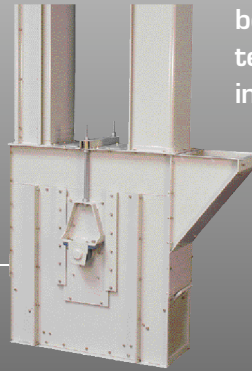


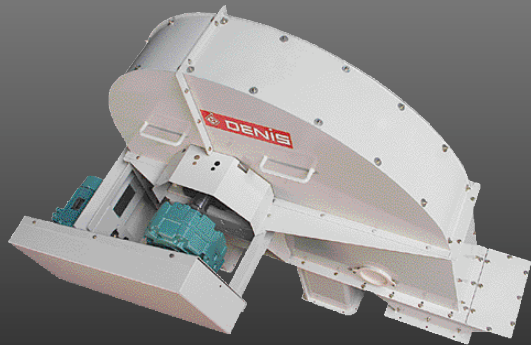
Head with removable upper half and replaceable wear plates



Outlet cone with aspiration point



Boot with belt tensioner incorporated



Drive assembly with motor, shaft mounted gearbox, pulleys and VEE belts



Inspection window

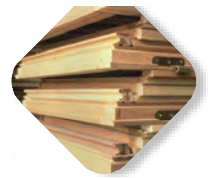


Trunking with access section and cleaning slide on boot

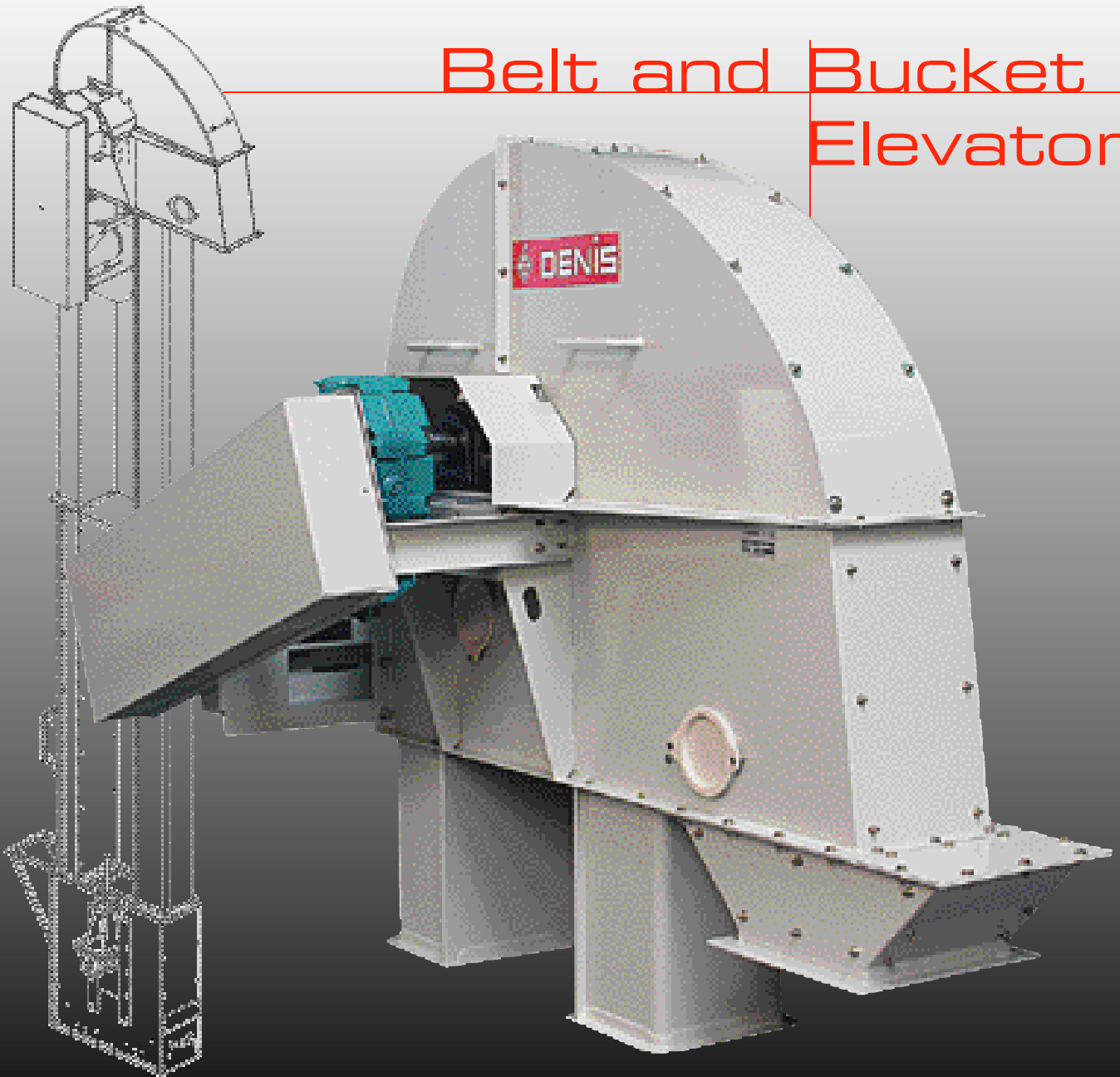


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Belt and Bucket Elevators



General Description

By their design and construction  **DENIS Belt and Bucket Elevators** provide the following advantages:

Robust and practical: strong rigid construction, self-supporting structure, easy to build, compact, easy to maintain

Functional and reliable: flexible specification, speed to suit products, choice of specifications for belt and buckets, access and clean out slides, removable access panel in trunking

Performance with economy: consistent throughputs up to 400 m³/hour, low power requirement, low maintenance

Well designed quality machines: the 180°C oven baked paint finish is applied after a degreasing treatment followed by a phosphate primer for every component

Optional: white food quality paint, hot dipped galvanised, stainless steel...

Safety: this equipment conforms with the European Standards for safety and strength and with **ATEX**, the European Explosion prevention requirements

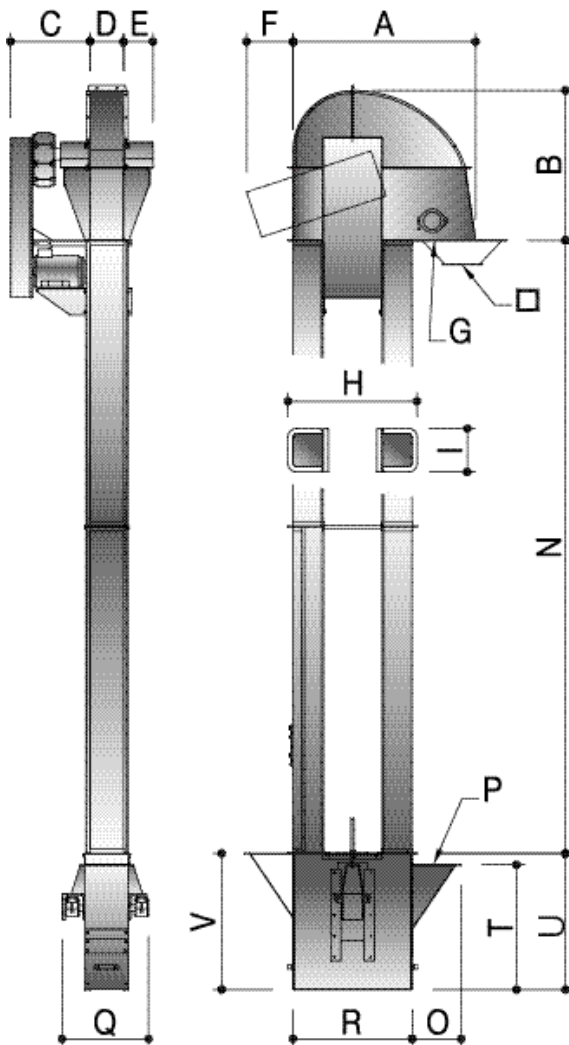
Performance

| TYPE | 10 N | | 14 N | | 20 N | | 24 N | | 30 N | | 37 N |
|------------------------------|----------|------|------------|----|------------|-----|------------|-----|------------|------|------------|
| Maximum t/h | 20 | 30 | 30 | 50 | 50 | 100 | 100 | 150 | 150 | 200 | 300 |
| Throughput.m ³ /h | 26 | 40 | 40 | 66 | 66 | 133 | 133 | 200 | 200 | 266 | 400 |
| Buckets n°/m | 8 | 12,5 | 8 | 11 | 6 | 9 | 7 | 9 | 3.75 | 4.75 | 5.55 |
| Belt speed m/s | 2.80 | | 2.80 | | 2.80 | | 2.80 | | 2.80 | | 3.0 |
| Drum dia mm | 300 | | 400 | | 500 | | 600 | | 630 | | 800 |
| Belt breaking strain N/mm | 250 | | 315 to 400 | | 315 to 630 | | 315 to 800 | | 400 to 800 | | 400 to 800 |
| Power kW | 1.1 to 4 | | 1.5 to 9 | | 3 to 18.5 | | 5.5 to 30 | | 11 to 45 | | 18.5 to 55 |

Based on product density of 750g/m³

Standard dimensions (mm)

| TYPE | 10 N | 14 N | 20 N | 24 N | 30 N | 37 N |
|------|-----------------------------------|---------|---------|---------|---------|---------|
| A | 850 | 1115 | 1420 | 1640 | 1835 | 1966 |
| B | 690 | 910 | 1170 | 1290 | 1500 | 1750 |
| C | 270 | 425 | 525 | 655 | 740 | 700 |
| D | 155 | 206 | 276 | 325 | 450 | 608 |
| E | 110 | 185 | 235 | 280 | 350 | 232 |
| F | | | | 730 | 800 | 615 |
| G | 240x150 | 315x200 | 400x270 | 500x318 | 500x440 | 500x540 |
| □ | 160 | 160 200 | 200 250 | 250 350 | 350 | 400 |
| H | 610 | 788 | 994 | 1128 | 1266 | 1454 |
| I | 212 | 266 | 332 | 386 | 540 | 640 |
| N | As required (multiples of 250 mm) | | | | | |
| O | 255 | 300 | 348 | 432 | 492 | 542 |
| P | □ 160 | □ 200 | □ 250 | □ 324 | □ 356 | □ 400 |
| Q | 270 | 320 | 485 | 565 | 760 | 924 |
| R | 555 | 730 | 938 | 1072 | 1220 | 1370 |
| T | 740 | 840 | 1110 | 1250 | 1300 | 1400 |
| U | 740 | 840 | 1110 | 1250 | 1500 | 1750 |
| V | 740 | 40 | 1110 | 1250 | 1500 | 1750 |



A wide range of equipment, standard or specially tailored for the most efficient handling of all kinds of bulk products with very different densities and particle size: cereals, seeds, flours, granules, fertilizer, minerals, wood shavings, wood chips, and therefore suitable for all your installations.

Characteristics



Drive

By shaft mounted gearbox from motor through pulleys and VEE-belts

Options:

- Speed to suit product
- Motor power balanced to requirements
- Shaft mounted gearbox drive (also available geared motor drive in line or right angles)
- In line drive from geared motor through flexible coupling
- Alternative drives available

Belt

Flame resistant (ISO 340) anti-static (ISO 284) and oil resistant in standard elevators.

Belt speeds between 1.6 and 3.0 m/second depending upon products – (there are special elevators for belt speeds between 0.8 and 1.2 m/second)

Option:

- Food quality FDA belt - High temperature belt (180 °C) also belts abrasive resistant, proof against

Trunking centred joints

(optional on Type 10N)

Options:

- Belt alignment monitors (2 on head, 2 on boot)
- Explosion relief panels
- Supplementary windows
- Aspiration points • Monoleg trunking

Trunking joining plates

Access trunking

with detachable sections to allow access for joining and tensioning the belt

Boot inlet

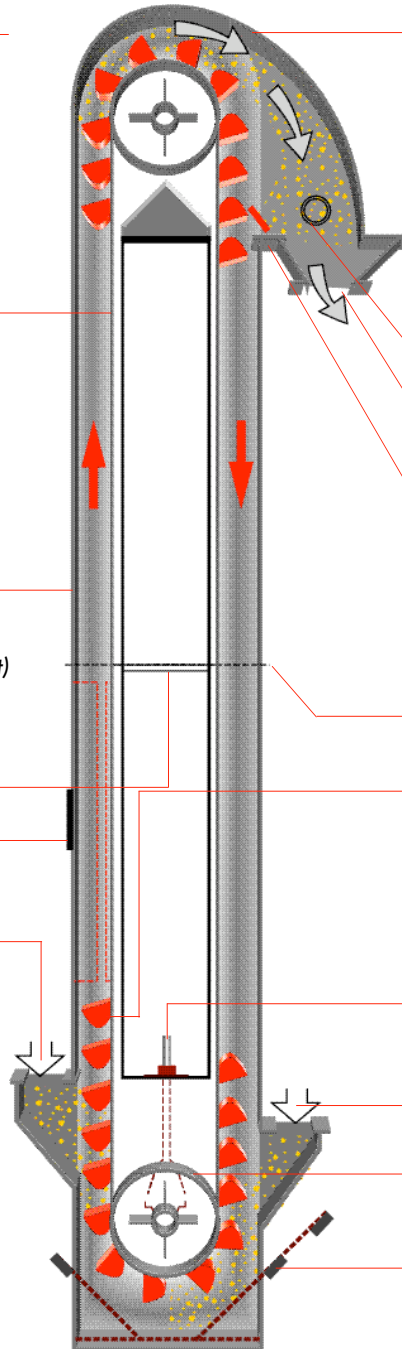
can be fitted on up-leg

Boot

one or two inlet feed hoppers can be fitted with replaceable anti-wear plates. The belt tensioning plates slide on PEHD 1000 wear pads – sealed bearings

Options:

- Underspeed sensor
- Special inlet feed hopper for fragile products
- Pedestal legs to lift boot
- Removable bottom in stainless steel
- Profiled boot for minimum residue
- Sealed boot shafts
- Refilling boot slide, etc



Head

with removable top section and replaceable wear plates – Caged drums for self-cleaning or rubber-clad drums – Anti run-back stop as standard – Adjustment to centre the belt – Pillow block bearings (type 10N flanged bearings)

Options:

- Explosion panels
- Sealed head shaft

Inspection port

Outlet cone

with aspiration point (standard on types 20N to 37N, optional on types 10N and 14N)

Throat plate

Finish

Oven baked paint finish

Options:

- Galvanised
- White food quality paint
- Stainless steel 304L, 316L

Nuts and bolts

Zinc finish or Dacromet

Buckets

Pressed steel Profile and thickness to suit product

Options:

- Special buckets: (reinforced edge, PEHD, stainless steel)
- Spacer washers
- Trunking cleaner

Belt tensioning

Option: Pneumatic belt tensioner (for very tall or large capacity elevators)

Boot inlet

normal position on down leg

Boot drum

caged pulley for self residue

Boot clean out slides

Option: boot profile inserts to eliminate residue



This equipment meets with the standards for safety and strenght.



This equipment conforms to the ATEX requirements.

Accessories

- Connectionss, Pipework, Mobility
- Head access platform
- Ladders with hoops
- Rest platforms
- Safety: speed sensor, belt alignment monitor, temperature sensors

Applications

There are different specifications suited to all types of activity

Agro-cereal sector

- Agriculture
- Commercial grain
- Milling
- Animal feeds

Industrial sector

- Minerals
- Wood, etc