

# BUCKET ELEVATOR

CONVEYING 





# IDEAL SOLUTION FOR VERTICAL CONVEYING OF DRY BULK MATERIAL



## GENTLE VERTICAL CONVEYING OF DRY BULK MATERIAL

Cimbria is one of the world's leading producers of conveying equipment for agricultural and industrial products.

The Cimbria bucket elevators are delivered world wide as singular supplied equipment or as a part of a total solution where they link key machines to form smoothly running industrial plants.

The bucket elevator distinguishes itself by its high degree of durability, safety of working and low power consumption when compared to the capacity.

## MEETING DEMANDS AND REQUIREMENTS

The Cimbria bucket elevator is ideal for vertical transport of materials such as grain, pellets and powder. It is highly resistant to wear and can be placed for indoor as well as outdoor use. Various models and sizes are available depending on materials being conveyed and the required capacity.

The bucket elevators are manufactured in a modular system and can be delivered in the exact required length and with optional equipment such as various types of buckets and belts, dust aspiration connection, explosion relief panels, platforms, etc.



### MODULAR STRUCTURE

The modular structure of the bucket elevators ensures that the user receives precisely the solution that matches his application. The high level of flexibility ensures that modifications and repairs can be carried out with a minimum of disruption of the conveying process which leads to a cost benefit in the form of reduced downtime.

### FORM AND FUNCTION

Optimal design and construction make the bucket elevator a reliable and safe solution. The bucket elevators are delivered with mandatory documentation and designed according to valid norms and regulations to comply to the various directives securing the health and safety of the people operating the equipment.

### SUPPORT AND SERVICE

We place great emphasis on giving customers the right advice, so that they can select the very best solution – in both technical and financial terms – in collaboration with Cimbria. Our customers can always be certain that the product has been thoroughly tested and documented. In addition, we keep all standard components in stock, which means that we can provide quick and efficient service for our customers.

## EXAMPLES OF MATERIALS TO BE CONVEYED

MINERALS		WHITE RICE		PELLETS	
SEED		GREEN COFFEE		FERTILIZERS	
GRANULES		SUNFLOWER		WOOD CHIPS	
MAIZE		GRAIN		POWDERS	

## BUCKET ELEVATOR CONSTRUCTION

Cimbria bucket elevator range of products contains models constructed to suit various materials and tasks, and it comes with a range of standard features. Standard features cover galvanized or painted execution, antistatic belt, self carrying construction up to 30 meter, with PEHD or HARDOX wear plate in elevator head and in-/outlet, drive terminal with hollow shaft gear, motors and gears from well-known and acknowledged supplier in energy classes IE2 and IE3.

Cimbria bucket elevators are manufactured with different types of buckets. An optimal number of buckets per meter belt and nominal belt speed is calculated depending on the specific material and capacity requirements.

The elevator head is a bolted construction and it is complete with a heavy duty main drive shaft mounted on industrial quality ball bearings. The elevators are available with a wide range of accessories.

### ELEVATOR HEAD

- designed with replaceable wear plates
- delivered with an efficient hollow shaft mounted gear with standard motor and incorporated back stop device to prevent reverse movement in case of unintended stops
- outlet fits the unique Cimbria Q-spouting system
- outlet is turnable allowing discharge in either 45° or vertical down



### ELEVATOR LEGS

- easily assembled by means of special assembly clamps and distance pieces, resulting in a sturdy construction
- delivered with a detachable door in full length for service and 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



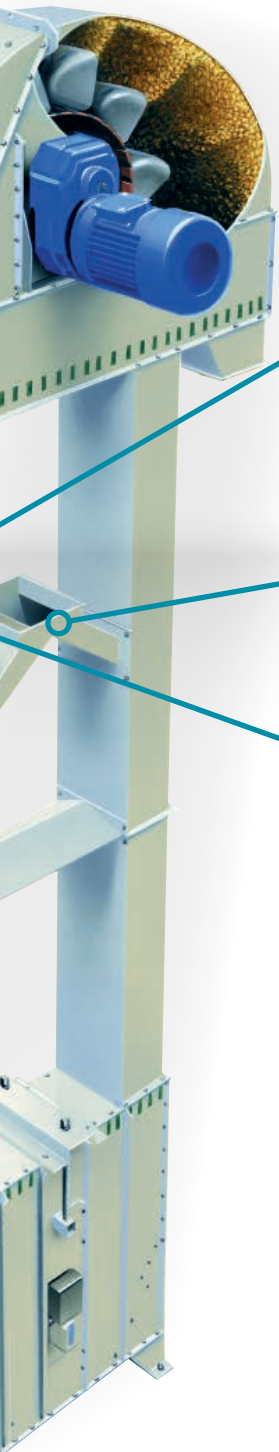
### ELEVATOR BOOT

- 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





## MODULAR SYSTEM ADAPTED TO YOUR REQUIREMENTS



### ELEVATOR BUCKETS

- available in steel, stainless steel and plastic
- placed with a distance that ensures an efficient filling of the buckets and optimal handling of the material at a high capacity



### DUST ASPIRATION

- adaptor for dust aspiration for connection to central extraction system
- optionally can the elevator be prepared for connection to spot filter



### ELEVATOR BELT

- available in many types and qualities.
- antistatic as standard.
- oil- and fat resistant as optional
- food grade as optional
- dimensioned with a tensile strength of 10 times nominal working load

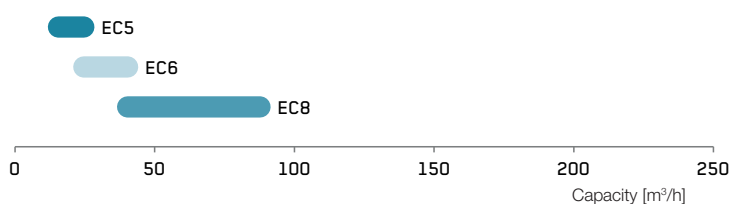
### ACCESSORIES AND FEATURES

- belt misalignment detector
- low speed guard
- explosion relief panels
- atex zone approved parts
- rubber lining on drive pulley
- aspiration connections
- top platform single or double sided

## MODELS AND CAPACITIES

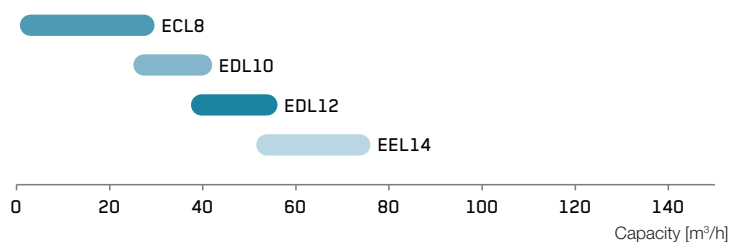
### TYPE EC

- low capacity
- flange bearing
- galvanized construction
- PEHD1000 wear plates



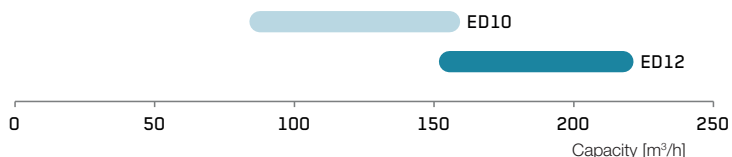
### TYPE ECL, EDL, EEL

- low speed elevator (belt speed 0,93 m/sec.)
- flange bearing
- gentle discharge prevents damage to material



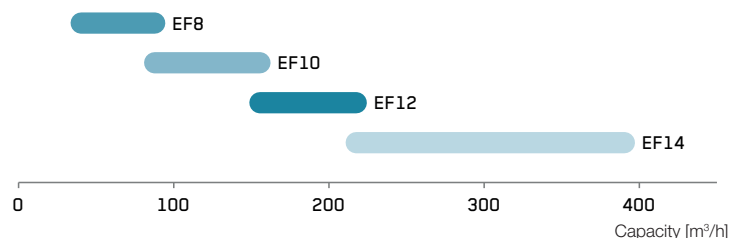
### TYPE ED

- medium capacity
- flange bearing
- galvanized construction
- PEHD1000 wear plates



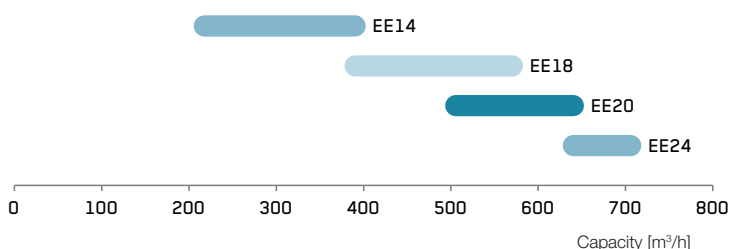
### TYPE EF

- medium capacity
- reinforced top with pedestal bearings
- hot dip galvanized execution
- hardox wear plates



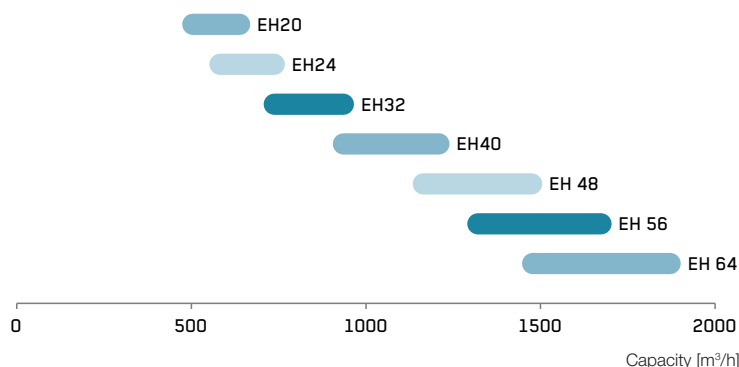
### TYPE EE

- high capacity
- flange bearing (EE14)
- pedestal bearing (EE18 - EE24)
- PEHD1000 wear plates
- hot dip galvanized execution



### TYPE EH

- high capacity
- pedestal bearing
- hardox wear plates
- hot dip galvanized execution



## BENEFITS



### EXPERIENCED AND RELIABLE SUPPLIER

- comprehensive documentation
- high industrial quality
- more than 60 years of experience
- local representation in 60 countries
- numerous installations world wide
- can be supplied as stand alone equipment or as part of a turnkey plant

### MODULAR CONSTRUCTION

- easy and quick replacement in case of damaged or worn parts without having to dismount the bucket elevator
- easy assembly
- reliable operation
- minimum of maintenance
- low energy consumption
- minimized downtime = maximized profit for the end-user

### COMPREHENSIVE PRODUCT PROGRAMME

- handles all dry bulk materials from industry to agriculture
- customised solutions to suit specific customer requirements
- day-to day delivery of spare parts
- standard components in stock
- extensive range of accessories for all applications
- full compliance with the ATEX directive
- continuous development of new products and features



**A/S CIMBRIA**

Faartoftvej 22  
P.O. Box 40, 7700 Thisted  
DENMARK  
Phone: +45 96 17 90 00  
holding@cimbria.com  
www.cimbria.com

**CIMBRIA UNIGRAIN A/S**

Praestejorden 6  
7700 Thisted  
DENMARK  
Phone: +45 96 17 90 00  
unigrain@cimbria.com

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