



Cobra Store loader



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GREEN

Capacity and Intelligence: the Cobra store loader

Pushing innovation in technology and machinery to the limit so that your crop can be handled in a fast and effective, as well as a potato-friendly manner, that is the goal of AVR. This certainly applies to our Cobra store loader range: it offers both capacity and intelligence.

■ High capacity

The 80 cm belt width, the wide flight and the extra deep trough (trough angle 24°) offer a very high capacity potential. The drum motor being configured in traction mode (the 17 and 19 m are even equipped with a double drum motor), and the snub idlers at the drum motors providing a wide contact surface between the rubber belt and drum, it is very easy for the Cobra store loaders to process high tonnages without slip. This allows the belt to run smoothly, even at large volume flows, which benefits potato-friendliness.



Well thought-out details

- **Accessibility:** the machine is easily accessible for maintenance and inspection.
- **Open chassis:** the counterweights are mounted on the side. As such, the open chassis (at the bottom) will prevent any build-up below the conveyor belt.
- **Low drop height:** the twin filling hopper guarantees a good connection and a low drop height from the feeding machine even at the maximum inclination angle.
- **Optimal flow:** the flow of potatoes in the storage unit can be optimally adjusted thanks to the variable speed of the hydraulically-driven wheels.
- **Foldable drawbar:** easy to fold safely out of the way.
- **Little power required:** the conveyor belt is electrically-powered, so that less power is necessary for the same load.
- **Stable machine:** thanks to the monobody frame, the large main wheels and the counterweights.
- **Unique belt speed:** 32-126 m/min
- Automatic belt control

Some useful extras

■ Feeding conveyor belt

A 1250 mm speed adjustable feeding conveyor belt (speed +/-15% compared to the Cobra belt speed) ensures a constant low drop height, regardless of the angle, and a final flow optimization.



■ Coupling bridge

The coupling bridge positions the conveyor belt perfectly above the store loader in any position. Both machines can be easily moved.

■ Scraper set

When storing under harsh conditions, an additional scraper set, on top of the standard V-shaped scraper in the belt and the scrapers on the snub idlers, is available to prevent waste build-up on the support rollers. Alternatively, rubber rings that shake the belt on its way back to get rid of any waste build-up can be added on the support rollers.

■ Folding wheel protection

The removable/folding wheel protection prevents any rolling back potatoes from getting under the wheels.



The Cobra store loader features you need





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SMALL DIAMETER TOP ROLLER -

To keep the drop height to a minimum.

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RUBBER V-SHAPED CONVEYOR BELT -

Cleated belt (chevron profile); the product does not touch any iron surfaces.

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HEAD SECTION

Adjustable angled section (5 positions between 0 and 20°) to limit the drop height. Wall and product sensors are optional.

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DRUM MOTORS -

Below and in the middle. Only in 17 and 19 m belts.

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CHAIN -

For extending/retracting.

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LARGE WHEELS -

For stability and undisturbed filling (reliability) 285/17-R19,5.

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HYDRAULIC UNIT -

Variable wheel speed control + cylinder functions.



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Operating the machine

■ Line control

All machines start up one by one at the push of 1 button. The machine is always equipped with LineControl contact.

As such, the machine can be linked to all other machines in the storage line.

The Cobra store loader acts as the leading machine.

■ Control

The machine is operated by default from a 5" touch display and a wired remote control. All sensors and steps can be followed on the display, so that adjustments can be made quickly if necessary.

Optionally, a radio remote control can be added.



■ Automatic programs

Standard: A sensor on the pivot point detects the store loader's position. This allows the leftmost and rightmost teach points to determine the swivel range. Standstill at the teach point and retraction time can be set.

Auto I: Wall sensors are added when Auto program 1 is chosen. These sensors enable automatic pivoting between 2 walls.

Auto II: In addition to the wall sensors, Auto program 2 also includes product sensors and measuring sensors (extension and angle). As such, it is possible to pivot between virtual walls, to use a corner filling program and to adjust the height when filling the last layer.



Specifications / dimensions

General

- Robust hitch with double lip, easily demountable
- Swiveling PU support wheels for transport
- **Pivots on the tires (285/70R19.5):**
 - Both hydraulic driven, with disengagement for freewheeling during transport
 - From transport to pivot positions by means of a hydraulic cylinder
- Each wheel is equipped with a motor, which makes it possible to move the store loader in all circumstances
- Pivot point (Ø 280 mm)
- Rubber filling hopper
- Rubber conveyor belt supported by V-shaped rollers
- High cleats (15 mm chevron profile) with good dragging effect on potatoes
- 'Sliding' side walls
- 80-17 / 80-19: Driven by 2 Van der Graaf drum motors (2 x 4 kW)
- 80-15: Driven by 1 Van der Graaf drum motor (1 x 5,5 kW)
- Drum motors with slight rounding & coated on the drum
- Automatic belt control system
- Scraper on top roller and snub idler drum motor above and below
- V-shaped scraper in belt

Options

- auto wall II wall detection sensors
- scraper set (clay)
- radio remote control
- work lights
- coupling part
- switched socket
- wheel protection
- feeding conveyor belt

- Adjustable angled section (0-20°) on the top of conveyor belt (L 1,50 m)
- **Hydraulics:**
 - Pump unit for drive wheels (proportional), swivel <-> riding position, conveyor belt up down
- **Electrical:**
 - Necessary power supply 3 x 400 V + PE, 50/60 HZ, 32 A
 - Electric motors for driving hydro unit (2.2 kW), conveyor belt (drum motors), retracting/extending
 - Frequency control for belt drive
- **Sensors:**
 - Encoder on pivot point -> record teach points
 - Inductive sensor: measuring limit retracting and extending
 - Pressure sensors: supply pressure & wheel motors
- **Operation:**
 - Electrical cabinet with incoming plug 32A + phase changer
 - Features: start-stop & reset (with light indicator), emergency stop, buzzer
 - LC: 13-pin connector for coupling to other machines
 - 5" Touch display and wired keypad (10m)
 - 5" Display for all controls, information & error codes
 - Keypad: 15 features + emergency stop: conveyor belt on/off, belt speed, belt up/down, belt in/out, manual/automatic, turn <-> driving position, swivel left/right, drive left/right wheel - front/rear, teach positions and a selection button.
- **Automatic function standard machine:**
 - Limitation left right by setting teach points
 - Wait and retract at teach point
 - Safety by overpressure on wheel motors

COBRA	8015	8017	8019
Conveyor belt width	0.80 m	0.80 m	0.80 m
Length	15.00 m	17.00 m	19.00 m
Power voltage	400 V	400 V	400 V
Frequency	50 Hz	50 Hz	50 Hz
Power belt drive	1x 5.5 kW	2x 4.0 kW	2x 4.0 kW
Tyre size main wheels	285/17 R19.5	285/17 R19.5	285/17 R19.5
Belt speed	32- 126 m/min	32- 126 m/min	32- 126 m/min



Our KEEN & GREEN quality label indicates that our machines are equipped with techniques that promote durability and ease of use.

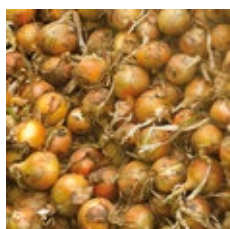
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■ **KEEN**

AVR never stops innovating and designs smart machines that make your work life easier and allow you to maximize your profits.

■ **GREEN**

Our machines are not only called green because of their striking color, but also because of their durability. The machines consume as little fuel as possible, and their solid construction ensures a very long lifespan. This means you will have recovered the costs of your investment in no time.



AVR bv, with head office in Roeselare, Belgium, manufactures a full range of machinery for the cultivation of potatoes as well as other bulbous and tuberous plants. From seed bed preparation, planting and ridging to haulm topping, harvesting and storing. Our mission is to help our customers store a higher percentage of sellable crops with less input. AVR strives to provide customers with maximum support by investing for instance in an extensive dealer network and a strong service department. AVR has 180 employees internationally, has a dealer network consisting of more than 100 dealers and had a turnover of 61 million euros in 2019.



www.avr.be

Ask for more information, we'll be happy to help you:

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