CONVEYING SOLUTIONS





The Experts in Plant Mechanization.

To find the right products for your business you need a partner you can rely on. One who understands your business and offers expert advice during selection, installation and beyond. Cimbria has been helping customers succeed for more than 75 years, with extensive know-how and technologically advanced solutions on the entire process of cleaning grain, seed and food commodities.

Gentle, Efficient and Fit For You.

Cimbria conveyors are ideal for **gentle handling** of all seed, food, and bulk materials.

We offer a **complete lineup of conveying options**, including belt conveyors, chain conveyors, bucket elevators, and more. So, you can choose the system that best fits your specific needs.

Our chain conveyors are ideal for transporting bulk materials over long distances, while our belt conveyors provide gentle handling for fragile materials such as seeds and grains. Our elevators offer efficient transportation of any dry bulk products, making them a popular choice for the industry. In addition to our standard conveying systems, we also offer **customized solutions** to meet the unique needs of your operation.





Our Range of Products.

BELT CONVEYORS

Gentle Horizontal Conveying

- · Capacities up to 4.000 cubic meters per hour.
- Ideal for gentle conveying of granular bulk products such as grain, pellets, powder, etc.
- Totally self-emptying, while energy consumption and wear are minimal.

CHAIN CONVEYORS

Simplicity and safety

- Capacities up to 2.800 cubic meters per hour.
- Ideal for horizontal and inclined conveying of granular bulk products such as grain, pellets, powder, etc.
- Completely closed dustproof transport.
- The product line covers chain, angle and trapezoid conveyors.

BUCKET ELEVATORS

Vertical transport of dry bulk material

- Capacities up to 1.900 cubic meters per hour.
- Vertical transport of materials such as grain, pellets and powder.
- High degree of durability, safety features and low power consumption in relation to its capacity.
- Highly resistant to wear and is suitable for both indoor and outdoor use.

PENDULUM BUCKET ELEVATORS

Horizontal and Vertical Conveying in a Single Product

- Capacities up to 40 cubic meters per hour.
- $\boldsymbol{\cdot}$ Very gentle perfect for seeds and other sensitive products.
- Multiple inlet and outlet options for maximum flexibility.

SCREW CONVEYORS

Efficient Conveying of Dry Bulk Materials

- Capacities up to 475 cubic meters per hour.
- Designed for horizontal or inclined conveying.
- Standard and heavy-duty trough or tube conveyors are available.
- Model CAU can be equipped with shaft-free inner screws to prevent build-up.













THE TOP BENEFITS OF USING CONVEYOR SYSTEMS:

- 1. **Eliminating or Minimizing Manual Labor**: With the right conveyor system, food manufacturers can reduce employment costs and automate the transportation of materials between long distances that may be on varying elevations.
- 2. **Reducing the Risk of Accidents**: Installing a conveyor system means needing fewer workers, which in turn reduces the number of workplace accidents.
- 3. **Increasing Efficiency and Productivity**: Conveyors help save time by allowing materials to be moved between multiple levels quickly. Materials can move in different directions, which is useful when moving them between opposite ends of a processing plant.
- 4. **Ensuring Food Safety and Maintaining Quality Standards**: Conveyor systems can be designed to be dust-free, contamination-free, and to move food materials safely, gently and efficiently. They also ensure a sanitary environment and compliance with regulatory agencies.
- 5. **Modular and customizable**. Conveyors are designed to be modular. So, you get the precise solution for your operation and the flexibility to modify or repair your conveyor with minimal disruption. This reduces maintenance costs the costs associated with lost production time.
- 6. Low energy consumption. By using energy-efficient motors and controls, conveyor systems help reduce overall energy costs.







Belt Conveyors CONSTRUCTION & OPERATION



01. TENSION STATION

- Designed for easy and fast tensioning and alignment of the rubber belt, using normal tools
- Designed with a crowned tension pulley to ensure a straight running belt
- Can be delivered with safety equipment such as speed guard and misalignment switch





02. INLET HOPPERS

- Efficient filling of the belt without spilling
- Designed to allow installation of several inlet hoppers on one belt conveyor
- Fixed or movable version available

03. INTERMEDIATE SECTIONS

- Height adjustable legs for easy and sturdy installation
- A unique design which allows stepless adjustment of the roller sets without the use of tools
- Assembly devices that ensures a straight running belt conveyor

04. CARRIER ROLLERS

- Free hanging rollers
- Ensures safe guidance of belt and product to outlet
- Duplex or triple roller system depending on belt size
- High capacity compared to the belt width

05. DISCHARGE CAR

- Low building height
- Incorporated wheels
- Available in motorised and manual versions
- Designed with optimal safety in mind
- Incorporated diverter in the outlet

06. BELT

- Open or welded execution
- Can be supplied with optional carrier flights to prevent materials from flowing back
- · Oil- and fat resistant belts upon request
- Food grade belt as option

07. DRIVE STATION

- Delivered with an efficient hollow shaft mounted gear with standard motor
- Outlet fits the unique cimbria q-spouting system
- Designed with a crowned drive pulley to ensure a straight running belt
- Optional lagging drive drum to ensure sufficient friction

STANDARD FEATURES

- Galvanized steel sheets
- Easily assembled sections of 500 - 1000 - 3000 mm length
- Free hanging rollers on side rails
- Belts according to din22102y
- Drive terminal with hollow shaft gear
- Motors and gears in energy classes ie2 and ie3
- Inclination up to 20°
 without loss of capacity
- Discharge spout suiting the cimbria q-spouting system

OPTIONAL ACCESSORIES

- \cdot Cover top and / or bottom
- Built-in belt weigher
- Speed guard
- Misalignment switch
- Emergency stop with micro switch
- Atex zone approved parts
- Weight tension station for long conveyors
- Optional cleaning brush can be mounted in outlet



08. SUPPORTING LEGS

- Easy to mount
- Consists only of a few parts that need assembling
- Easy adjustable to various inclinations
- Can be used for both standing and hanging support
- \cdot Inclination in standard range up to 20° or 3.4 M/10 M



Chain Conveyors CONSTRUCTION & OPERATION

01. INLETS



- Lid or side inlets available
 DOUBLE SIDE INLETS
- Available in standard length of 990 mm
- Ideal for inlet hoppers, bulk weighers and other places where a bin is to be emptied



02. CONVEYING CHAIN

- Manufactured in steel with welded flights, assembly pins and hardened steel bushings. This provides a hardwearing chain that is easy to install
- Has a sufficient number of nylon flights in the full width of the conveyor to ensure emptying
- Is available with return buckets for conveying of overflow material
- Various types of special chain e.G. Drop forged chain are available on request



03. INTERMEDIATE SECTIONS

- Assembled by means of assembly devices that ensure a tight and straight running chain conveyor
- Height adjustable legs for easy and flexible installation of the chain conveyor in the exactly required height
- Complete with 10 mm pehd wear plates that ensure a long lifetime of the chain conveyor and a low noise level for optimal working conditions
- $\boldsymbol{\cdot}$ Designed with return rollers for minimum friction and noise



04. DRIVE STATION

- Efficient hollow shaft mounted gear with standard motor and safety switch as overflow control.
- Outlet fits the unique cimbria q-spouting system



05. TENSION STATION

- Keeps the conveying chain tensioned
- Designed with tensioning device that allows adjustment of the chain while working
- Can be delivered with speed guard

06. RETURN ROLLERS AND WEAR PLATE

- Provides minimum friction and silent running conveyor
- · Ensures long service intervals between chain tensioning
- Manufactured in nylon or steel
- Supplied with exchangeable wear plates in the bottom.
- Wear plates can be in steel or PEHD

STANDARD FEATURES

- 1. Galvanized steel sheets
- 2. Easy assembled sections of 500 1000 2000 3000 mm
- 3. A number of flights are complete with plastic flaps, which clean the bottom of the conveyor box. The chain can be supplied with return buckets for return transport of material in the conveyor

ACCESSORIES AND FEATURES

- Explosion relief panels
- Atex zone approved parts
- Double bottom and heightened cover
- Shutter manual pneumatic or with spindle motor
- Speed guard 24 or 220 V
- Plough by chain wheel to prevent blockage
- Curved plate at drive to prevent material building up
- In line shutters
- Trapezoid bottom for almost no residuals
- Self cleaning drive and tensioning station

07. SUPPORTING LEGS

- Easy to mount
- \cdot Can be used for both floor
 - or roof mounting
- Easy adjustable to various inclinations
- Maximum inclination standard 12°

08. OUTLET SHUTTER

- Available in manual, pneumatic and motor operated versions
- \cdot Complete with wear plate on the slide plate
- Designed with a brush that keeps the chain above the slide clean and ensures optimal chain cleaning
- Complete with outlet spouts that fit the unique cimbria q-spouting system





CONVEYING

Bucket Elevators

CONSTRUCTION & OPERATION



01. ELEVATOR HEAD

- Replaceable wear plates
- Efficient hollow shaft mounted gear with standard motor and incorporated back stop prevent reverse movement in case of unintended stops
- Outlet fits the unique Cimbria Q-spouting system
- Adjustable outlet for 45 degree or vertical down discharge

02. ELEVATOR LEGS

- Easily assembled by means of special assembly clamps and distance pieces, resulting in a sturdy construction
- Delivered with a full-length detachable door for service, inspection, and easy installation of the belt and buckets.
- Available in standard lengths the exact height is easily achieved by means of the height adjustment section



03. ELEVATOR BOOT

- Complete with inlet hopper that fits the unique cimbria q-spouting system
- Delivered with cimbria electronic speed guard that switches off the current if the belt starts to slip
- Built-in cleaning door
- Designed with belt tensioning devices easily accessible on top of the elevator boot
- Designed with a crowned tension pulley to ensure a straight running belt



04. ELEVATOR BUCKETS

- Different types of buckets
- Available in steel, stainless steel
 and plastic
- Optimal distance for efficient filling and high-capacity handling

STANDARD FEATURES

- 1. Galvanized or painted
- 2. antistatic belt
- 3. Self carrying construction up to 30 meters, with PEHD or HARDOX wear plate in
- elevator head and in-/outlet
- 4. Heavy duty main drive shaft mounted on industrial quality ball bearings

ACCESSORIES AND FEATURES

- Belt misalignment detector
- Low speed guard
- explosion relief panels
- Atex zone approved parts
- \cdot rubber lining on drive pulley
- Aspiration connections
- Top platform single or double sided
- Pneumatic foot cleaning für complete emptying



05. DUST ASPIRATION

- Adaptor for dust aspiration for connection to central extraction system
- Can also be adapted for spot filtration



06. ELEVATOR BELT

- Available in many types and qualities.
- Antistatic is standard.
- Optional oil and fat resistance
- Food grade belt availablel
- Tensile strength 10 times
 nominal working load





Pendulum Bucket Elevators CONSTRUCTION & OPERATION





01. INLET

- 1. Flexible number of inlets
- 2. Equal and constant filling of the buckets with a vibratory feeder or an adjustable feeding system



02. TENSION STATION Simple chain tensioning via manual spindles for steady chain performance and smooth bucket operation





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03. CHAIN AND BUCKETS

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1. Long-life, high-tensile chrome chain

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2. Plastic buckets reduces drive power and treats the product to be conveyed gently

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04. DRIVE



The relatively low drive power required by the pendulum bucket elevator saves energy and reduces operating costs. PBE 10: 1,1 – 1,5 kW PBE 20: 1,5 – 2,2 kW





05. OVERLOAD SWITCH

The overload switch on the drive station stops the drive immediately in case of abnormal torque on the motor

STANDARD FEATURES

The edges of the buckets overlap each other in the inlet section and therefore prevent spillage of kernels. Due to the pivoted mounting of buckets in the chain, buckets keep their horizontal position all the way around in the conveyor until they finally reach the outlet. There, each bucket is tilted and the product falling out is gently led into the outlet hopper.

ACCESSORIES

- Frequency converter
- Vibrating feeder
- Intermediate outlet
- Cleaning drawers
- Multiple possibilities of linesetup like, Z-, C-, T- version etc.



06. OUTLET

- 1. Flexible outlets
- 2. One outlet is always fixed, while additional outlets are actuated by hand or pneumatically by the central plant control panel
- 3. outlets are used one at a time, which means only one outlet is active at any time

07. SPEED GUARD

A speed guard in the lower corner station of the pendulum bucket elevator reliably detects and reports about potential chain breakage









CONSTRUCTION & OPERATION





CONVEYING

02. SPEED GUARD

02. SPEED GUARD (OPTIONAL) AND EARTHING

The speed guard is an inductive indicator that monitors the turning of the shaft and transmits a signal to a central control system, if required



Screw conveyors can be delivered without inlets for on-site modification, with square inlets to fit Cimbria's Q Pipe System, or with square or round flanged inlets based on your requirements. A variety of widened inlets are also available





03. STAND OFF BEARINGS

and exchangeable wear liners used when conveying abrasive products, powders or when the product temperature is above 90°C



04. INTERMEDIATE BEARING Standard 4 m intermediate bearings can increase to 6 m if required. The intermediate bearings can be supplied in various materials; bronze, plastic, beechwood or roller bearings



05. ACCESS COVER (OPTION)

Used for ease of access during the cleaning process and for regular inspection. The cover is equipped with spring locks and a safety microswitch to isolate the drive



06. SAFETY FLAP AND INSPECTION DOOR

The safety flap is mounted on the screw conveyor at the outlet end to protect the machine in the event of a blockage. The safety microswitch isolates the drive when the flap is opened for inspection or a blockage occurs. The safety flap is standard on most models



07. THE DRIVE

Hollow shaft direct drives are standard on Cimbria Contec conveyors. They can also be supplied with direct drive coupling mounted with a substantial torque arm frame at the drive or tail end



08. OUTLET

Screw conveyors can be delivered with a variety of outlets. There are three standard outlet options: a square outlet to fit Cimbria's Q pipe system, square outlet, and round flanged outlet based on customer requirements. Furthermore, numerous transition and adaption pieces can be supplied, to fit the equipment that is connected to the screw conveyor



09. ACCESSIBLE BOTTOM (OPTION)

In order to obtain easy access during the cleaning process, the screw conveyor is equipped with a bottom door with spring locks and a safety microswitch to isolate the drive. Suitable for the CU and CO models



10. FLIGHT OPTIONS

Cimbria Contec flights are fully welded on the transport side. For hygiene, the flight can be manufactured in stainless steel and fully welded on both sides. Standard flight is offered rolled or from pressed plate. Design options include; variable pitch or tapered flight to control product flow for silo screw dischargers or when under a flood feed; paddle flight for mixing products; ribbon flight for sticky products



STANDARD FEATURES

Cimbria's modular screw conveyors include inlet and outlet sections, trough section with screw flight, and the drive assembly. All can be delivered in painted, hot dipped galvanized, or stainless steel.

Equipment and accessories are manufactured for straightforward conveyors or complete systems for large corporate projects, all to meet specific customer requirements.

The Contec screw conveyors can be delivered for transport, extraction and dosing

ACCESSORIES AND FEATURES

- multiple inlets
- multiple outlets
- prepared for earthing as standard
- flights with Hardox
- shaft free flights
- atex zone approved parts
- PEHD wear plate (f. trough screw conveyors)

Pipe and Valves.

Cimbria offers a variety of grain flow products including piping, sliding valves, and valve covers. The range features square piping for higher capacity and less friction, and components like bends, junction boxes, and grain brakes.



Q-SPOUTS Grain speed reducers



TWO-WAY VALVES For diverting grain flow



SLIDING VALVES To regulate or cut off flow



ROTARY VALVES For discharge of dust

Jog Conveyor.



The conveyors are intended for horizontal conveying over shorter distances. For longer distances, several conveyors can be placed in succession.

CIM-Safe.



The CIM Safe infrared spark detection system secures at risk fire areas. A compact die cast sensor housing protects the infrared sensor from scratches. It connects to a control unit monitoring for sparks or fire, triggering alarms and shutting down equipment to prevent damage.

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Service First.

CERTIFICATIONS

- CE conformity certificate
- 2006/42/CE on machinery safety
- 2014/30/CE on Electromagnetic Compatibility

DELIVERYING RELIABILITY AND DEPENDABILITY

At Cimbria, we take pride in delivering exceptional customer service. Our business strategy centres around providing comprehensive support for all technical issues, orders, product selection, pricing inquiries, project engineering, and turnkey plant installation, ensuring your plant runs optimally at every level.

CONTACT US: WWW.CIMBRIA.COM/EN/CONTACT/CONTACT-US.HTML

SPARE PARTS

Cimbria provides the highest performance, with original parts available for day-to-day delivery. Our extensive range of components meets strict quality requirements and thorough documentation, keeping your machines running at peak performance.

REGULAR MAINTENANCE

Our skilled staff regularly perform machinery maintenance, ensuring your equipment and products stay in perfect condition and minimise downtime. We offer training on-site during and after installation, allowing your team to learn in a familiar environment, saving them the time and expense of travelling from site to site.

Cimbria Financing.

Access to flexible and tailored financing solutions becomes a critical factor in securing a successful outcome. Cimbria creates tailored, customer-focused financing solutions to help you achieve success, offering attractive benefits like lower costs, better conditions than local options and a fast, low-documentation decision process. Relevant solutions provide financial relief to your business challenges, combining our technical expertise and financial support where necessary. We collaborate with national Export Credit Agencies (ECAs) to secure and develop national jobs by funding promising projects and solutions and offer financing solutions through Cimbria Leasing. Let us help you find the perfect financing solution for your business needs.



Cimbria Leasing

Leasing your equipment? We've got you covered with our flexible leasing solutions for optical sorting and small scale projects.



We tailor financing solutions to your needs, supporting the growth of your business on large scale turnkey projects.

ECA Cover

First-class European Export credit Agencies support bigger projects with confidence.









Reliable Conveying Solutions for Every Need



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Release date: Oct. 2024/EN