# **CONVEYING**

# BUCKET ELEVATOR TYPE EC

#### **GENERAL**

Brand Cimbria
Designation Bucket Elevator

Model EC
Use Industry

Application Vertical transport of loose bulk materials,

such as grain like products.



Cimbria type EC bucket elevator is designed for vertical transport of loose bulk materials, such as grain like products.

The EC elevator is intended for installation in an industrial environment.

The EC elevator has a totally enclosed construction divided into modular sections consisting of a head section, leg section and a boot section.

# **FEATURES**

- · Backstop, built in
- Solid boot pulley
- Slatted head pulley or solid head pulley with rubber lagging

#### **DRIVE SYSTEM**

- · Parallel shaft helical gearmotor, hollow shaft
- · Helical bevel gearmotor, hollow shaft (optional)
- Gearmotor mounted on right or left hand side as specified

### **CONTROLLERS**

- · Rotation sensing
- · Bearing heat sensing (optional)
- · Misalignment detectors (optional)

# **ACCESSORIES**

- · Connection for flour intake
- · Connection for negative pressure
- Cleaning system for boot
- · Equipotential bonding of shafts (ATEX configuration)
- Explosion relief (ATEX configuration)
- · Inlet module
- · Outlet module
- · Scraper for solid boot pulley
- Support system; data sheet: Bucket Elevator Support System

| Technical data                          |                          |          |          |  |  |  |
|---|--------------------------|----------|----------|--|--|--|
| Machine                                 | EC-5                     | EC-6     | EC-8     |  |  |  |
| Maximum capacity                        | 25 m³/h                  | 38 m³/h  | 85 m³/h  |  |  |  |
| Minimum belt speed                      | 1.20 m/s                 | 1.30 m/s | 2.10 m/s |  |  |  |
| Maximum belt speed                      | 1.90 m/s 2.00 m/s        |          | 2.80 m/s |  |  |  |
| Maximum bulk den-<br>sity               | 850 kg/m <sup>3</sup>    |          |          |  |  |  |
| Drive motor size                        | According to application |          |          |  |  |  |
| Sound pressure level                    | 75 to 87 dB(A)           |          |          |  |  |  |
| Operating conditions Indoor and outdoor |                          |          |          |  |  |  |
|   | -15°C to +40°C ambient   |          |          |  |  |  |

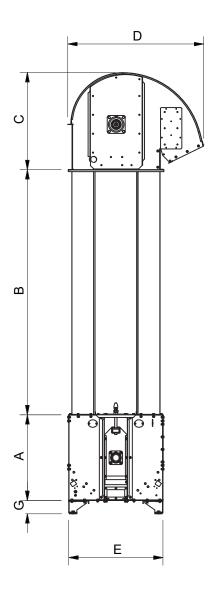
NOTE: All capacities in the above table are based on the handling of dry and cleaned wheat.

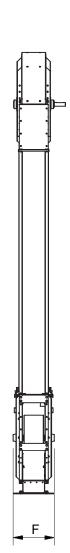
| Materials           |          |   |  |  |  |  |
|---------------------|----------|---|--|--|--|--|
| Casing              | Standard | Pre-galvanised steel  |  |  |  |  |
|                     | Optional | Stainless steel   |  |  |  |  |
|                     |          | Hot-dip galvanized  |  |  |  |  |
|                     |          | Painted   |  |  |  |  |
| Wear parts quality  | Standard | Plastic (PEHD)  |  |  |  |  |
| (top)               | Optional | Steel (Hardox®)   |  |  |  |  |
| Belt material       | Standard | Standard belt, antistatic, (SBR/NBR)                            |  |  |  |  |
|                     | Optional | Oil-resistant belt 'GS', antistatic (NBR)                       |  |  |  |  |
|                     |          | FDA compliant belt, white, oil-resistant ´GS´, antistatic (NBR) |  |  |  |  |
| Belt fasteners      | Standard | Steel   |  |  |  |  |
|                     | Optional | Stainless steel   |  |  |  |  |
| Buckets             | Standard | Steel   |  |  |  |  |
|                     | Optional | Stainless steel   |  |  |  |  |
|                     |          | Plastic (PEHD)  |  |  |  |  |
| Spacers for buckets | Optional | Spacers (PEHD)  |  |  |  |  |

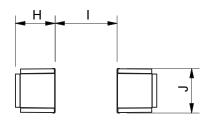
| Compliance |          |   |
|------------|----------|---|
| ATEX       | Standard | Non-zone inside<br>Non-zone outside           |
|            | Optional | Zone 22 or 21 inside<br>Zone 22 or 21 outside |

NOTE: Specific requirements apply for ATEX compliance.









|      | A<br>[mm] | B<br>[mm] | C<br>[mm] | D<br>[mm] | E<br>[mm] | F<br>[mm] | G<br>[mm] | H<br>[mm] | l<br>[mm] | J<br>[mm] |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| EC-5 | 560       | 1 950     | 650       | 880       | 600       | 300       | 100       | 170       | 250       | 210       |
| EC-6 | 685       | 1 950     | 775       | 1 090     | 750       | 330       | 106       | 210       | 330       | 236       |
| EC-8 | 825       | 1950      | 1060      | 1300      | 895       | 380       | 108       | 210       | 472       | 286       |

|      | Boot<br>section<br>[kg] | Head sec-<br>tion [kg] <sup>1</sup> | Leg sec-<br>tion [kg/m<br>elevator] | Belt<br>[kg/m] | Weight of<br>material<br>[kg/m] <sup>2</sup> | Belt types |           | Belt width<br>[mm] |  |
|------|-------------------------|-------------------------------------|-------------------------------------|----------------|--|------------|-----------|--------------------|--|
| EC-5 | 41                      | 37                                  | 20                                  | 1.9            | 2.6  | 500/3 1+3  | 630/3 1+3 | 125                |  |
| EC-6 | 78                      | 83                                  | 24                                  | 2.3-2.6        | 4.4  | 500/3 1+3  | 630/3 1+3 | 150                |  |
| EC-8 | 103                     | 115                                 | 33                                  | 3.0-3.5        | 6.1  | 500/3 1+3  | 630/3 1+3 | 200                |  |

[1] Weight of head section is without gearmotor

[2] With material bulk density 760 kg/m $^{\rm 3}$ 

