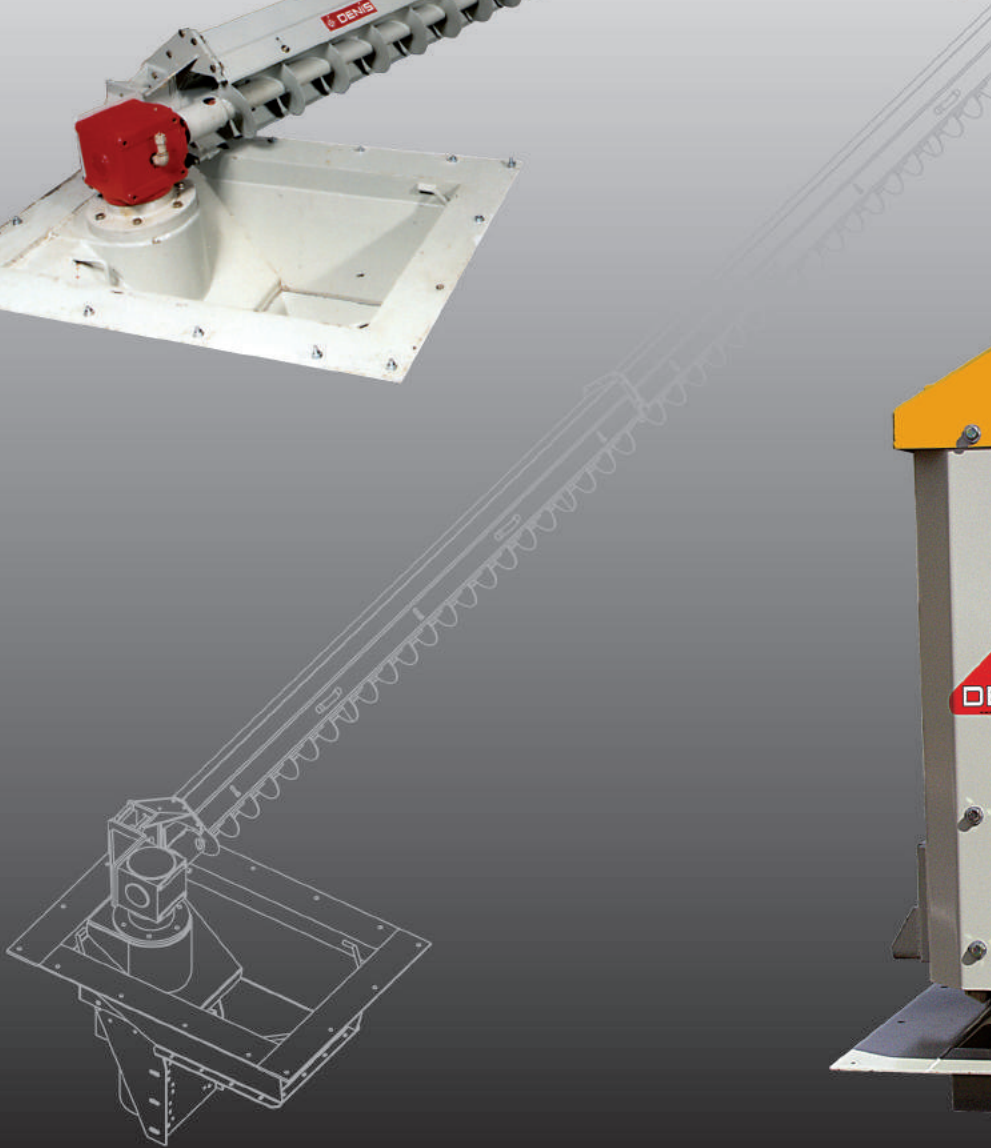




Sweep Augers
DNS & BM

Sweeping
brush

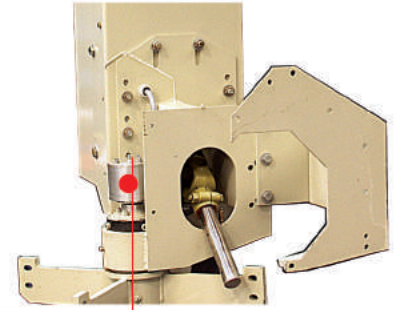
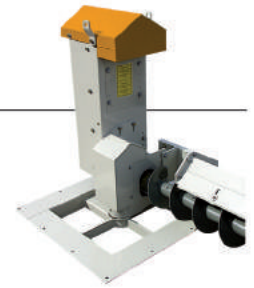
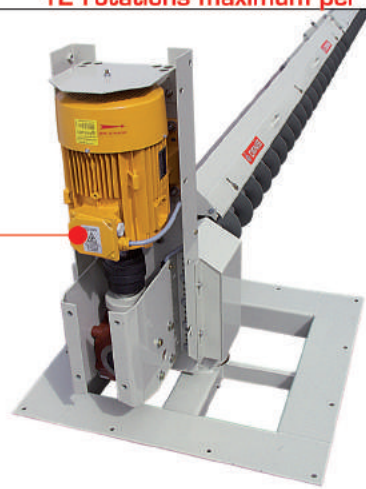


DNS type

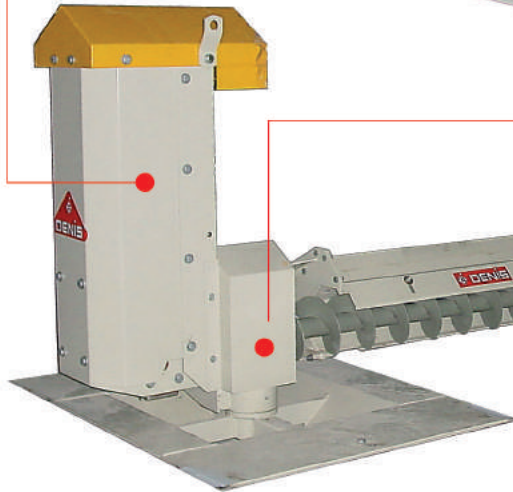
12 rotations maximum per year



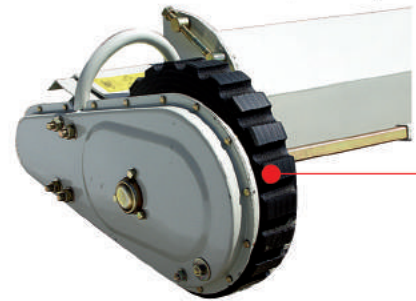
The drive placed inside the silo, under safety guard (motor & flexible coupling), makes the mounting of the sweeping device easier



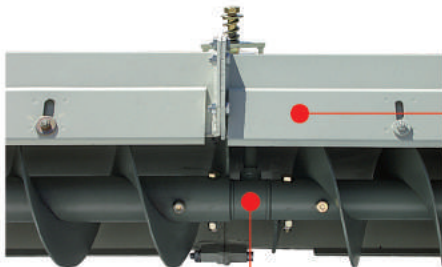
Electric connections secured by use of slip ring



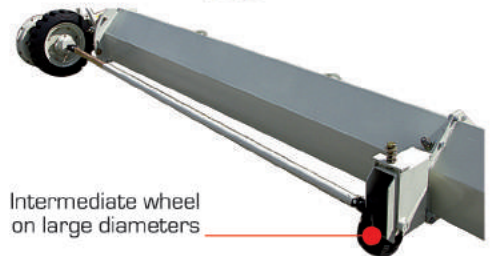
Auto advance unit at the end of the auger to ensure planetary motion



Regulating slide



Self-aligning intermediate bearings at each joint



Intermediate wheel on large diameters

Results

DNS residual output*	30 tph	50 tph	80 tph	100 tph
Maximum gravity output	200 tph			
Diameter of silo*	Ø ≤ 21.40 m	Ø ≤ 21.40 m	Ø ≤ 25 m	Ø ≤ 21.40 m
Wall height*	≤ 27 m			
Speed	483 rpm			
Power (kW)*	2.2 - 5.5 kW	3 à 7.5 kW	4 à 11 kW	5.5 à 11 kW

*average output on dry wheat (specific weight 0,75 t/m³). For other product or dimensions, please contact us.



ATEX norm for C type

We can supply a kit to allow your existing **CNS** type  **DENIS** sweep augers to comply with **ATEX** norms by changing it into a **DNS** type. For more information, please contact us.

BM type

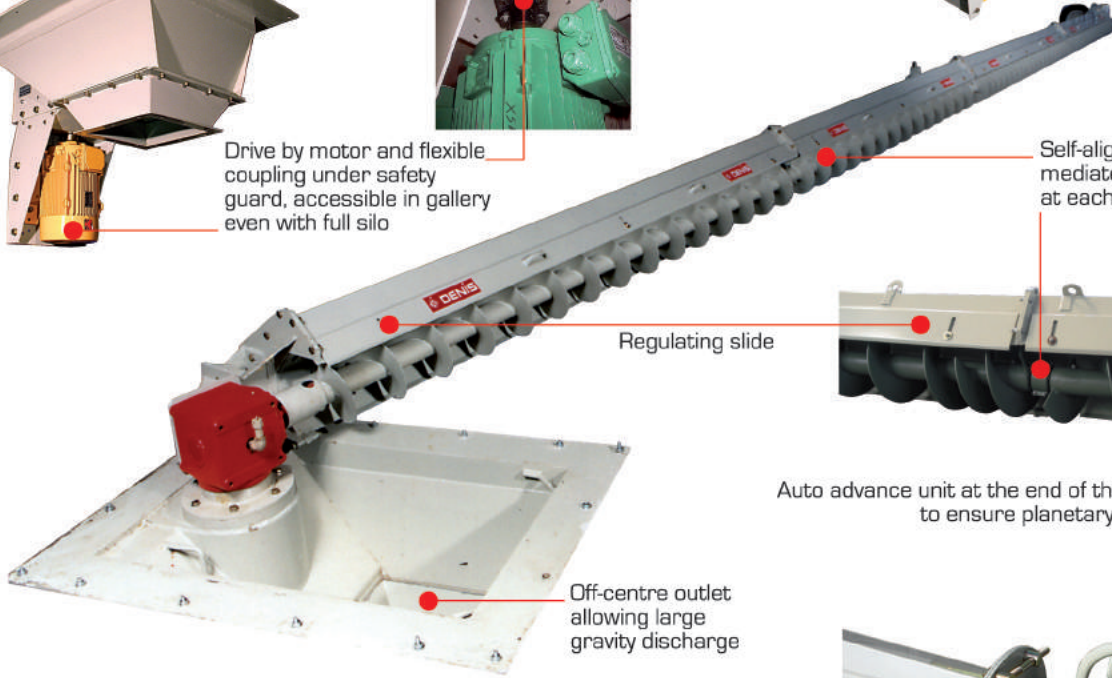
12 rotations maximum per year



Drive by motor and flexible coupling under safety guard, accessible in gallery even with full silo



Self-aligning intermediate bearings at each joint



Regulating slide



Auto advance unit at the end of the auger to ensure planetary motion

Off-centre outlet allowing large gravity discharge



Results

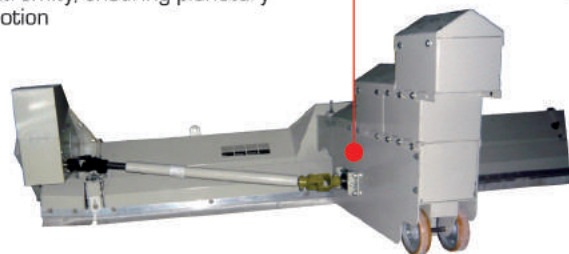
BM residual output*	50 tph	80 tph	100 tph	100 tph
Maximum gravity output	200 tph		400 tph	
Diameter of silo*	Ø ≤ 22 m	Ø ≤ 26 m	Ø ≤ 26 m	Ø ≤ 26 m
Wall height*	≤ 27 m			
Speed	414 rpm			
Power (kW)*	5.5 – 7.5 kW	5.5 à 11 kW	5.5 à 15 kW	5.5 à 15 kW

*average output on dry wheat (specific weight 0,75 t/m³). For other product or dimensions, please contact us.

BM GM type



Auto advance unit away from extremity, ensuring planetary motion

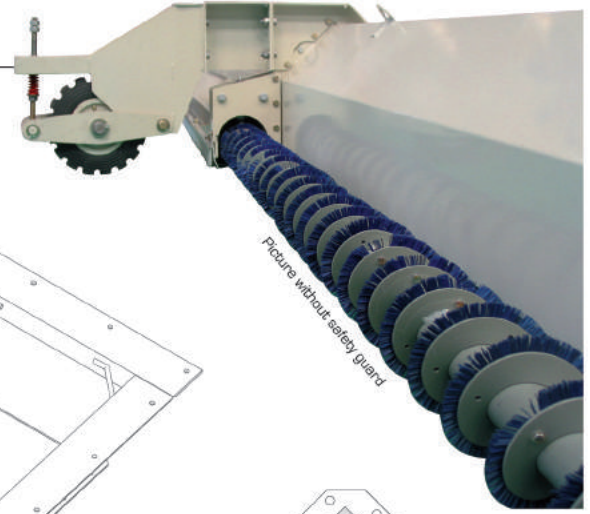


Results

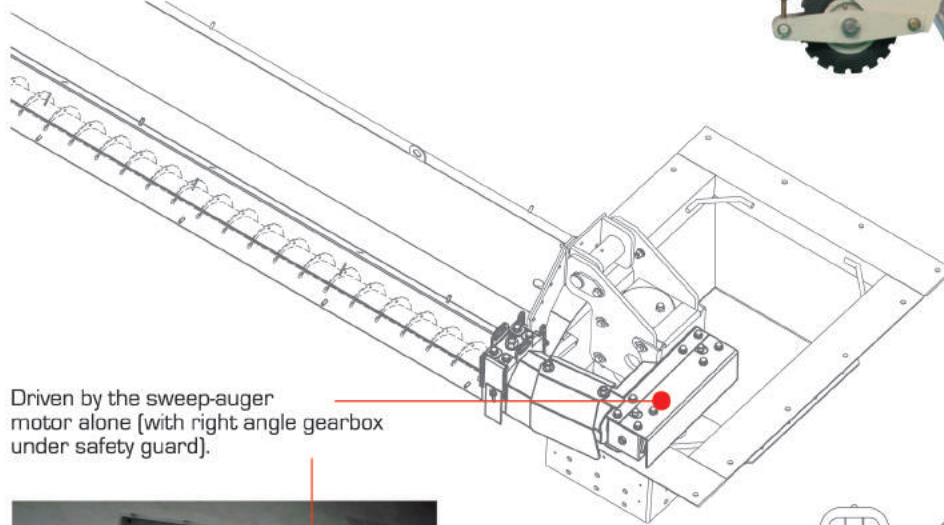
BM GM residual output*	100 tph		150 tph			200 tph	
Maximum gravity output	400 tph	600 tph	200 tph	400 tph	600 tph	400 tph	600 tph
Diameter of silo*	Ø ≤ 31.5 m	Ø ≤ 37.5 m	Ø ≤ 25.5 m	Ø ≤ 31.5 m	Ø ≤ 31.5 m	Ø ≤ 25.5 m	Ø ≤ 24 m
Wall height*	≤ 27 m		≤ 27 m			≤ 27 m	
Speed	414 rpm		414 rpm			414 rpm	
Power (kW)*	7.5 - 18.5 kW	7.5 à 30 kW	11 à 22 kW	11 à 30 kW	11 à 30 kW	15 à 30 kW	

*average output on dry wheat (specific weight 0,75 t/m³). For other product or dimensions, please contact us.

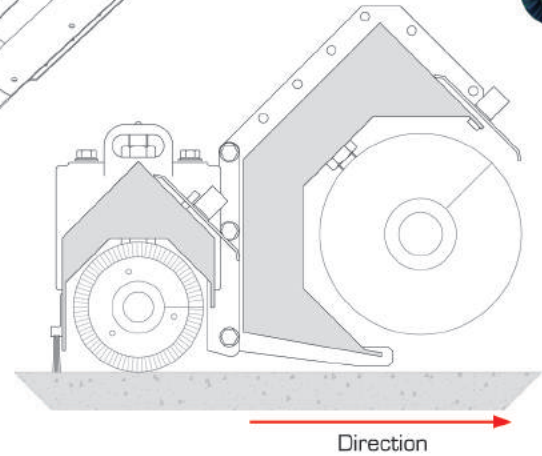
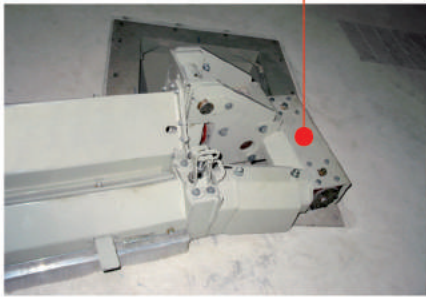
Sweeping brush



Picture without safety guard



Driven by the sweep-auger motor alone (with right angle gearbox under safety guard).



Characteristics

Sweeping brush for	DNS	BM	BM GM
Diameter of silo	$\varnothing \leq 18 \text{ m}$	$\varnothing \leq 18 \text{ m}$	$\varnothing \leq 31.5 \text{ m}$

The **DENIS** sweeping brush, mounted on sweep auger (new or existing) avoids the need for manual sweeping in a dusty atmosphere.

This patented system, automatic and safe, ensures a clean floor in 2 rotations.



Silos regulations and existing sweep augers



We can provide solutions to renew and adapt existing sweep augers to conform with **ATEX** norms.

- **ATEX** kit allowing to turn your existing **DENIS** sweep auger type CNS into a DNS with adapted central unit **ATEX**. Flights and support beams are retained.
- Moto drive **ATEX**
- **ATEX** auto advance unit on end of auger
- Intermediate bearings ATEX

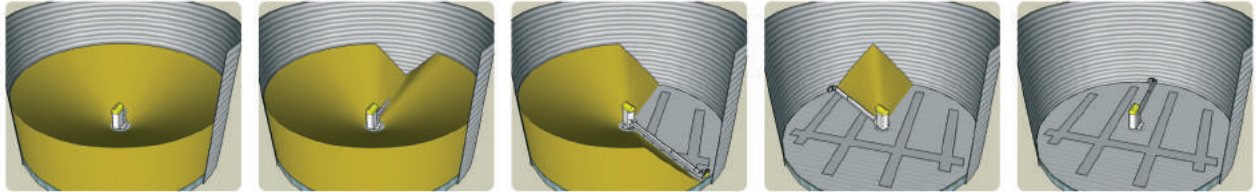
Contact us



General Description

DENIS sweep augers enable the discharge of the residual cereal cone of flat-bottom silos after gravity discharge. They offer the following advantages:

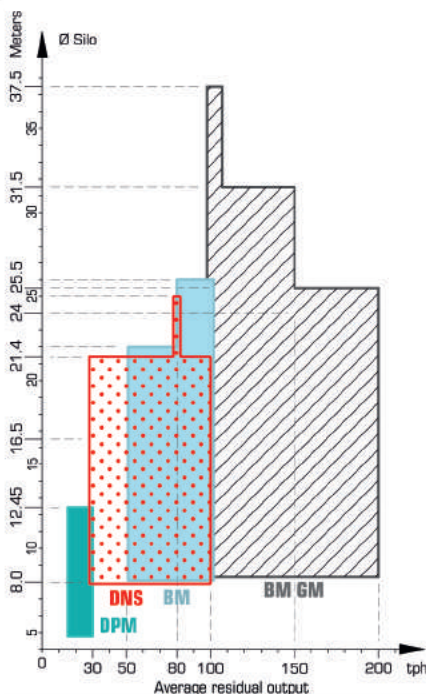
- They are suitable for any granular product flowing by gravity: wheat, rape seed, soya, sunflower...
- They can be fitted in existing silos without any modification (**DNS** type)
- Only the centre outlet is required (intermediate outlets only required if sweeping brush fitted)
- Sweep equipment is fitted inside the silo. Discharge by gravity through the central outlet to another handling system.



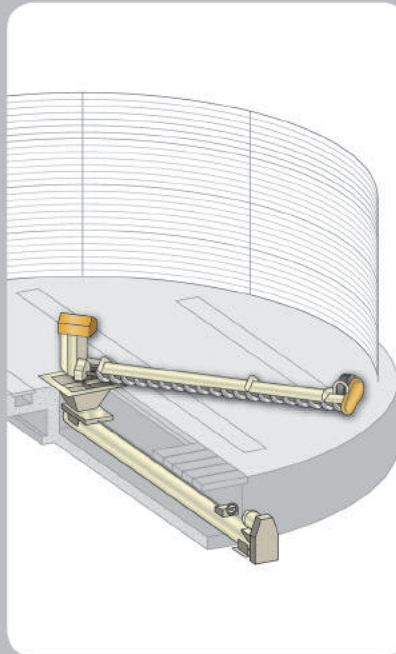
After gravity discharge, the sweep auger can be started. The 2 movements, rotation and advance, are ensured by the central drive, inside the silo for **D** type, or below the silo floor for **BM** type. The screw conveys the grain of the residual cone into the central outlet. The product then flows to the conveying equipment below the silo in a trench or gallery. When there is no more grain in front of the screw, it moves forward automatically driven by the outer wheel. In this way, the discharge is complete in only one rotation. Sweep augers can be mounted with a sweeping brush, ensuring a clean floor after a second rotation.

Characteristics

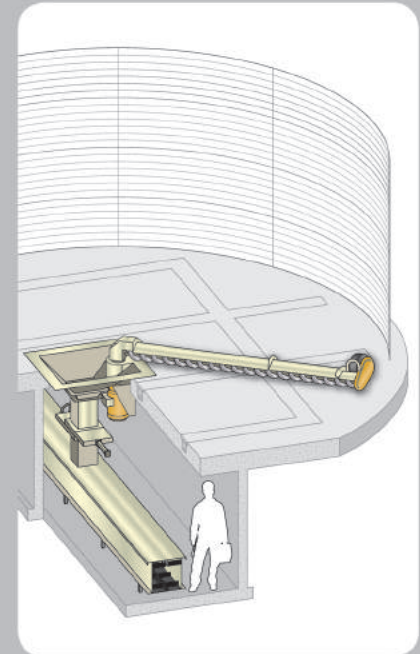
How to choose the sweep auger



Recovery under the floor or in trench, use DNS type



Recovery in gallery under silos, use BM type



Norms and certifications

CE This equipment meets with the standards for safety and strength

Ex This equipment conforms to the ATEX requirements

DENIS sweep augers are available in ATEX version, certified ATEX II2D or II3D by **INERIS** authorised office, or simply equipped with ATEX components.

A sweep auger range to enable the residual discharge of flat-bottom silos

Farm range



Automatic removable sweep auger



DPM type

Storage companies and industries



DNS type

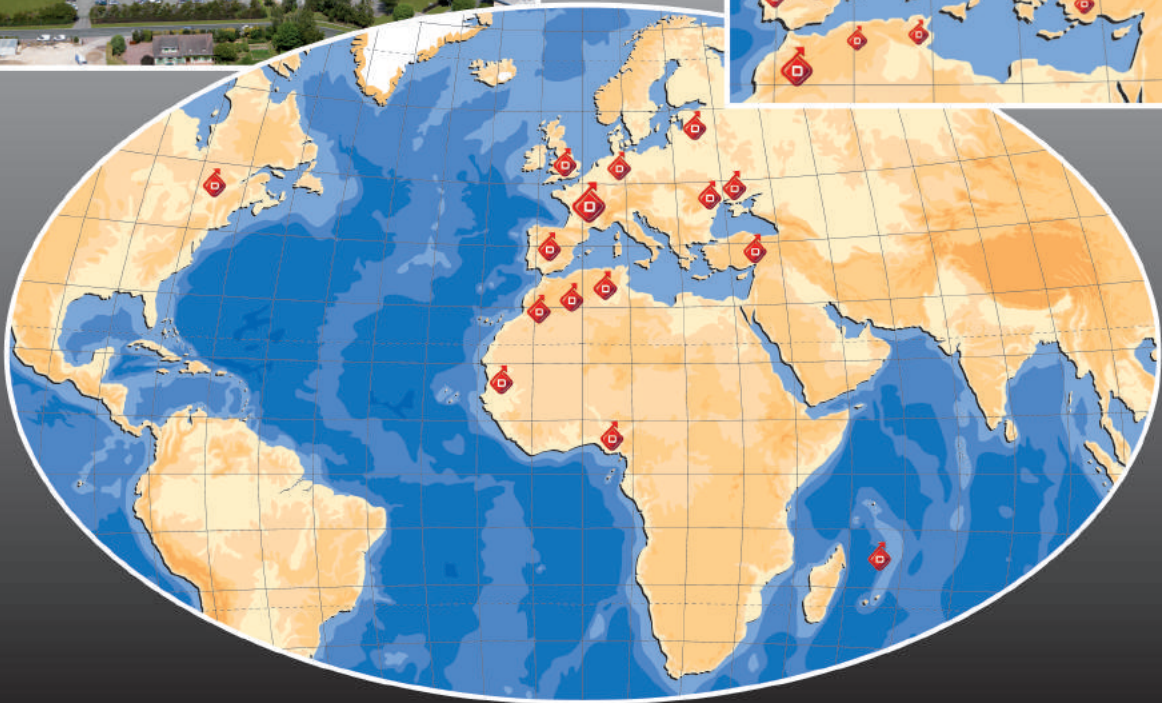


BM type

Solutions designer



Continuous handling, silo discharge and extraction, cleaning, separation, grain treatment and protection... From the bucket elevator to the perfect know-how of screws, DENIS has acquired a worldwide reputation as designer and manufacturer of cleaning and bulk-handling equipment of solid products since 1855. Efficient, allowing an output up to 300 tonnes per hour (11.250 bushels per hour), economic, fast and quality driven, DENIS range is wide and continuously innovative. According to your needs, DENIS creates standard materials adapted to your installation.



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These characteristics related to this documentation are given as an indication only and can be modified at any time without notice to improve the product. This manufacturer cannot in any way be held responsible for these changes.