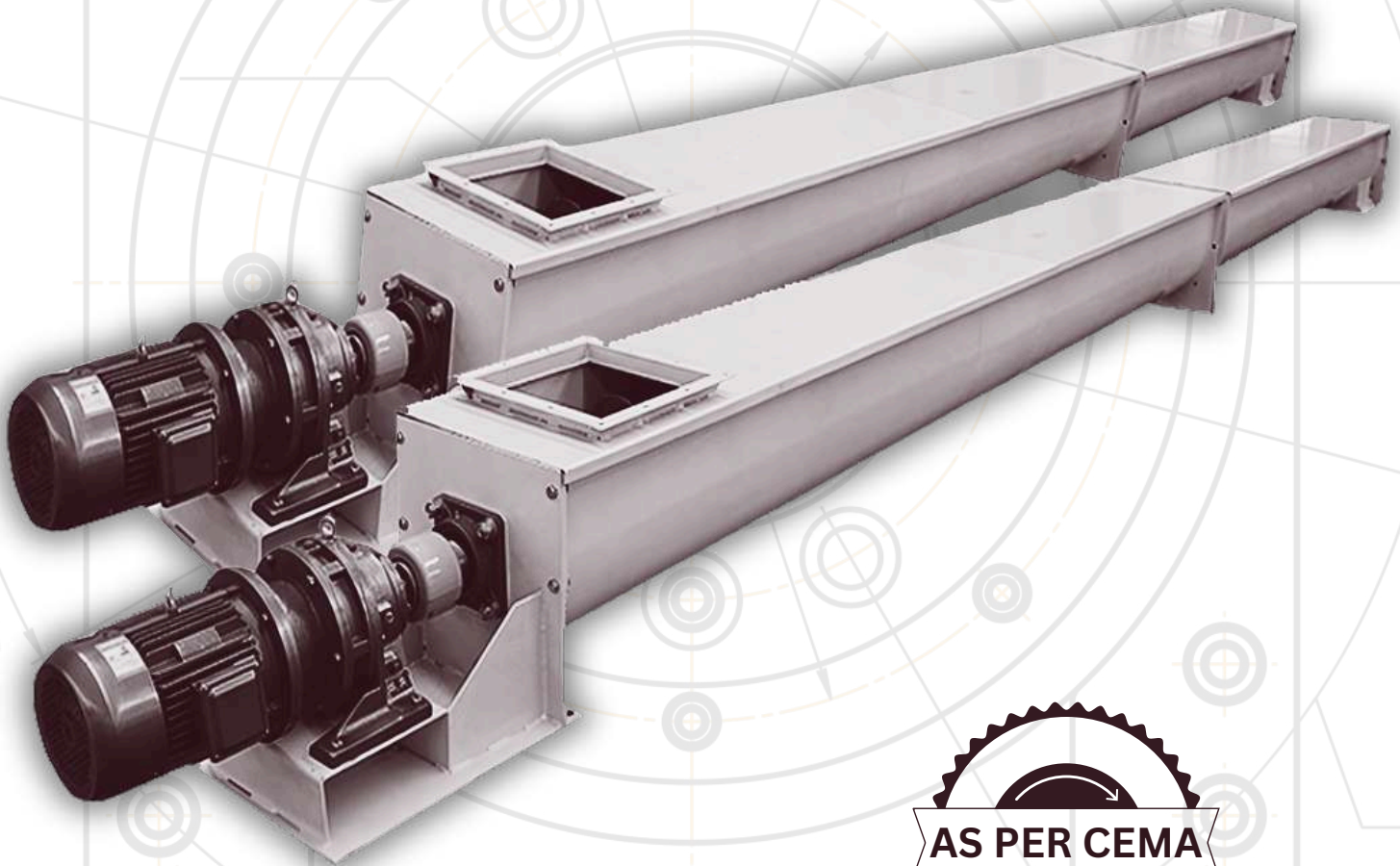
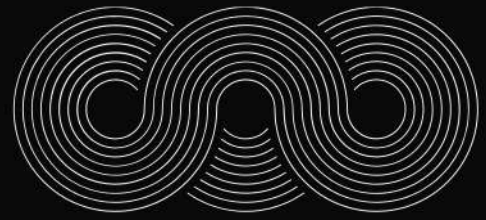




SCREW CONVEYOR



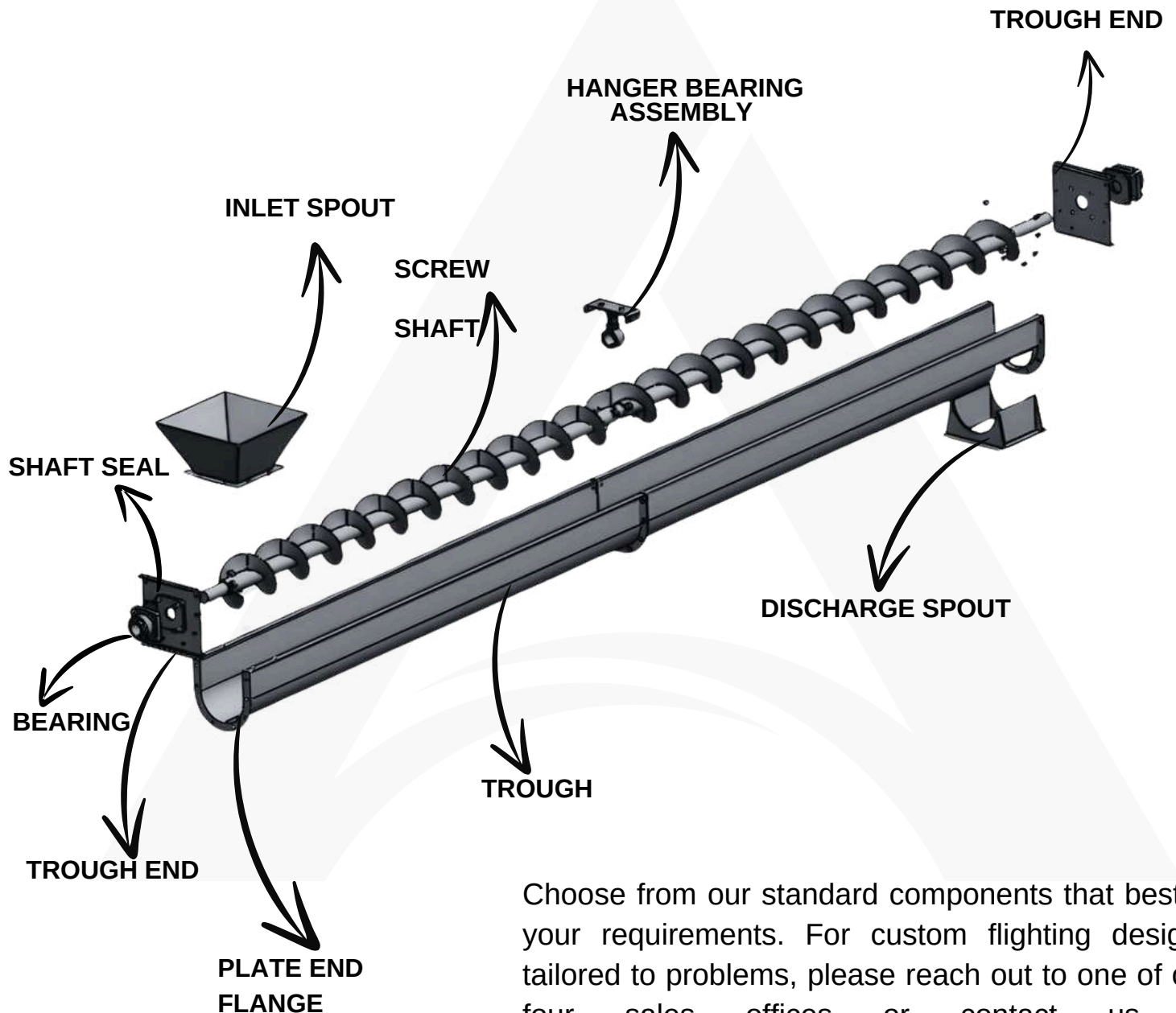
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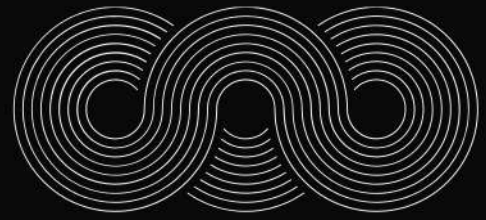
SCREW CONVEYOR SYSTEM

Screw conveyors are versatile devices that transport materials horizontally, on an incline, or vertically. They are commonly used to feed, distribute, collect, or mix materials and can be designed to provide heating or cooling during the transfer process. With the right covers and gaskets, screw conveyors can be sealed to prevent dust, weather, and rodent intrusion. Their compact and clean design conserves space by eliminating the need for a return run. Suitable for tight spaces, screw conveyors are easy to support and install, and they often cost less than other conveyor systems.

Agamus AI and Automation's reliable and durable screw conveyors are built to deliver consistent performance and flexibility for a wide range of tasks. These conveyors are employed across various industries and can be tailored for integration into machinery and equipment.



Choose from our standard components that best fit your requirements. For custom flighting designs tailored to problems, please reach out to one of our four sales offices or contact us at sales@agamus.ca

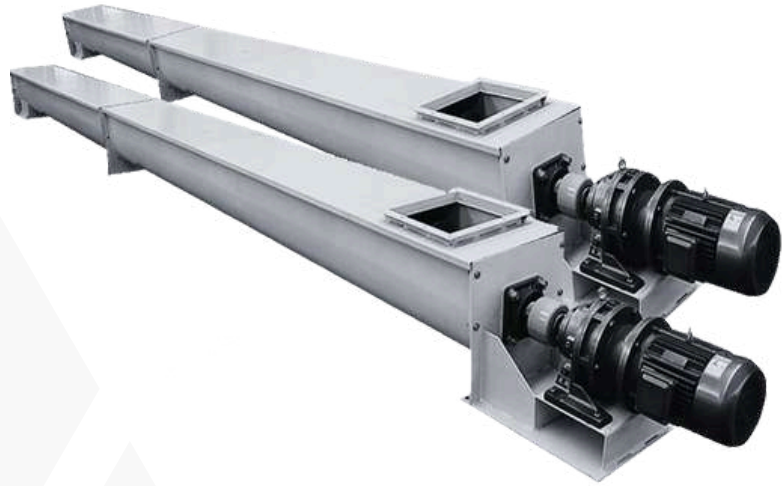


SCREWS CONVEYOR TYPES

our screws Conveyor come in a variety of designs to suit different applications and requirements of clients . Each type is crafted to be straight and accurate to ensure optimal performance:

Horizontal Screw Conveyors

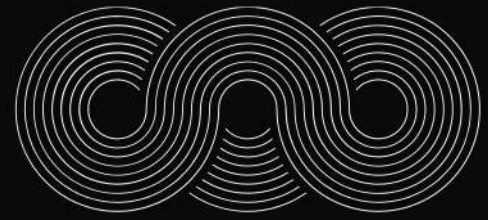
Commonly used for transporting bulk materials horizontally. They come in various sizes, lengths, and materials. Designed for trough loadings of 15%, 30%, or 45% depending on the material's characteristics.



Inclined Screw Conveyors Used to move materials at angles up to 45 degrees. Efficiency decreases and horsepower requirements increase with steeper inclines. Suitable for conveying materials with varying degrees of incline.

Shaftless Screw Conveyors Ideal for sticky, sluggish materials, these conveyors have no central shaft, preventing clogging. They are flexible and efficient for handling high-moisture or difficult-to-convey materials.





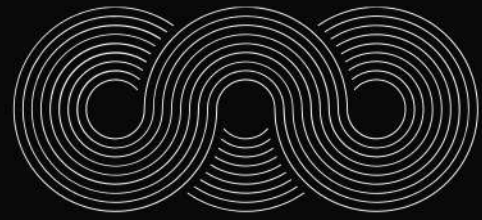
SCREWS CONVEYOR TYPES

Screw Feeders Our screw feeder accurately controls and measures bulk materials at the beginning of a process. It features variable speed drives for precise feed rate adjustments and comes in a range of sizes, lengths, and materials to suit various applications. Common applications include handling powders, granules, and pellets in industries such as food processing, pharmaceuticals and Chemicals.



Vertical Screw Conveyors Designed for lifting materials vertically or at steep inclines over 45 degrees. They offer compact, cost-effective, and reliable vertical transport for bulk materials.





SCREWS TYPES

Conveyor Screws: Our conveyor screws come in a variety of designs to suit different applications and requirements. Each type is crafted to be straight and accurate to ensure optimal performance:

Helicoid Screw and Flighting

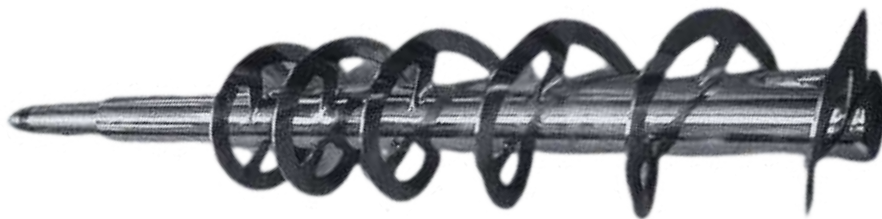
Helicoid screws have a continuous helical flight that wraps around the shaft. They are ideal for light to medium-duty tasks and offer cost-effective solutions. The uninterrupted flight design ensure efficient handling of materials in less demanding .

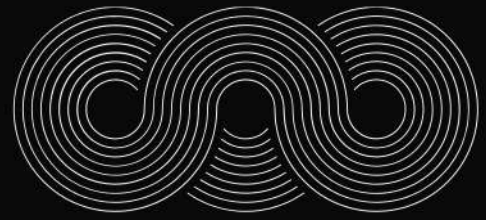


Sectional Screw and Flighting Sectional screws feature flights welded to a central shaft, allowing for high customization. They are well-suited for heavy-duty applications and can include specialized features such as ribbon or cut-and-folded flighting. Materials like AR-235 or 316 stainless steel can be used for applications involving abrasive or corrosive materials.



Ribbon Screw Ribbon screws have flights shaped like ribbons or strips, which handle materials gently. This design minimises breakage and segregation, making them ideal for applications where a more delicate approach to material handling is required.





SCREWS TYPES

Cut Screw / Cut and Folded Screw

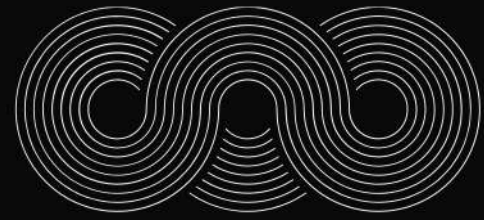
Cut screws have flights that are cut and folded, creating a more aggressive material movement. This design enhances mixing and processing capabilities, making it suitable for applications that demand thorough material handling.



Paddle Screw

Paddle screws use paddle-shaped flights to convey materials. This design is particularly effective for handling sticky, viscous, or bulk materials that are challenging to move with traditional screw types. The paddles help break up clumps and ensure smooth material flow. Each design is built to provide reliable performance and can be tailored to meet the exact specifications of your application. Whether you need a standard solution or a custom configuration, our conveyor screws are engineered for accuracy and durability.





TROUGH TYPES

We offer various Trough Types and Features

1) U-Troughs

The most common type for screw conveyors and feeders, U-troughs are simple, cost-effective, and offer easy maintenance access.

2) Angle Flanges Trough :

Featuring structural angle top flanges, these troughs provide added rigidity. They are typically used for light to medium-duty applications and are constructed from thinner metal gauges.

3) Formed Flange Troughs

Manufactured with heavier, formed top flanges, these troughs are used for medium to heavy-duty applications and offer a dust-tight seal.

4) Double-Formed Flange Troughs

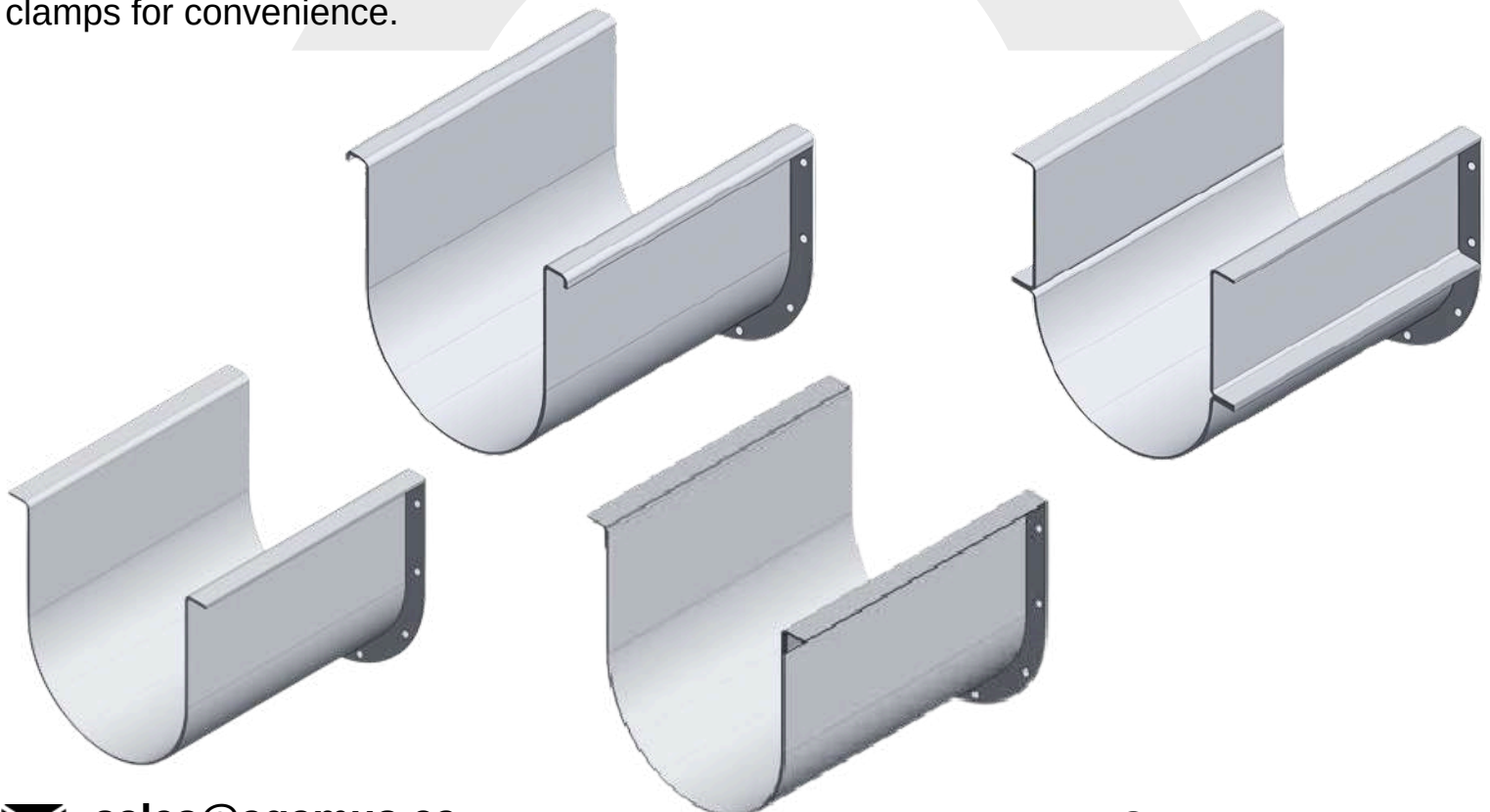
These troughs include two formed top flanges for enhanced rigidity and dust-tight sealing when used with flanged covers and gaskets.

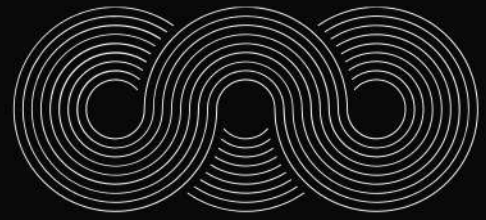
5) Formed Channel Troughs

With two formed side channels for added support, these troughs are ideal for spanning long distances and feature a replaceable lower curved section.

6) Drop Bottom Troughs

Featuring a removable or hinged lower curved section, drop bottom troughs allow for easy access to the screw for cleaning and maintenance. Hinged versions include quick-release clamps for convenience.





SCREWS TYPES

2) Flared Troughs With a wider top opening, flared troughs facilitate the entry of sticky or viscous materials. They are commonly used in mixing applications where extra space above the screw aids in material mixing.



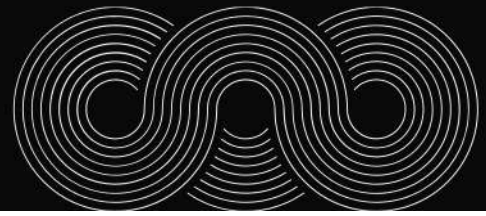
3) Tubular Housings Used for inclined screw conveyors over 15 degrees, tubular housings improve efficiency by containing bulk materials and reducing fall-back. They also offer weather-tight protection and can hold internal pressure. **Non-Split Tubular Housings:** Made from a continuous cylindrical tube or pipe cut to length. **Split Tubular Housings:** Consist of two halves with flanges that are bolted together for rigidity.



4) Rectangular Troughs Ideal for abrasive materials, these troughs create a static layer of bulk material that reduces wear on the trough. They are beneficial for using abrasion-resistant steels due to their low formability.

5) Angle Flange Rectangular Troughs: Feature structural angle top flanges for added rigidity. **Formed Flange Rectangular Troughs:** Have formed top flanges for increased strength. **Angle Flange – Top & Bottom:** Include angle flanges on both top and bottom for added support, especially with high-strength steels. **Formed Flange – Top & Bottom:** Feature formed angles on both top and bottom flanges for enhanced durability.





SCREWS SAFETY PRACTICES

To ensure safety with screw conveyors, adhere to the following:

- 1. Enclosure and Guards** : Operate screw conveyors the housing completely encloses moving elements and all power transmission guards are in place. Warning signs should remain attached and visible. Replacement signs are available from CEMA.
- 2. Usage**: Do not overload the conveyor or use it for purposes other than its intended function.
- 3. Feed Openings** : Design feed openings to enclose rotating and moving parts, restricting access to the conveyor.
- 4. Maintenance** : Always lock out power before performing maintenance.

Agamus AI and Automation does not design electrical systems for screw conveyors. We recommend consulting an electrical designer or supplier to select appropriate devices such as zero-speed switches and interlocking systems to ensure safe and efficient operation.

WARNING

CVS930010

Exposed conveyors and moving parts can cause severe injury

LOCK OUT POWER
before removing

WARNING

CHS990026

Walking or Standing on Conveyor Covers or Gratings can cause Serious Injury or Death

DO NOT STAND or WALK on COVERS or GRATINGS - STAY OFF