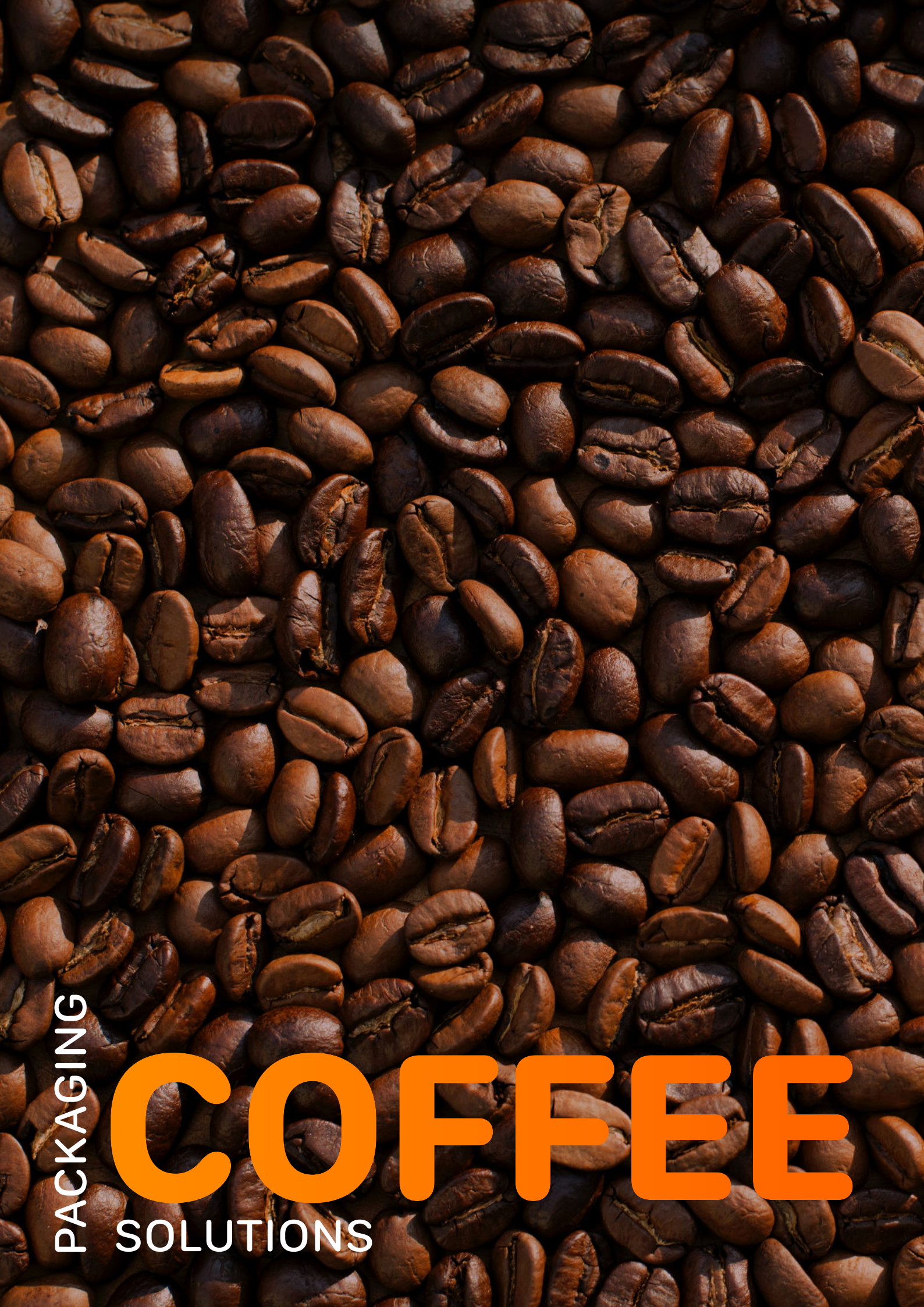


WE PACK
YOUR
FUTURE



ENG - Coffee



PACKAGING

COFFEE

SOLUTIONS



WELCOME IN COMEGA

For over 15 years, Comega has been a partner of excellence in the production of packaging machines and turnkey lines, from secondary packaging to end-of-line palletizing.

The use of modern product handling technologies, not least the most advanced robotics to guarantee efficiency and versatility, allows us to respond adequately to the different market needs in the various industrial sectors, with adaptable and customizable solutions according to individual needs.

Customer satisfaction and human capital are primary values which drive Comega investments, with a view to continuous growth.

DESIGNED FOR OUR CUSTOMER

We put our customer at the center of all our activities to offer innovative and high quality products and services that can best meet his needs.

The Comega technical team is available to its customers to give valuable support in the study of project data and to best advise in the choice of materials and packaging for perfect machinability, in full compliance with the required standards for quality, operating and sustainability, also in terms of energy saving. Maximum reliability and user friendliness are elements that distinguish the Comega technical solution through dedicated construction techniques and premium brands components.

THE STRENGTH OF THE GROUP

In 2020 Comega was acquired by BIPRES SPA and this new structure has favored a renewed momentum of the company by creating new important opportunities.

The group that was formed created a system that favors synergies within its divisions, optimizing the efficiency of the various business units by strengthening individual skills, to ensure a product and service with high added value and extremely beneficial for its customers

Transversal functions and departments are made available to Comega – sheet metal processing and machining, painting and mass assembly – guaranteeing total control of production and quality, from the single component to the complete machine

In this new context, it becomes easy for Comega to focus on its engineering and R&D departments, making full use of the know-how and long experience acquired over the years by the group, to position itself on today's market as the ideal supplier for the development, design and assembly of high-quality, state-of-the-art turnkey machines and systems.

Gemini 120

TOP-LOAD CARTONER FOR COFFEE CAPSULES

Gemini 120 is the range of cartoners designed and engineered by Comega for the **ordered insertion** of coffee capsules in cartons from flat blanks



3 SCALABLE MAGAZINES

Each dedicated for flat blanks, honeycomb, interlayer

CAPSULES COMPATIBILITY

Nespresso

RAW MATERIAL

Aluminum, plastic, compostable

INFEEED OUTPUT

Max 120 capsules/minute

CARTONS DIMENSIONS

Min L155 x W80 x H30 mm
Max L155 x W80 x H150 mm

MAGAZINE CAPACITY

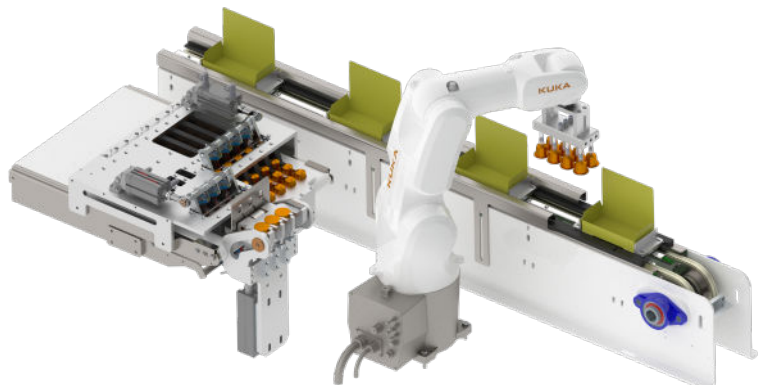
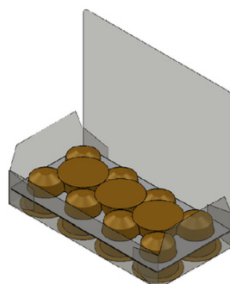
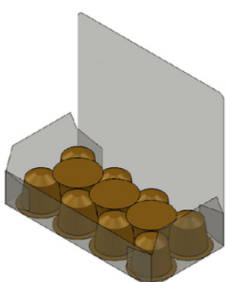
1100 flat blanks

The philosophy which stands behind the Gemini concept is a machine with reduced operation costs to allow our customers short terms return of investment and increase profit

SOME EXAMPLES OF CARTONS

Single Layer

1 Layer with Honeycomb



Gemini 120

TIMING AND PREPARATION OF CAPSULES

In total safety, with guided and controlled system and capsule orientation "Easy tilting" for pattern 8+2 and 8+3

CARTON ERECTION

By means of vertical pusher

CAPSULES FILLING INTO CARTON

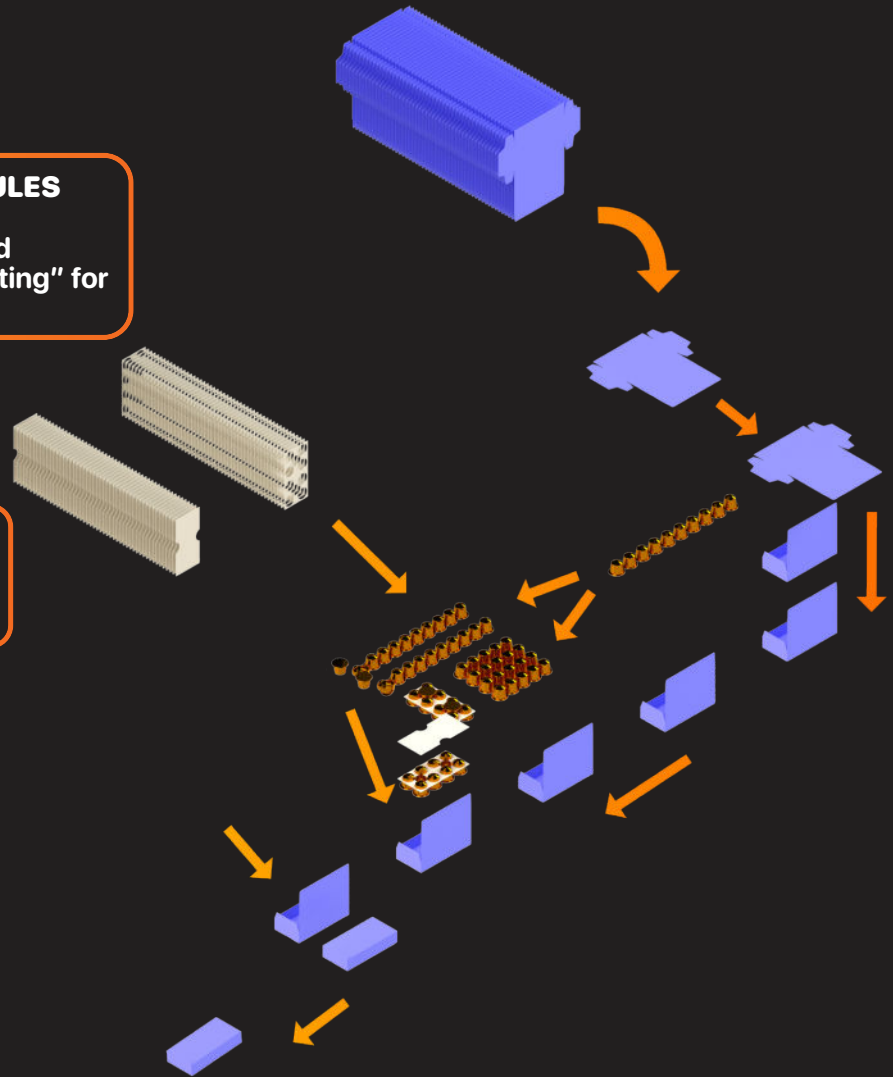
Handling via "Smarty", with anthropomorphic 6 axis robot

CARTON CLOSING

Hot melt, with compression for perfect squaring and sealing

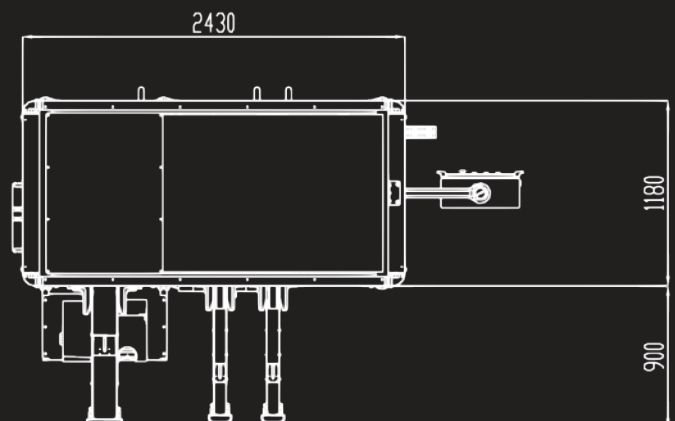
NUMBER OF LAYERS

From 1 to 5, with honeycomb and interlayer, on request



Plus

- Guarantee of capsules quality and integrity
- Low maintenance need
- Quick and easy size changeovers
- Maximum reliability and efficiency
- Extreme reduced footprint
- Full visibility of all interior components
- Integrated module for remote access



SOLUTIONS Gemini DG 360

CAPSULES TRANSFER TO FILLING UNIT

"Brushy-in" is an innovative and smart concept to bring the capsules from the lower level to the hopper infeed station. Capsules flow is managed by a dedicated software to ensure correct timing with capsules drop sequence

CARTON ERECTION

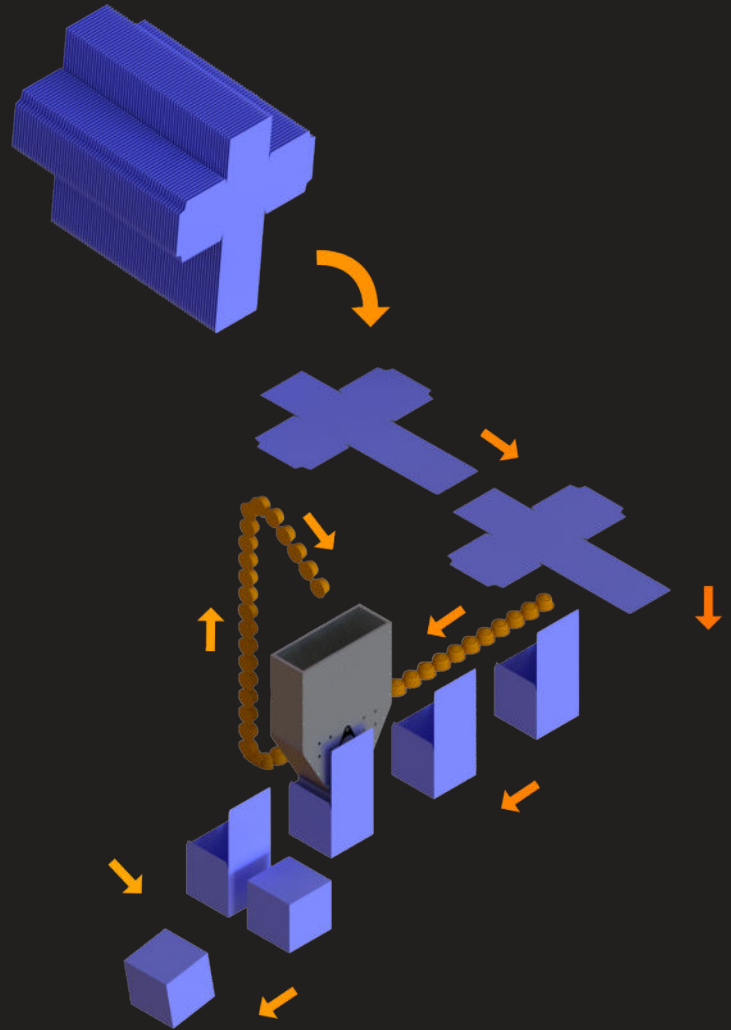
By means of vertical pusher

CAPSULES FILLING INTO CARTON

Capsules are dropped randomly into the carton at the requested quantity. Counting is performed by a dedicated counting device at the hopper infeed

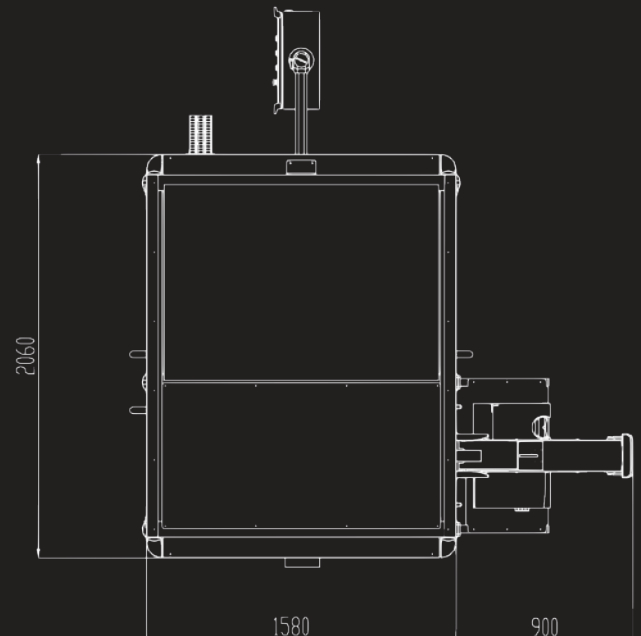
CARTON CLOSING

Hot melt, with compression for perfect squaring and sealing



Plus

- Guarantee of capsules quality and integrity
- Quick and easy size changeovers
- Low maintenance need
- Maximum reliability and efficiency
- Extreme reduced footprint
- Full visibility of all interior components
- Integrated module for remote access





Gemini DG 360

TOP-LOAD CARTONER FOR COFFEE CAPSULES

Gemini DG 360 is the range of cartoners designed and engineered by Comega for the **random insertion** of coffee capsules in cartons from flat blanks



CAPSULES COMPATIBILITY

Dolce Gusto

RAW MATERIAL

Plastic, compostable

INFEEED OUTPUT

Max 360 capsules/minute

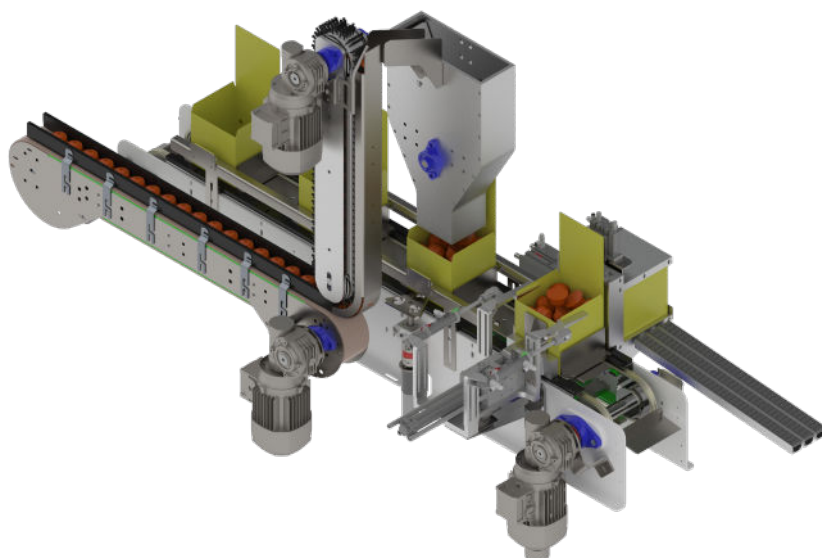
CARTONS DIMENSIONS

L120 x W120 x H120 mm (16)
L150 x W150 x H150 mm (30)

MAGAZINE CAPACITY

For flat blanks, 1100 cartons

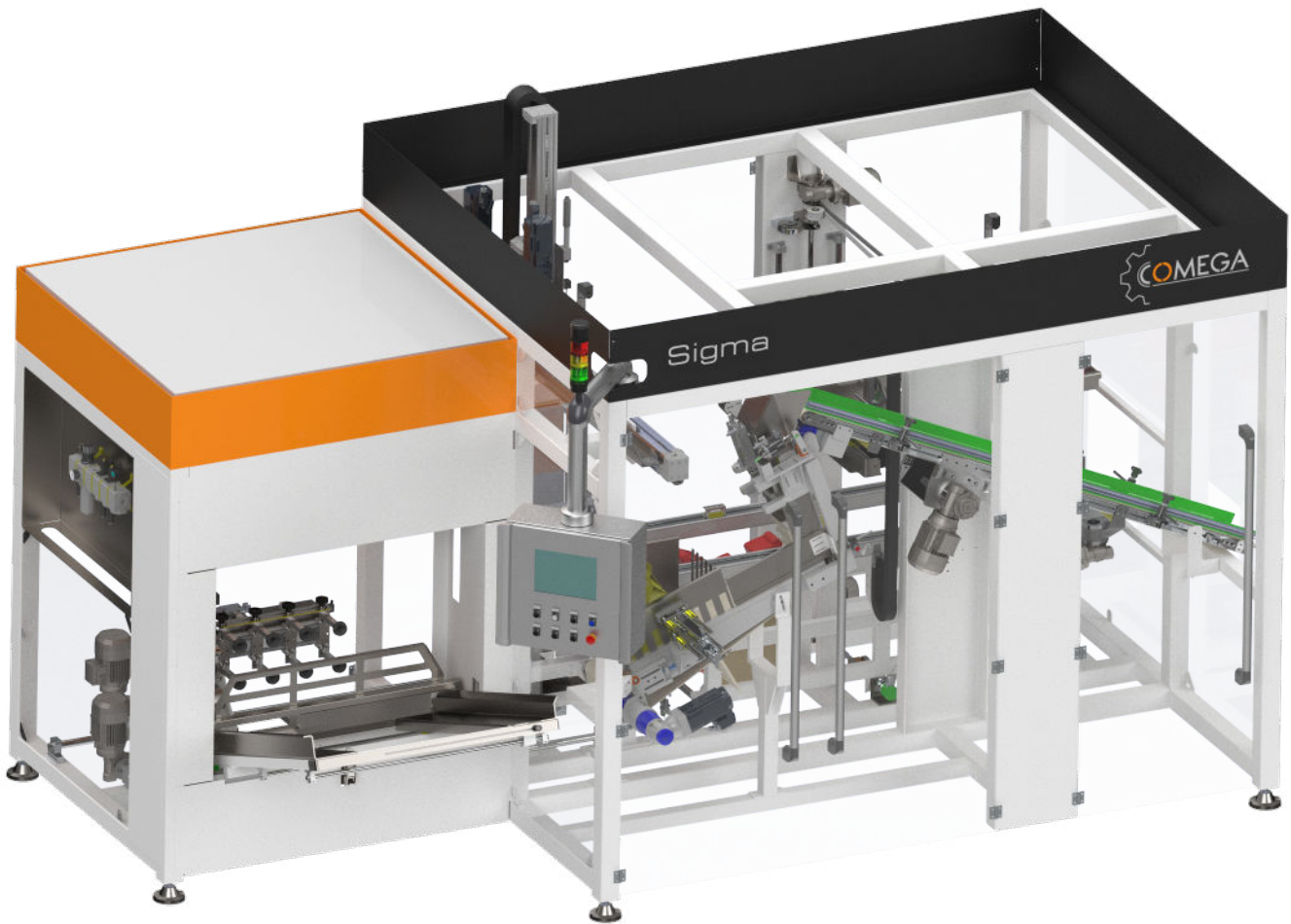
The philosophy which stands behind the Gemini concept is a machine with reduced operation costs to allow our customers short terms return of investment and increase profit



Sigma 10

TOP-LOAD CASE PACKER FOR COFFEE BAGS

Sigma is the range of top load case packers designed and engineered by Comega for insertion of bags in RSC cases in vertical position



Automation is not only a question of reducing labor and improve ergonomics, but also a way of increasing safety and quality of the finished products for the consumers

TYPE OF BAGS

Gable top, double flat bottom

BAGS FORMATS

Up to 1000g

INFEED OUTPUT

60bags/min - pattern 1x6, 1000g

OUTFEED OUTPUT

Max 10 cases/minute

CONFIGURATION IN THE CASES

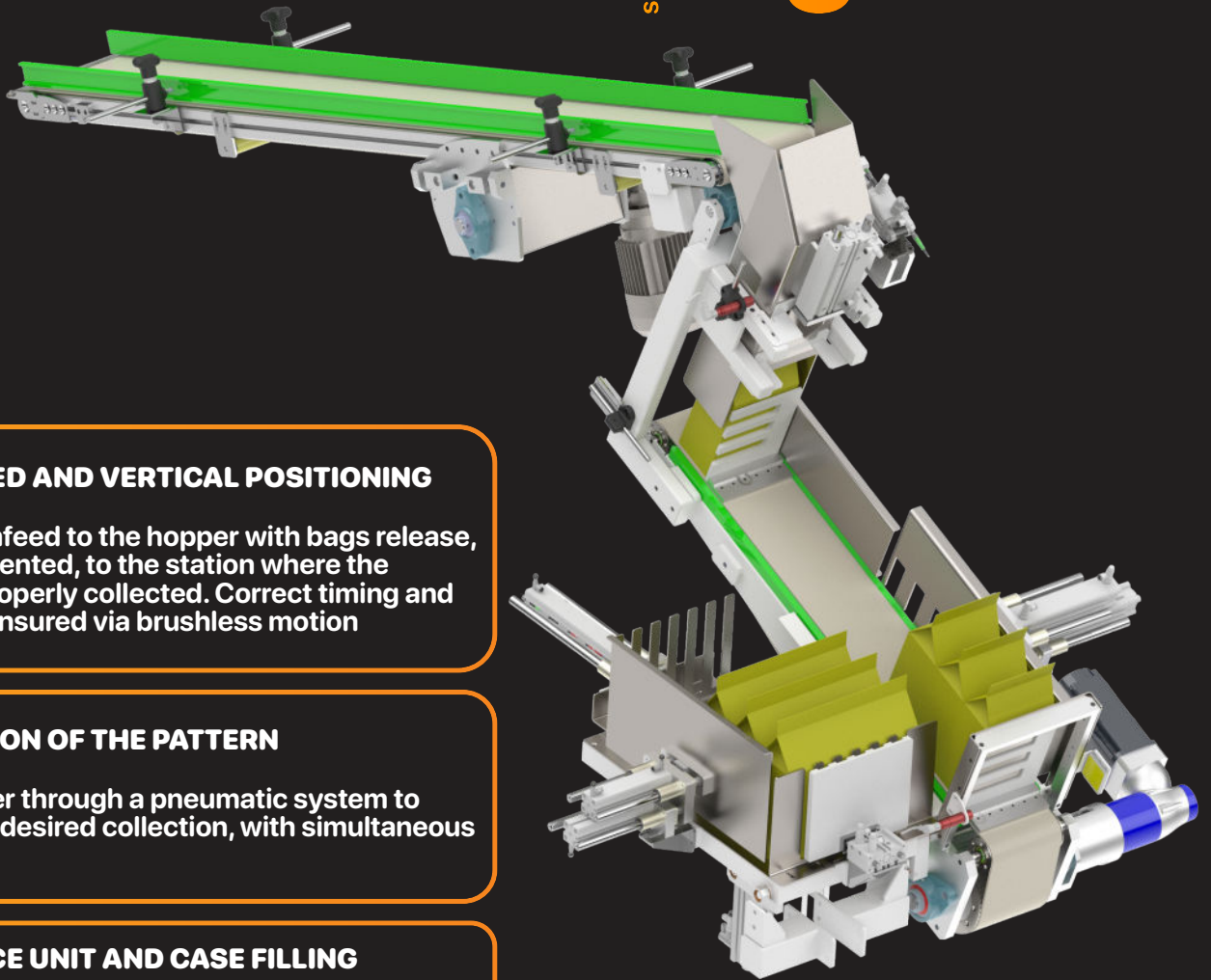
Stand up, in the different patterns

CASES DIMENSIONS

Min L220 x W150 x H210 mm
Max L600 x W400 x H400 mm



SOLUTIONS Sigma 10



BAGS INFED AND VERTICAL POSITIONING

Single line infeed to the hopper with bags release, vertically oriented, to the station where the pattern is properly collected. Correct timing and line flow is ensured via brushless motion

PREPARATION OF THE PATTERN

Bags transfer through a pneumatic system to perform the desired collection, with simultaneous movements

PICK&PLACE UNIT AND CASE FILLING

Dedicated gripping unit mounted on 2 linear axis arm

CASES MAGAZINE CAPACITY

120 cases, with ergonomic loading access by operator

CASE ERECTION

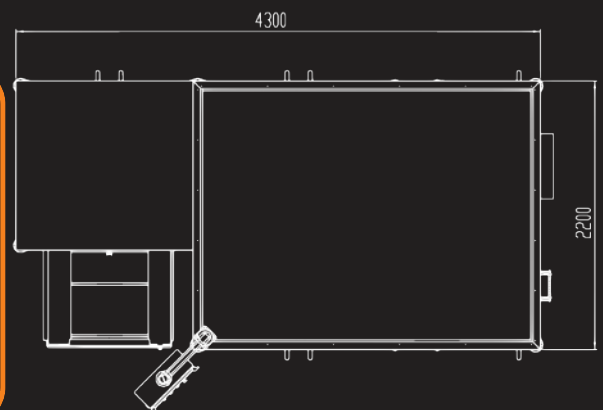
Vertical and positive case forming

CASE CLOSING

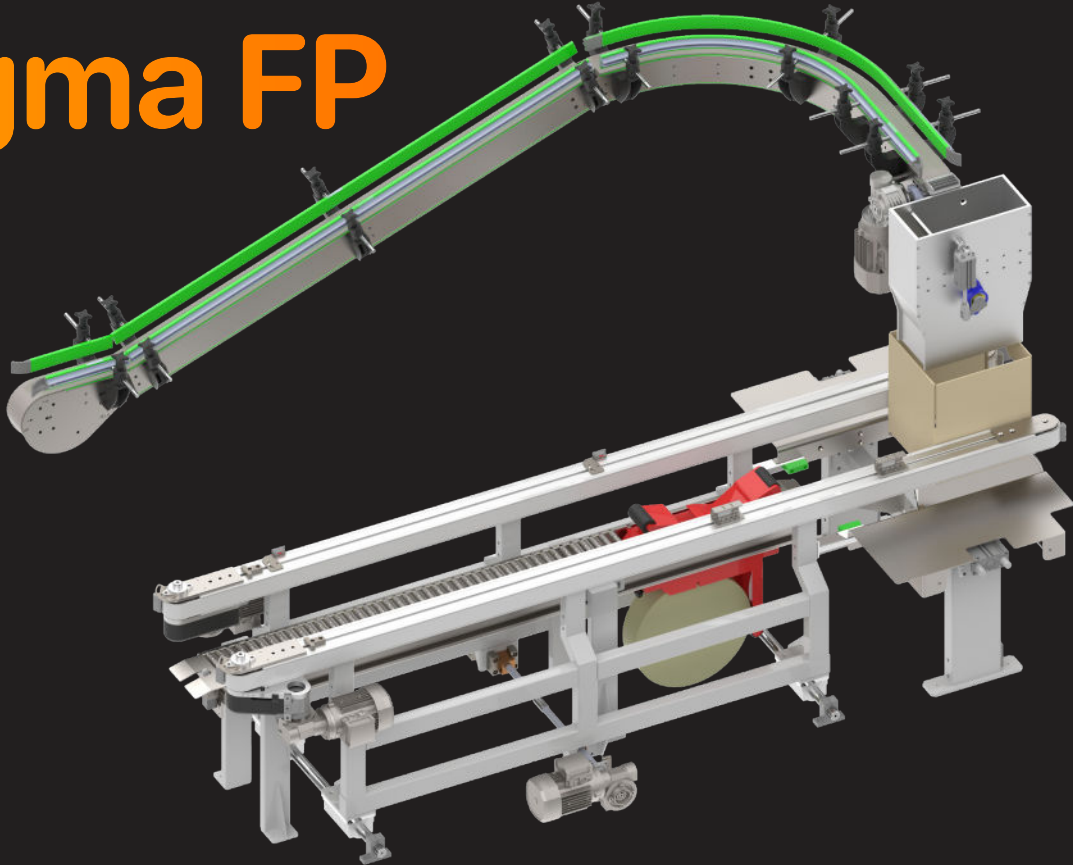
By tape or glue, with guaranteed perfect squaring

Plus

- Guarantee of product quality and integrity
- Flexible configurations and user-friendly programming
- Low maintenance need
- Maximum reliability and efficiency
- Consistent collection and accurate positioning
- Work ergonomics loading of cases magazine
- Integrated module for remote access



Sigma FP



PRODUCT INFEEED

Transfer of the product from the upstream line, in single row to the filling hopper, positioned on the upper level, for random release

HOPPER

Double bulkhead hopper for the simultaneous action of product filling and release, in the exact quantity into the cases

CASE ERECTION

Vertical and positive case forming

CASES MAGAZINE CAPACITY

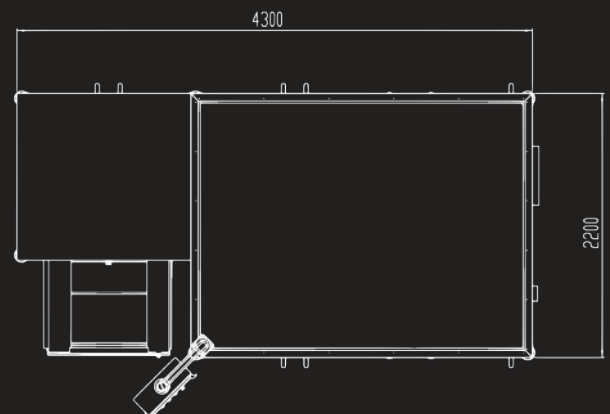
120 cases, with ergonomic loading access by operator

CASE CLOSING

By tape or glue, with guaranteed perfect squaring

Plus

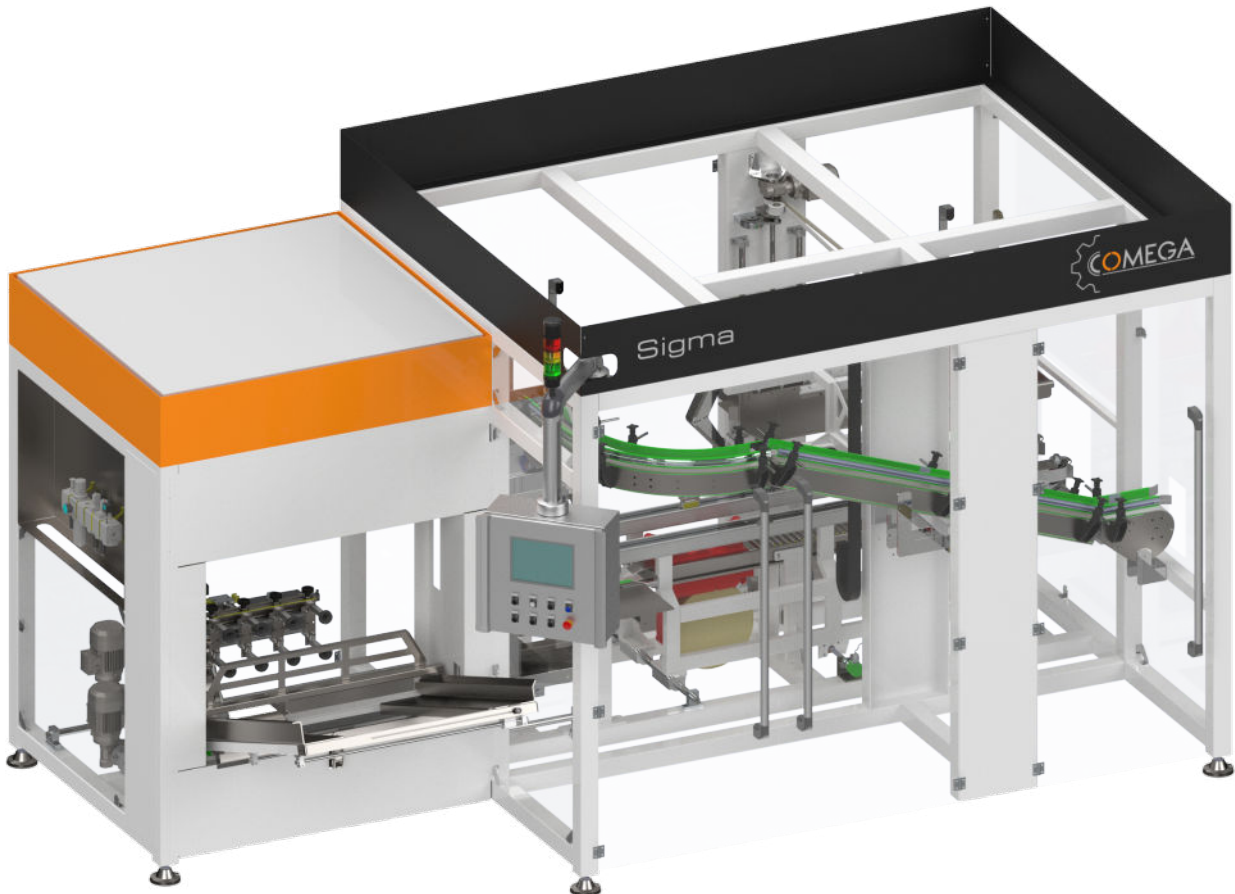
- Guarantee of product quality and integrity
- User-friendly programming
- Maximum reliability and efficiency
- Low maintenance need
- Easy to use
- Work ergonomics loading of cases magazine
- Integrated module for remote access



Sigma FP

TOP-LOAD CASE PACKERS FOR FLOW PACKS OF CAPSULE

Sigma FP is the range of top load case packers designed and engineered by Comega for the random insertion of flow packed coffee capsules in RSC cases



Automation is not only a question of reducing labor and improve ergonomics, but also a way of increasing safety and quality of the finished products for the consumers



TYPE OF SACHETS

Flow pack

CASE DIMENSIONS

Min L220 x W150 x H210 mm
Max L600 x W400 x H400 mm

INFEEED OUTPUT

Max 500 flow packs/
minute

OUTFEED OUTPUT

Max 10 cases/minute

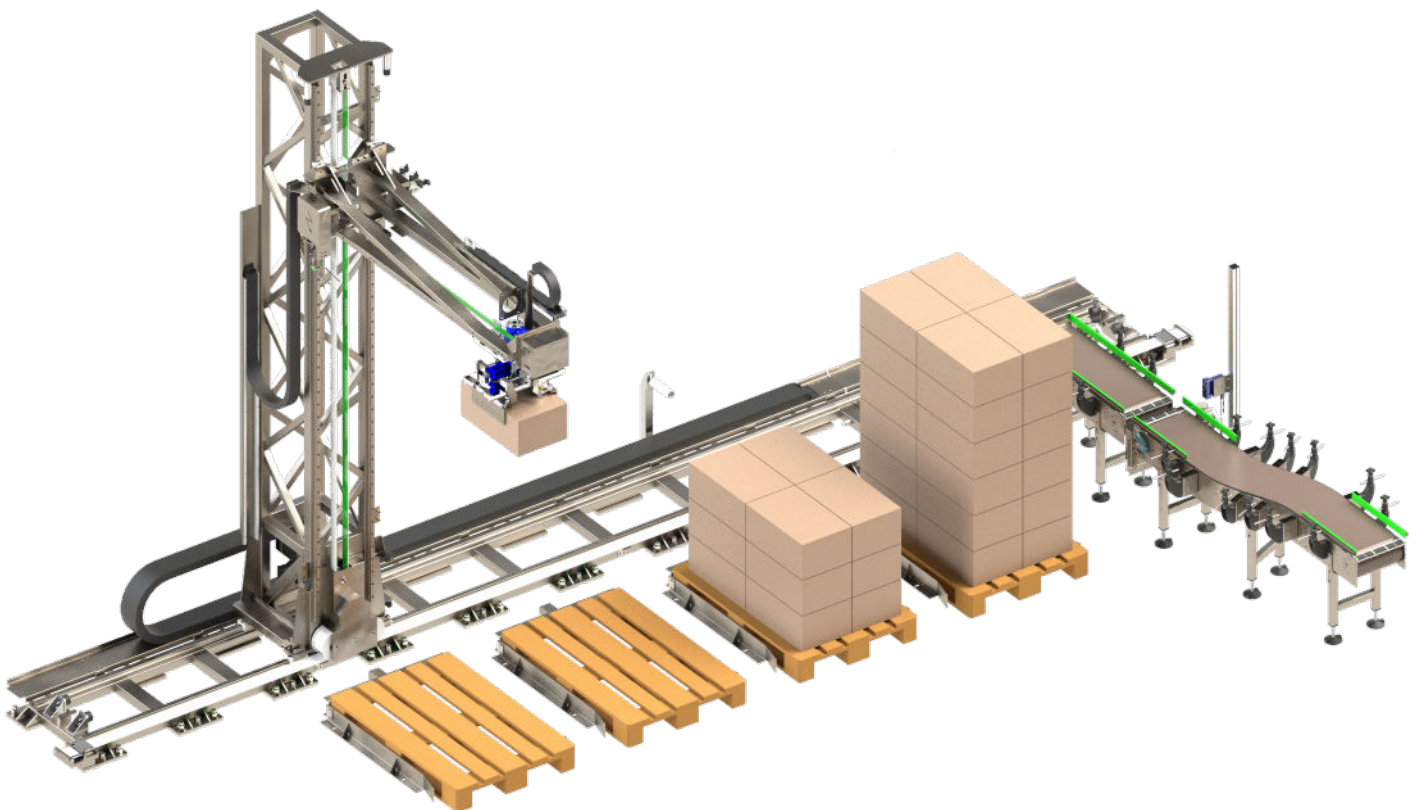
Virgo

COLUMN BASED PALLETIZER

Virgo is the range of palletizers which Comega dedicates to the coffee industry for its end-of-line solutions, to ensure the maximum level of **scalability**

Its gripping unit and software are designed and conceived 100% internally by Comega, for **highest flexibility** and conformity to the specific needs and quality standards

The drives unit is located at the base of the column to facilitate maintenance operations and ensure work ergonomics



TYPE OF PACKAGING

Virgo can handle both cardboard and plastic cases, even simultaneously

PALLETS DIMENSIONS (mm)

800x1200; 1000x1200; 1200x1200

Simultaneously, where necessary

MAX CAPACITY

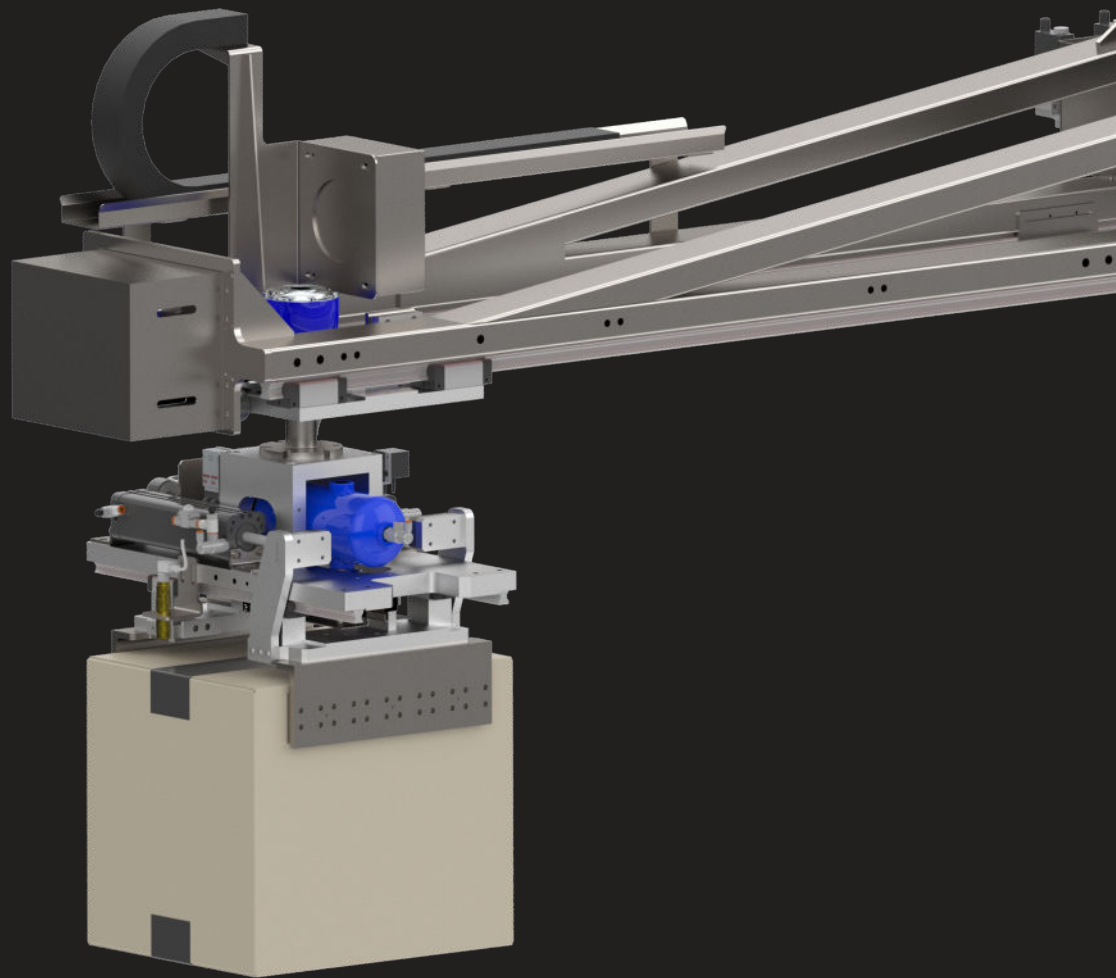
480 cases/hour

SCALABLE SOLUTION

From 1 to 10 pallet positions

4 axis palletizer, via brushless motors
Available also in stainless steel

The use of the most advanced technologies allows us to respond to today's needs for standardization and automation of product handling processes to significantly reduce the labor costs associated with manual operations, also to the benefit of operator safety

**DEDICATED SOFTWARE**

Data collection for statistical analysis of production and line efficiency

RFID SYSTEM

Operator recognition via smart card: maximum safety and access management, data tracking

CUSTOMER SERVICE

Via online connection

INTEGRATION COMPATIBILITY

Deposit bays, empty pallet warehouse, interlayer picking, automatic pallet exits, and much more

PALLET CONFIGURATION

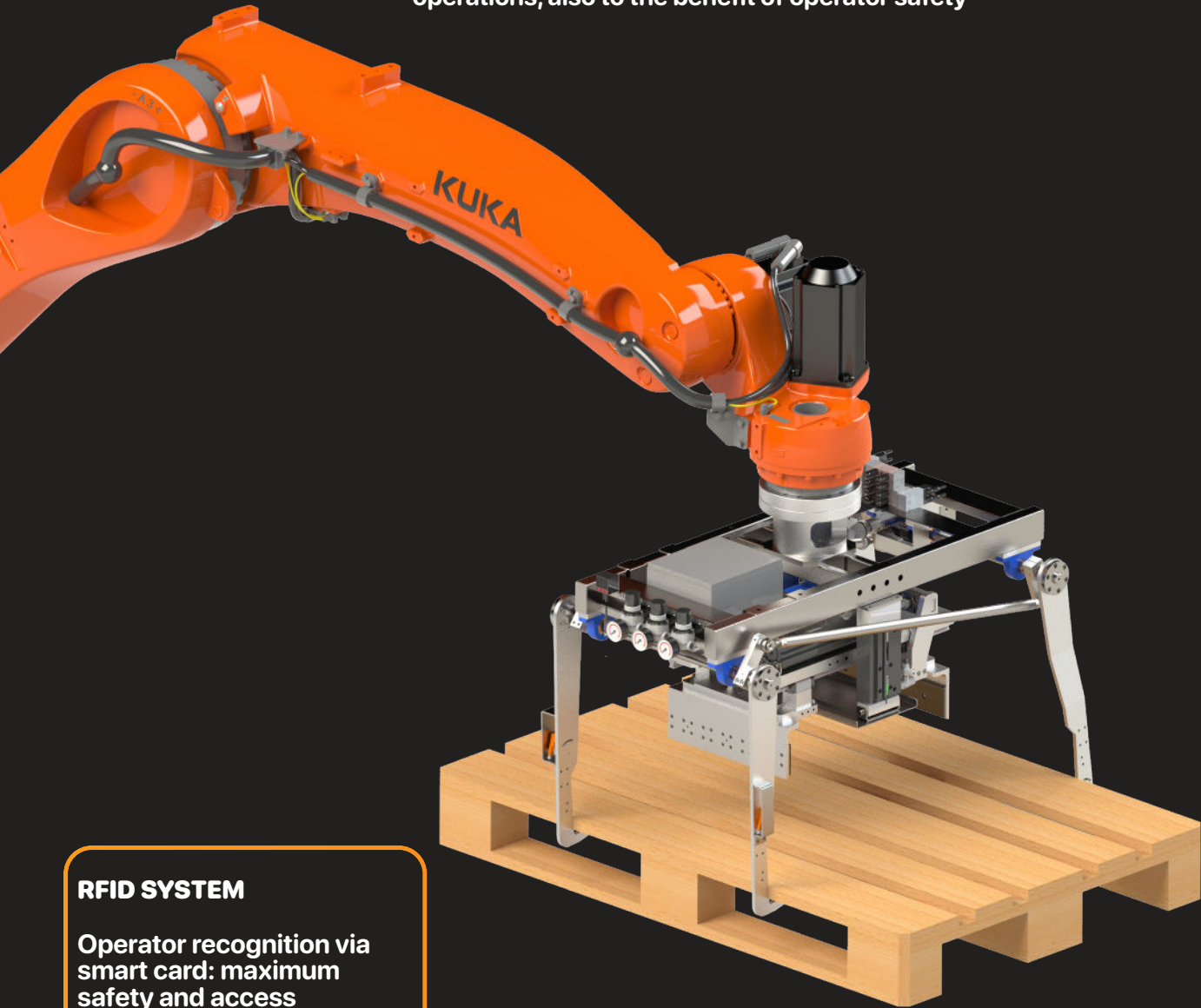
Customized, with possible gripping unit rotation for cross matrix

REDUCED OVERALL DIMENSIONS

Possible installation close to existing walls, to make room for storage of finished products

SOLUTIONS Aries

The use of the most advanced technologies allows us to respond to today's needs for standardization and automation of product handling processes to significantly reduce the labor costs associated with manual operations, also to the benefit of operator safety



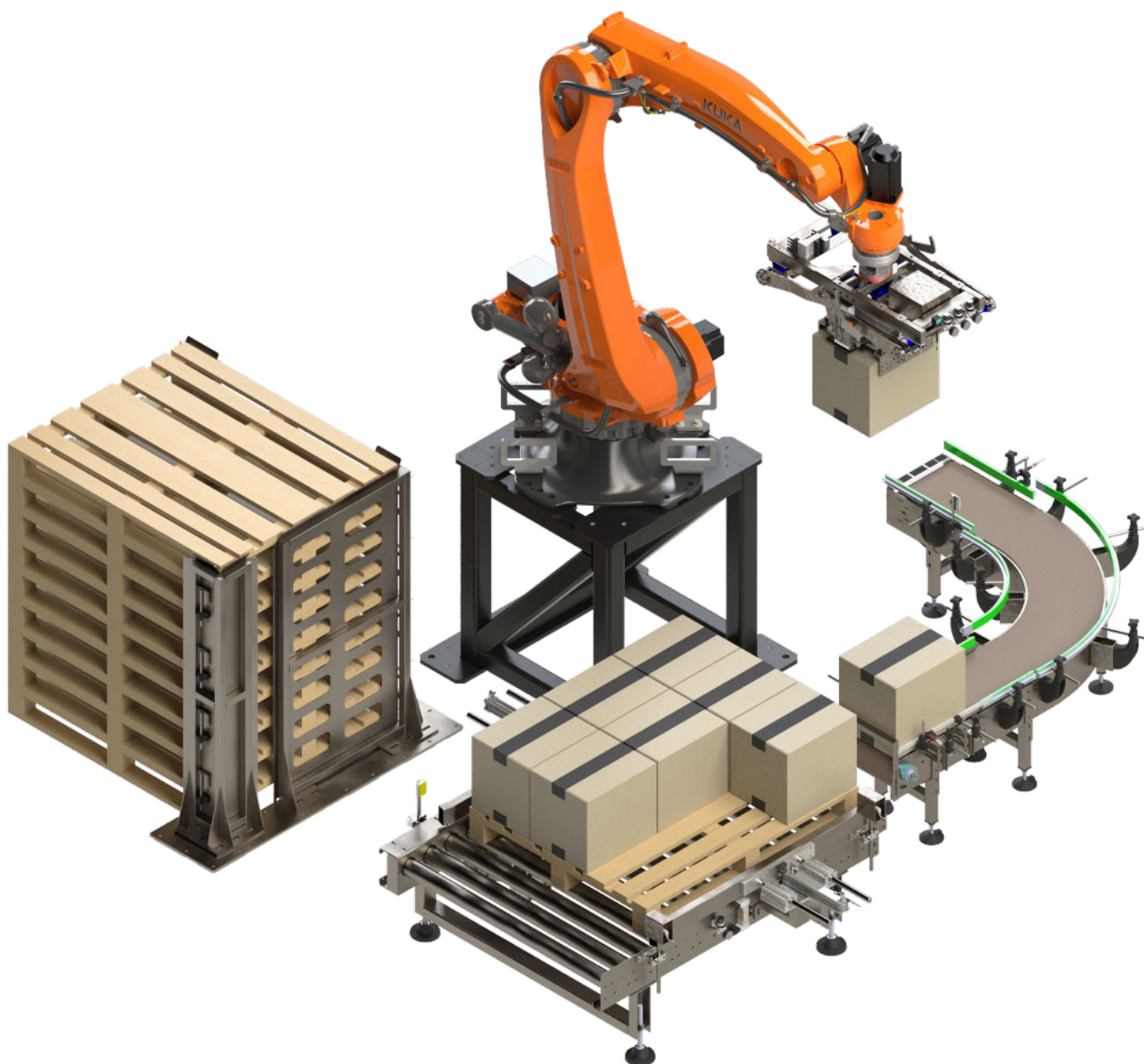
RFID SYSTEM

Operator recognition via smart card: maximum safety and access management, data tracking

- Layers and configuration management to correctly handle crossed patterns, complete or partial loads, with tilting of products where necessary
- Operator's full safety as each palletizing area is enclosed within safety barriers and automatic doors access
- Dedicated gripping unit to handle any type of product
- Suitable for different pallets dimensions and interlayers, with accurate and constant positioning over the time
- Easy programming and quick changeovers with no need of mechanical adjustments
- No deformation of products during product manipulation to ensure total integrity

Aries

AUTOMATIC ROBOT PALLETIZER



Aries is the range of Robotic palletizer which Comega dedicates to the end of line in the coffee industry by providing dedicated layout solutions with single or multiple palletizing areas

Comega integrates **anthropomorphic robots** of premium brand manufacturers where the gripping unit and the software, entirely designed and conceived by it's internal Engineering department, ensure maximum flexibility and conformity to the specific needs and quality standards

The preparation of the products takes place through **different handling system** for single or multiple product picking and dedicated packs orientation device are used where necessary

Integration of OEM'S equipment is also possible to comply with the request of each customer specifications and product needs

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