



**CMC INDUSTRIES**

Leading in Load Solutions



**Apollo Generation 2**  
Load Quality, the New Frontier.



## CMC INDUSTRIES. TWO DIVISIONS, ONE GREAT COMPANY

CMC Industries is an Italian company specialising in innovative conveyor solutions for the poultry and logistics industries. World leaders in the automatic loading of chickens and turkeys.

### POULTRY DIVISION

CHICKEN LOADERS  
TURKEY LOADERS  
FORKLIFTS  
ADDITIONAL EQUIPMENT

CMC transferred the skills and forty years of experience gained in machine design and construction of automatic belt transport systems, to the logistics sector: our second division.

### LOGISTICS DIVISION

EXPRESS COURIERS  
COMPLEX TRANSPORT SYSTEMS  
MOVING GOODS IN BULK,  
PARCELS AND PALLETS  
CUSTOMIZED SOLUTIONS

TO BE THE BEST THERE  
IS ONLY ONE THING  
TO DO: CONTINUE  
TO IMPROVE.



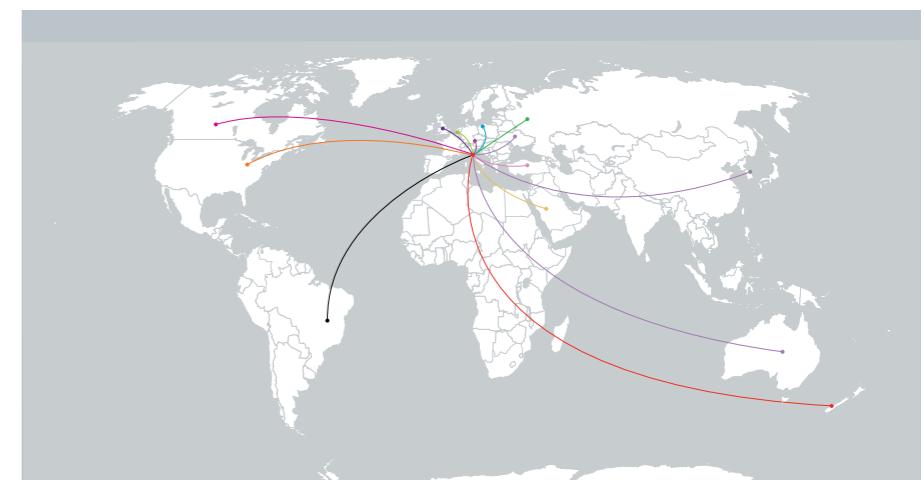
We are a dynamic company, always looking for service improvements and machinery innovations that will benefit our customers.

We are flexible and adapt to the needs of our extremely diverse customer base.

CMC Industries is a Company Member of EHEDG and follows the EHEDG guideline know-how.

## HERE ARE THE STATS.

- 40 years of experience
- 85% market share in the poultry division
- 57 patents registered since 1972
- 5% of turnover invested in R&D



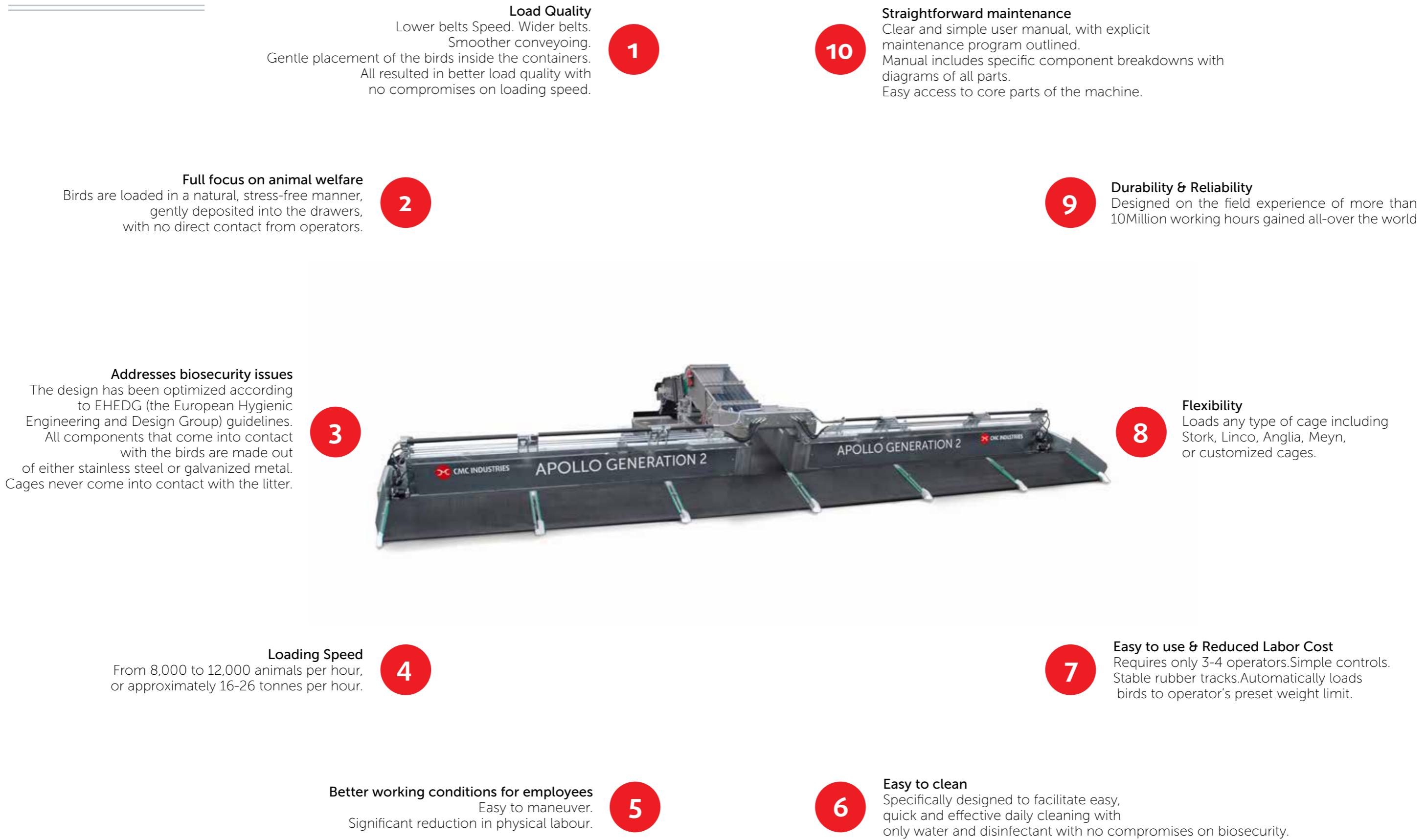
## ENVIRONMENTALLY FRIENDLY – IT'S IN OUR DNA.

- Photovoltaic system capable of producing 610,000 kWh/year
- Reduce our CO<sub>2</sub> emission by 268 tons annually
- 100% energy independent
- Respect of directives and European standards



Photovoltaic roofing of the Company

## APOLLO GEN2: STRENGTHS

- 
- Load Quality**  
Lower belts Speed. Wider belts.  
Smoother conveyoing.  
Gentle placement of the birds inside the containers.  
All resulted in better load quality with no compromises on loading speed.
- 1**
- Full focus on animal welfare**  
Birds are loaded in a natural, stress-free manner, gently deposited into the drawers, with no direct contact from operators.
- 2**
- Addresses biosecurity issues**  
The design has been optimized according to EHEDG (the European Hygienic Engineering and Design Group) guidelines.  
All components that come into contact with the birds are made out of either stainless steel or galvanized metal.  
Cages never come into contact with the litter.
- 3**
- Loading Speed**  
From 8,000 to 12,000 animals per hour, or approximately 16-26 tonnes per hour.
- 4**
- Better working conditions for employees**  
Easy to maneuver.  
Significant reduction in physical labour.
- 5**
- Straightforward maintenance**  
Clear and simple user manual, with explicit maintenance program outlined.  
Manual includes specific component breakdowns with diagrams of all parts.  
Easy access to core parts of the machine.
- 10**
- Durability & Reliability**  
Designed on the field experience of more than 10Million working hours gained all-over the world
- 9**
- Flexibility**  
Loads any type of cage including Stork, Linco, Anglia, Meyn, or customized cages.
- 8**
- Easy to use & Reduced Labor Cost**  
Requires only 3-4 operators. Simple controls.  
Stable rubber tracks. Automatically loads birds to operator's preset weight limit.
- 7**
- 6**

# How does Apollo Gen2 work?

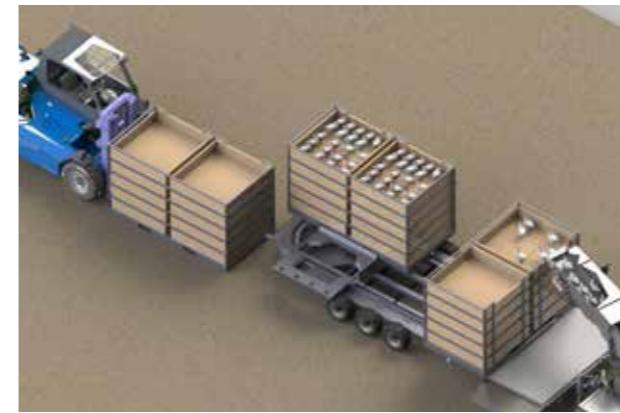
Simply.

## 1 CATCHING



The machine is stationed inside the poultry shed and prepared by opening the two wings of the front collection head, which are formed of individual blocks of conveyor belts. The operator starts the machine: Apollo activates the conveyor belts and slowly moves towards the animals, allowing them to climb onto the collection belts in a natural way that requires no mechanical force. These belts deposit the birds, without subjecting them to any sudden or stressful movements, onto the two transverse belts that lead to the central channel.

## 3 CAROUSEL



The containers are positioned on a carousel, which, with the aid of automatic movement, allows for a continuous loading process. This is where the core of the innovative animal weighing system is located, which allows for the instant verification that the correct weight of animals has been deposited into each crate. Once a module is full, it is then ready for collection by the forklift, which places it on the lorry outside the poultry shed.

## 2 CAGING



The animals then continue into Apollo's central channel, where they are carefully transported towards the caging area. Here, the caging belt directly deposits the birds into the container. With simple controls, the operator can raise or lower the belt, or move it nearer or further away. The new design of the machine ensures a stress-free caging process with reduced flapping and improved placement of the birds inside the drawers. Thanks to the automatic weighing system, the machine stops when it reaches the preset value, guaranteeing compliance with every regulation in force regarding animal density in the containers.

## APOLLO GEN2. WHY IT WORKS MORE EFFECTIVELY.

### Load Quality & Animal Welfare:

The new design and new technical features of the Gen2 represent a significant step ahead in terms of animal welfare and quality of the loading. The complete machine has been conceived based on 40 years of experience with the main objective on improving these aspects with no compromises on loading speed.

The increased width of all the belts allow to maintain the same loading speed performance but with a lower conveying speed. The inclination of the belts as well as all the drop between adjoining belts have been minimized for a smoother conveying. The 3's system (Soft Start and Stop) controls all the belts to gradually start and stop, allowing the birds to keep their balance during the loading. The caging arm design and process has been optimized allowing a very gentle placement of the birds inside the container drawers. All this has significantly contributed in the birds being subjected to a very low stress level and consequently to remain calmer during the entire loading process.

**Cleanability and Bio-security:** CMC Industries has been working on improving Cleanability and Bio-security, following the guidelines of EHEDG (European Hygienic Engineering and Design Group). Within this program, the entire design of Gen2 has been optimized and simplified to ensure a better access to all machine points and an easier cleanability of all components, resulting in faster and more effective cleaning process and in a improved bio-security.

**Consistent quality and quantity:** Apollo can load between 8,000 and 12,000 animals per hour, which is equal to 16-26 tonnes per hour, depending on the weight of the animals, the type of container, the speed of the forklift and the distance travelled. Apollo's weighing system guarantees that the correct quantity of chickens is deposited into the containers with quick, high-quality continuous loading. This significantly improves logistics inside the slaughterhouse.



## All the answers for your questions.

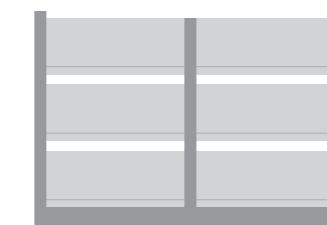
### IS APOLLO GENERATION 2 A QUALITY PRODUCT?

Most definitely. Apollo Generation 2 adheres to the strictest quality standards imposed by the leading food sector companies across the world.



### WHICH TYPES OF CONTAINERS CAN I USE?

Any type. Apollo Generation 2 uses the most common containers available on the market - including Stork GP, Meyn, Lincoln, Anglia - but can also take cages constructed on site. Different types of containers can even be used during the same loading session: a simple computer command is all it takes.

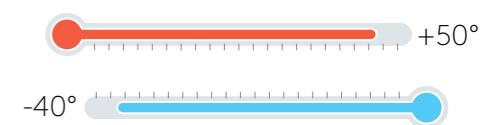
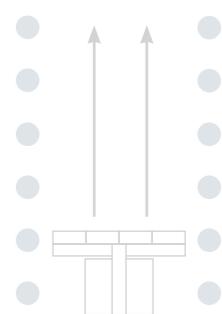


### WHAT HAPPENS IF MY POULTRY SHED HAS PILLARS INSIDE?

### WHAT IF IT GETS VERY COLD OR VERY HOT?

### AND IN TERMS OF CLEANING?

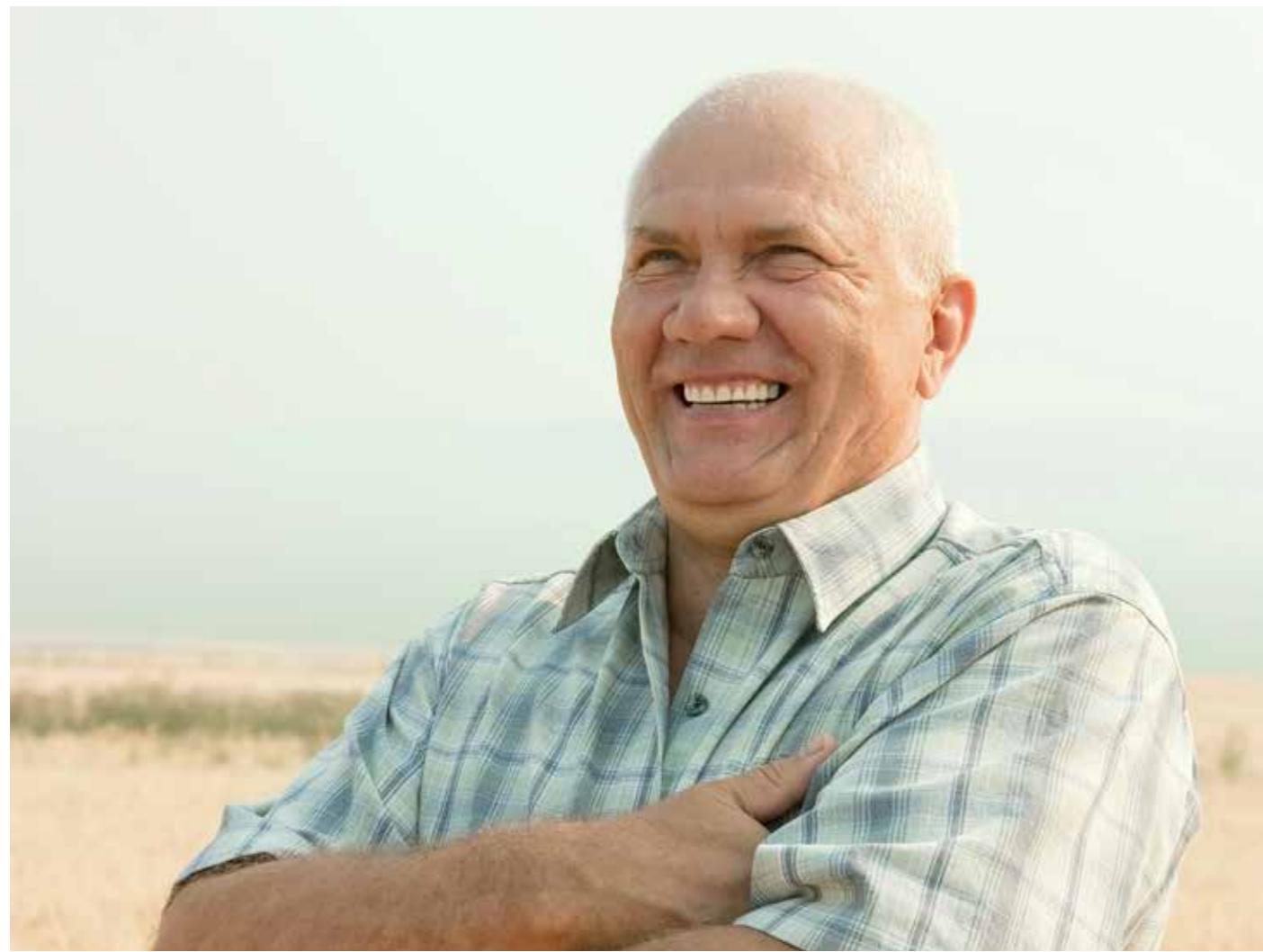
Thanks to the front-loading system, Apollo Generation 2 can easily move along different corridors.



Apollo Generation 2 works very well between temperatures of -40° C (-40° F) and +50° C (122° F).

Apollo Generation 2 has a fully galvanised body and its main components are made from stainless steel, making the machine very easy to wash and disinfect. All of this leads to a significant increase in Biosecurity.





## AFTER DELIVERY, YOU CAN STILL COUNT ON US.

We don't just sell equipment to our customers. We make sure they know how to maximize their returns by training them how best to use and maintain their CMC machinery.

**Training:** Either at our facility or on-site at the customer's location, we organise courses for the operators and technicians who will be using the CMC machines. We want to make sure that the people on the front lines are comfortable with the equipment, and understand its capabilities and best practices.

**Assistance:** In the event of an accident or breakdown, our customer service will be there to help. We are ready with technical support, spare parts and

the benefit of all our experience. We guarantee maximum efficiency and peace of mind, always.

**Consulting:** We are ready to face any kind of problem, together with our customers. We approach new challenges as an opportunity for further growth. Because of this, we offer advice, expertise and design solutions to meet even the most varied needs.

### PERFORMANCE

Machine start-up time	5 minutes
Operatos	3-4
Load quantity	From 16 to 26 tonnes/h
Machine weight*	5,370 kg - 11838 lb
Carousel Weight	2,200 Kg - 4,850 lb

### ENGINE

Model	Kubota 2203 M
Maximum power	35,9 kW (48 Hp)
Revolutions per minute	2,600 max. 3,000
Functioning	4 stroke diesel
Cooling	liquid
Number of cylinders	4 in line
Cylinder capacity	2,200 cc
Consumption	4 l/h - 1,05 g/h

### TRANSMISSION

Double hydrostatic pump with variable cylinder capacity	21cc + 21cc
Hydraulic dual speed piston motor	
Joystick-controlled movement	
Hydraulic system	Electrohydraulic parking brake
Double hydraulic circuit	32 lt. 160 Bar - 22 lt. 160 Bar

### RUBBER TRACKS

Rubber tracks with internal steel structure width	450 mm
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### REFUELING

Fuel tank	93 l - 24,55 g
Hydraulic tank	93 l - 24,55 g

### STANDARD EQUIPMENT

Harvesting head	From 3 to 9 m
Container carousel	
Special long-life bearings, triple protection, resistant to washing with high pressure water	

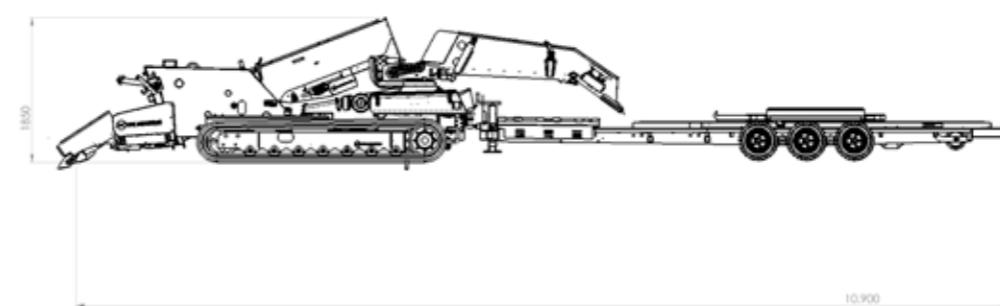
### OPTIONAL EXTRAS AND ACCESSORIES

Front steering	
Harvesting head hydraulic hitch	
Hydraulic oil ATF XT II for low temperatures	

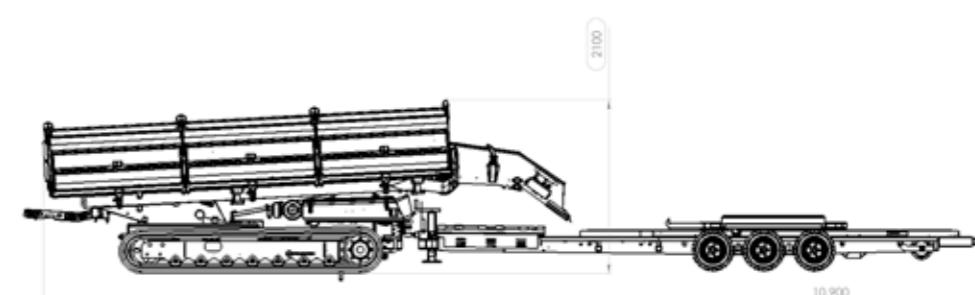
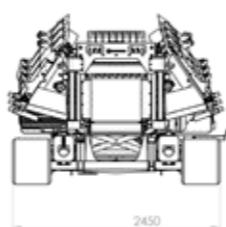
### ADDITIONAL INFORMATION

Frame	Hot-dip galvanised steel and stainless steel
Cleaning	High pressure air and water
Push Button	IP 69 K

\* Based on a machine with 9mt wide harvesting head



Apollo with CR2 Carousel 3 positions



PATENTED  
SYSTEM

