



LEADERS  
INNOVATE.

- CFT DIVISION -

▶ **PRODUCT TREATMENT**  
OVERVIEW





- TUNNEL PASTO-COOLER
- SPIRAL SOLUTIONS
- IQF FREEZER
- STERILIZATION/RETORTS
- DRYING SOLUTION



- FRESH-CUT and SALAD LINE
- POTATO & CARROT LINE
- FROZEN VEGETABLE & FRUIT LINE
- SPINACH LINE
- CHIPS & FRENCH-FRIES
- LEGUME/PULSES
- PESTO & PICKLES
- SOUP & FORMULATED

## PRODUCT TREATMENT

CFT Group Product Treatment division provides complete solutions for fresh and pre-cooked vegetables and thermal treatment both for non-packaged and packaged products. The new Product Treatment division provides machinery and complete solutions through the integration of technologies and expertise provided by our affiliate brands LABS, LEVATI and MECPARMA, supported by a dedicated team of persons with consolidated and proven experience, with hands-on approach for each specific application. With a new commercial partnership with Naddeo Technologies, born a new proposal CFT/NADDEO with the aim to grow in fresh-cut and salads equipment.

# ADULT SALADS

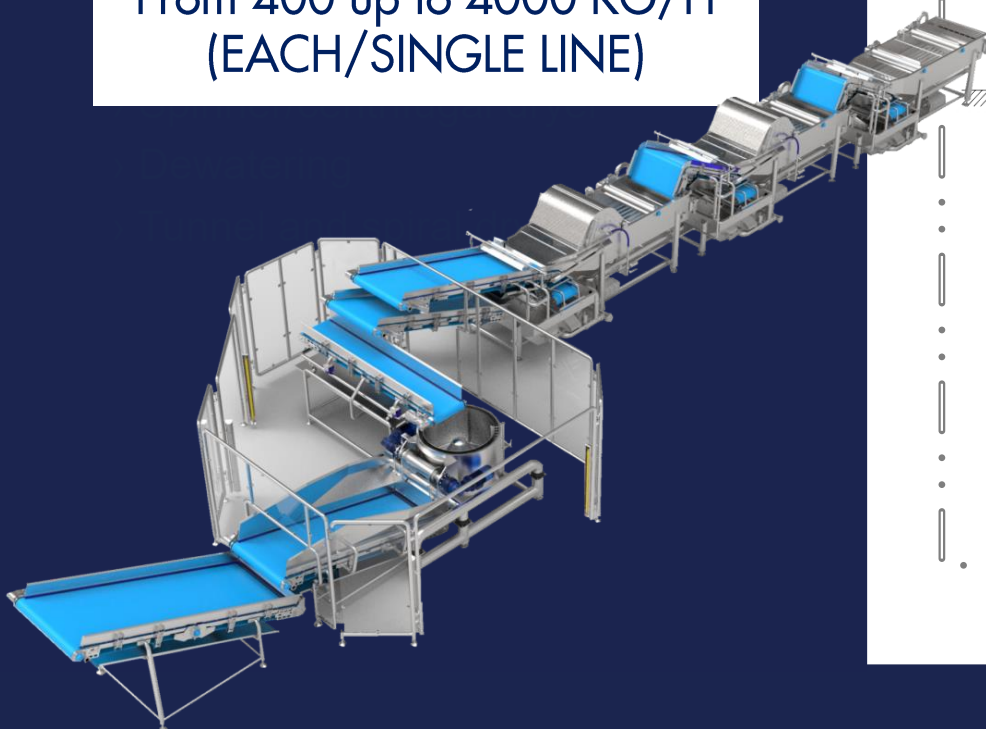
(4<sup>th</sup> RANGE)

Complete solutions for fresh-cut and mix preparation for ADULT SALAD both fresh and ready to eat.



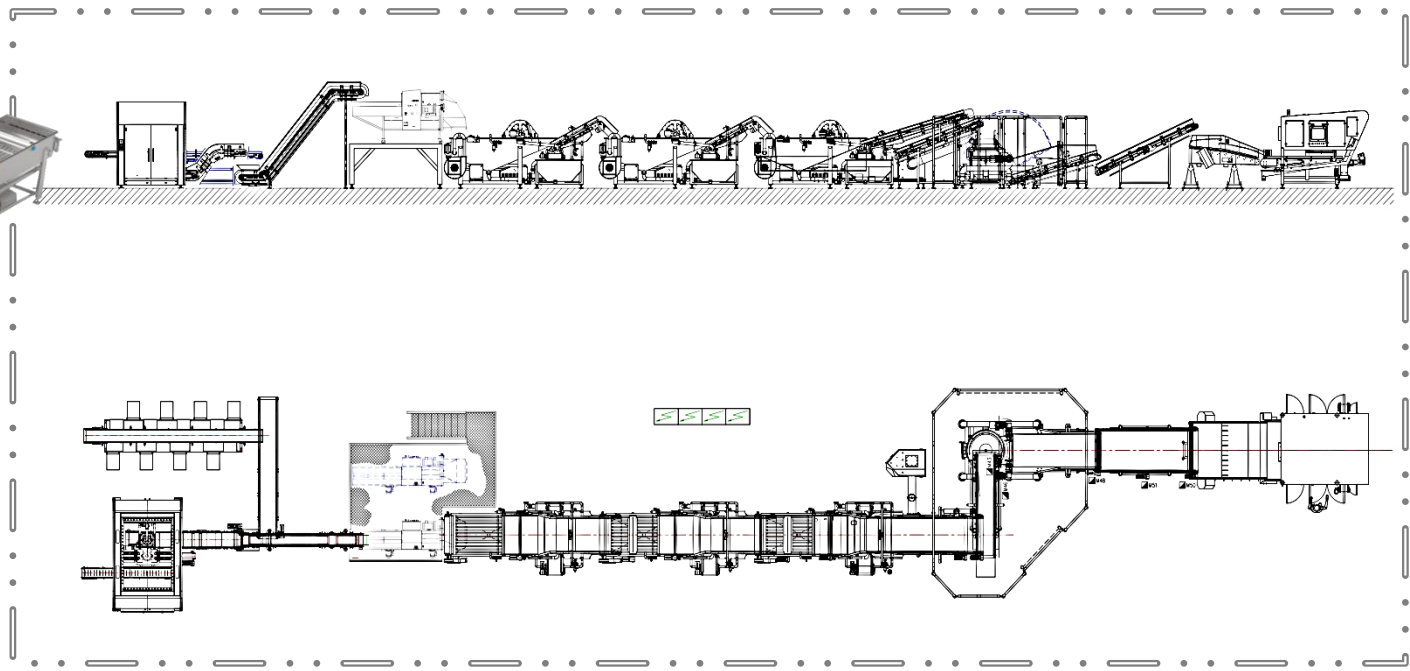
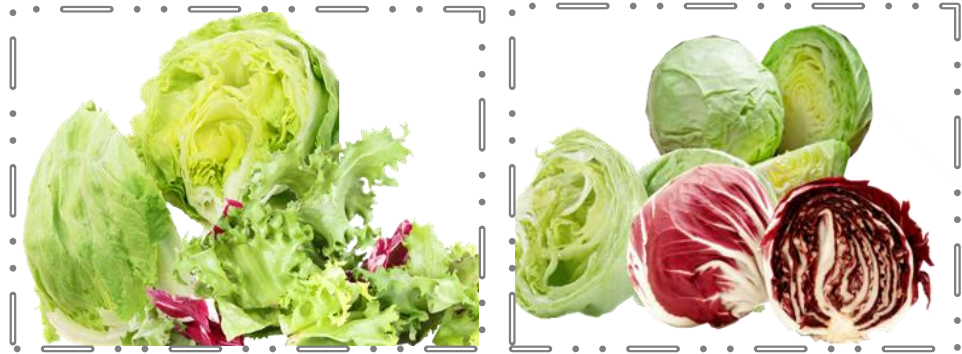
▶ CAPACITY RANGE

From 400 up to 4000 KG/H  
(EACH/SINGLE LINE)



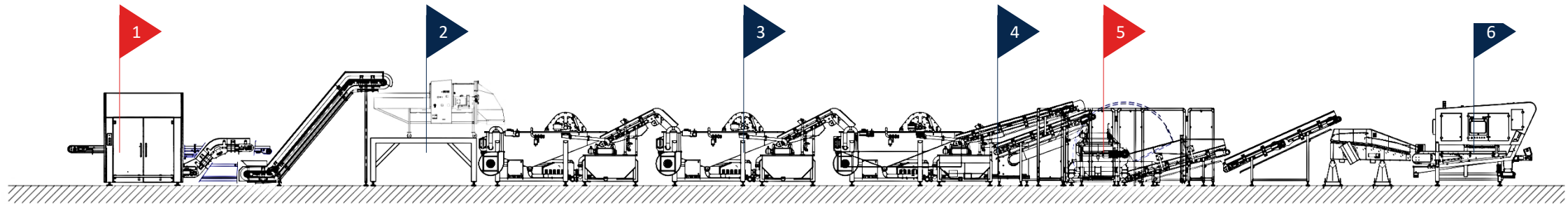
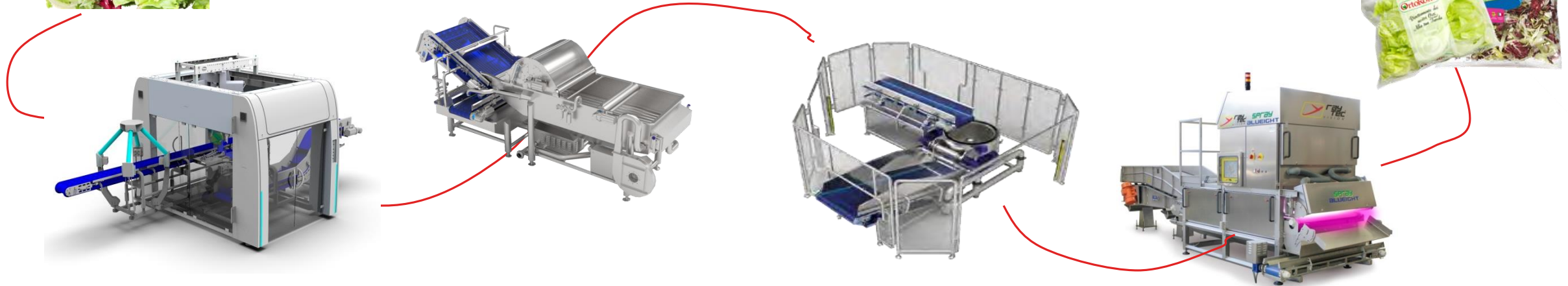
## ADULT SALADS

- ▶ ICEBERG
- ▶ CABBAGE
- ▶ RADICCHIO
- ▶ RICCIA





# ADULT SALADS (4<sup>th</sup> RANGE)

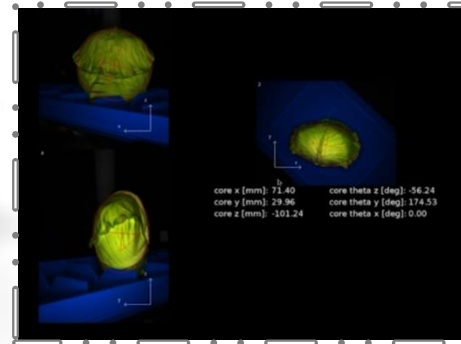
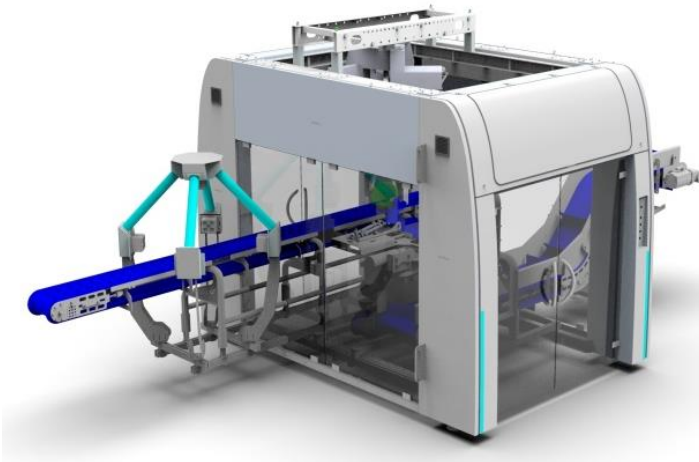


## LEGENDA (main plant)

<b>1</b>	COMBICORE – DECORING MACHINE	<b>3</b>	SINGLE/DOUBLE/TRIPLE WASHER	<b>5</b>	ROTO-DRAY SPIN DRYER
<b>2</b>	KNOCKING BELT	<b>4</b>	DEWATERING	<b>6</b>	RAYTEC OPTICAL SORTING



# FOCUS EQUIPMENT

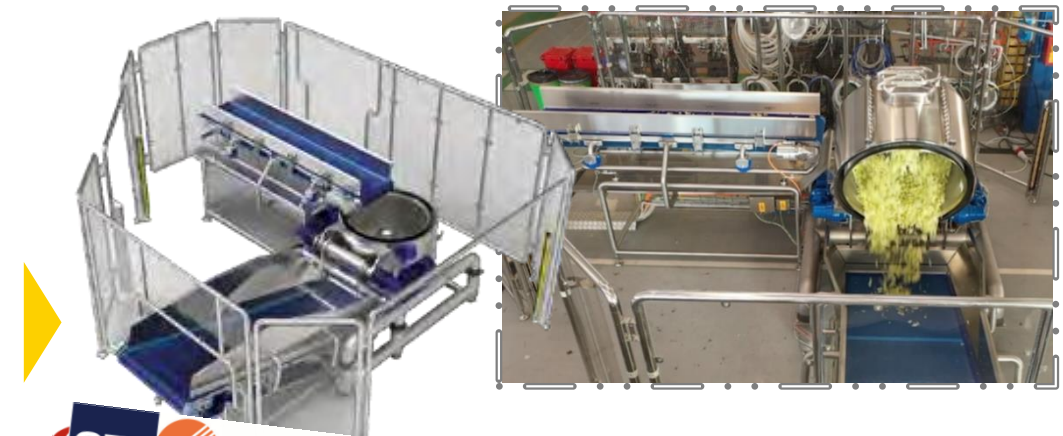


## COMBICORE DECORING MACHINE

- Full hd vision system , with automatic self-adjustable cutting/penetration for each individual product, for repeatability, maximum accuracy, significant yeld increase and waste reduction
- Costs saving for number of operators required and professional diseases risk reduction
- modular approach for different capacity from 20 pz/min/modules and flexibility to adapt the system for semi-automatic operation and manual loading

## SPIN DRIER mod.ROTO-DRY

- New concept with complete hygienic design
- Easy accessibility for cleaning and maintenance
- High efficiency motor with regeneration system and energy saving
- Drum washing/rinsing by water/air



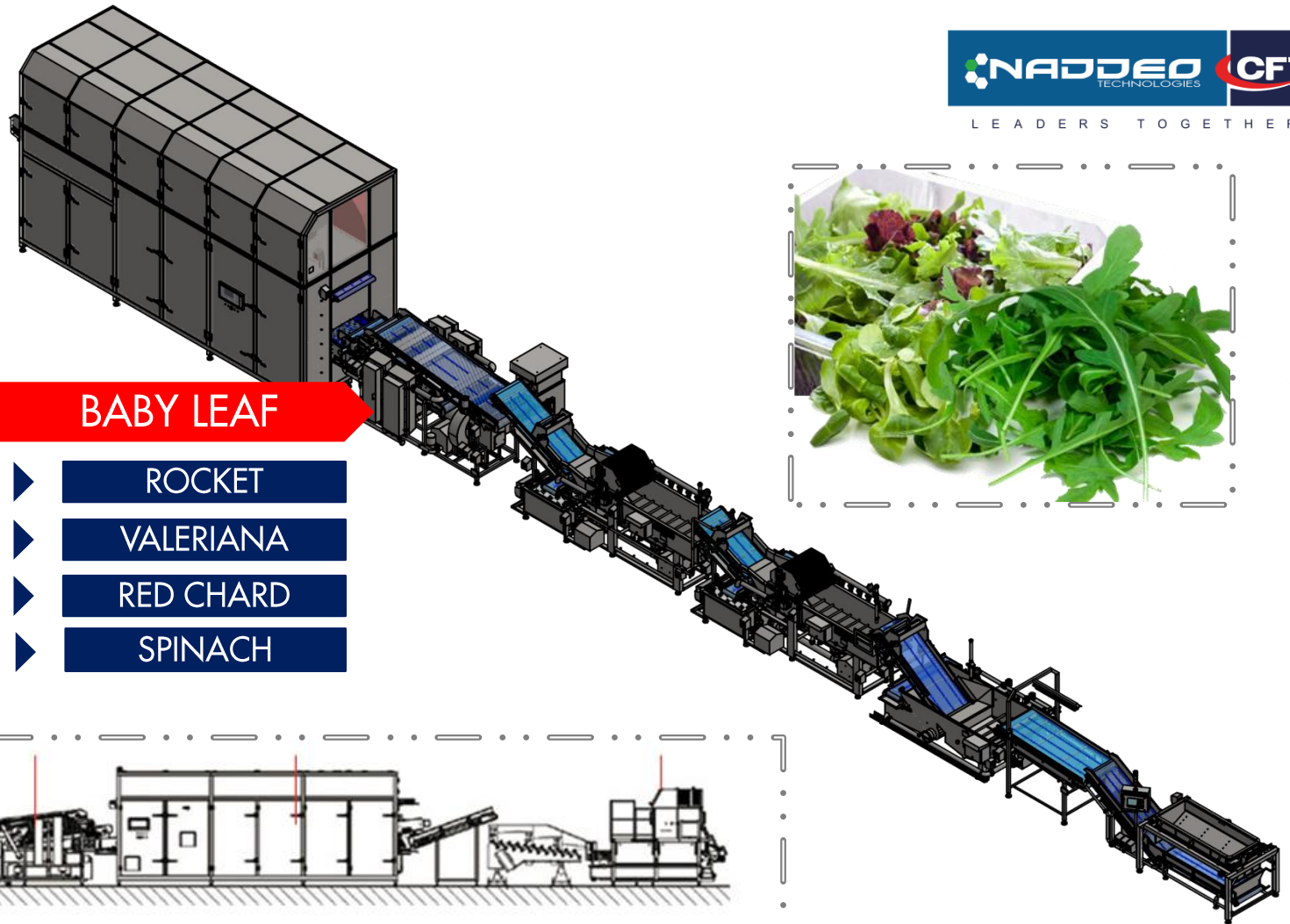
# BABY LEAF (4<sup>th</sup> RANGE)

Complete solutions for fresh-cut and mix preparation for BABY LEAF SALAD both fresh and ready to eat.



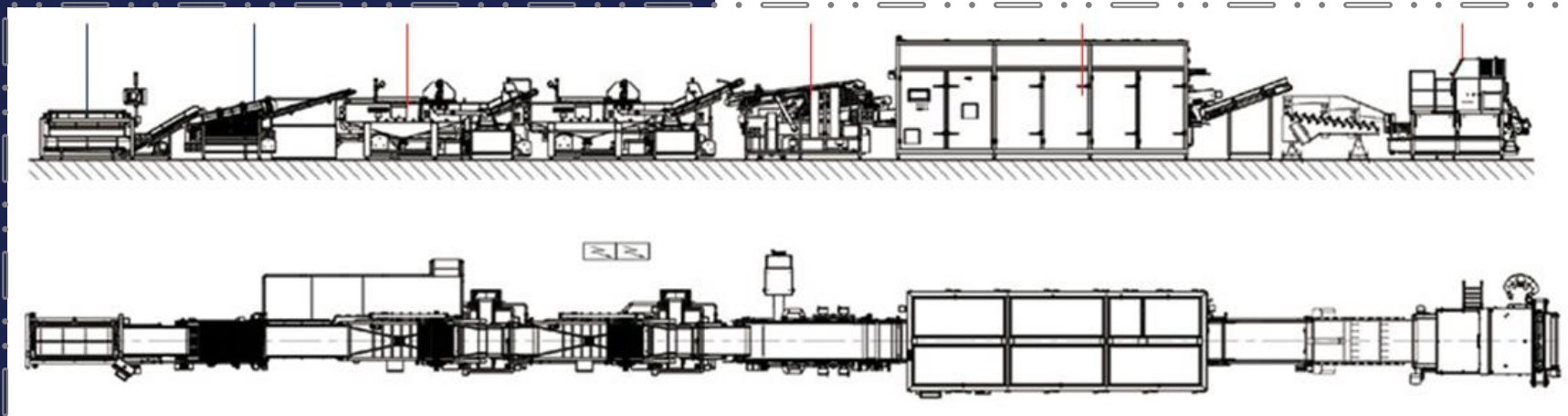
## CAPACITY RANGE

From 400 up to 3.000 KG/H  
(EACH/SINGLE LINE)

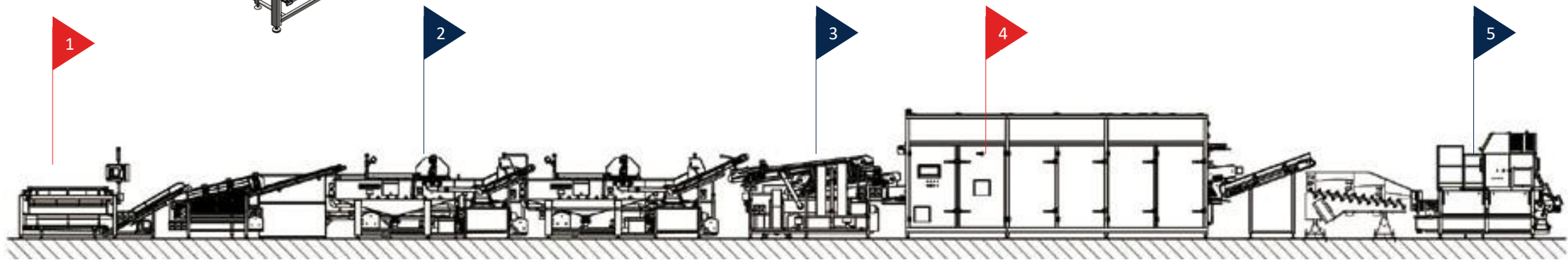


### BABY LEAF

- ▶ ROCKET
- ▶ VALERIANA
- ▶ RED CHARD
- ▶ SPINACH



# BABY LEAF (4<sup>th</sup> RANGE)



## LEGENDA (main plant)

	LOADING WEIGHING HOPPER		DEWATERING		RAYTEC OPTICAL SORTING
	SINGLE/DOUBLE/TRIPLE WASHER		AIR DRYING TUNNEL CO2		



# FOCUS EQUIPMENT



## LOADING HOPPER mod.WHD

- continuous production line loading.
- Weighing station before feeding the product to the line
- precise software to manage the line flow and capacity control

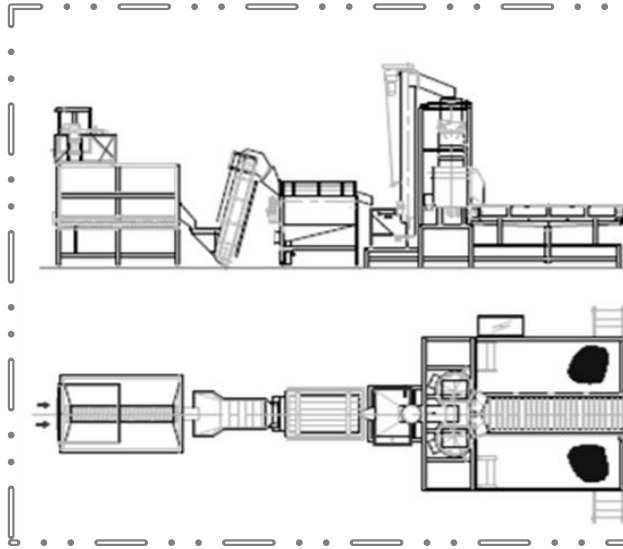
## TUNNEL DRIER - ECO2 Mod. AELUS – ZEPHYR PLUS

- CO2 gas for heating and cooling in the air dryer instead of the standard one (R404A), that will be forbidden in the 2020!
- benchmark in the market for capacity, yield, residual humidity and outlet temperature!
- No greenhouse gas emissions (natural gas)
- + 30% working efficiency and yield
- < operating and energy cost
- Possible water saving system due to connection and circulation of the water in combination with the washing section



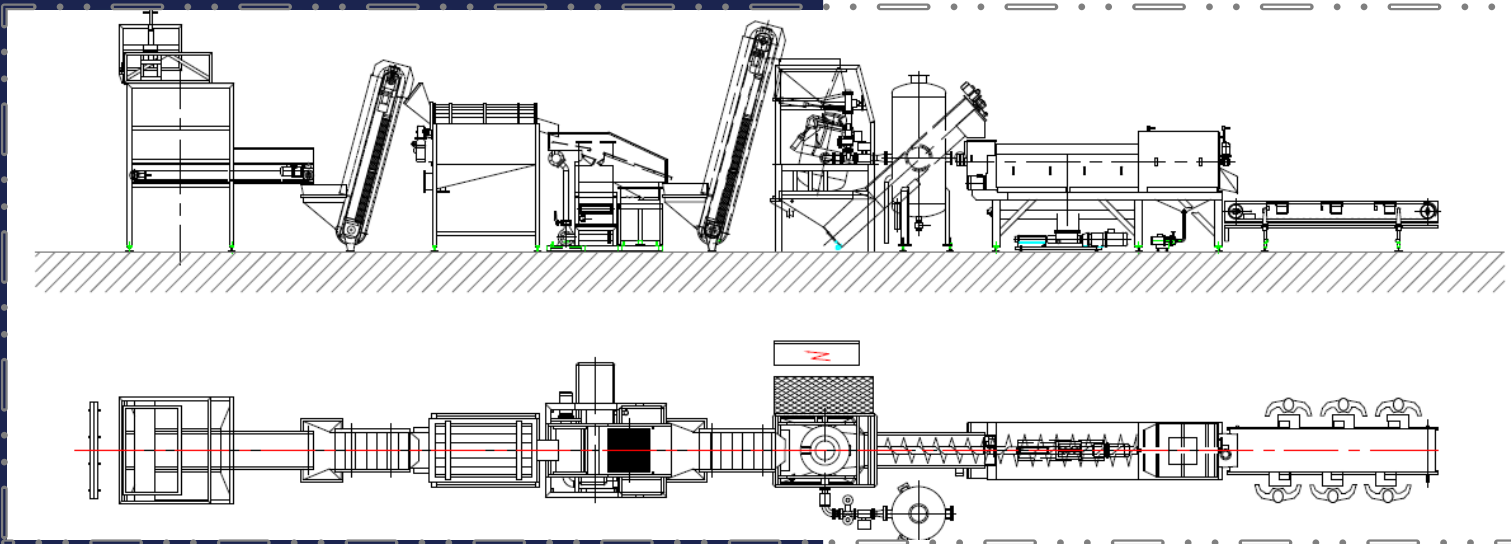
# CARROT and POTATOES

Two different solutions for Carrot and POTATO peeling and preparation for different kind of final products



COLD-ABRASIVE

From 500 up to 5000 KG/H



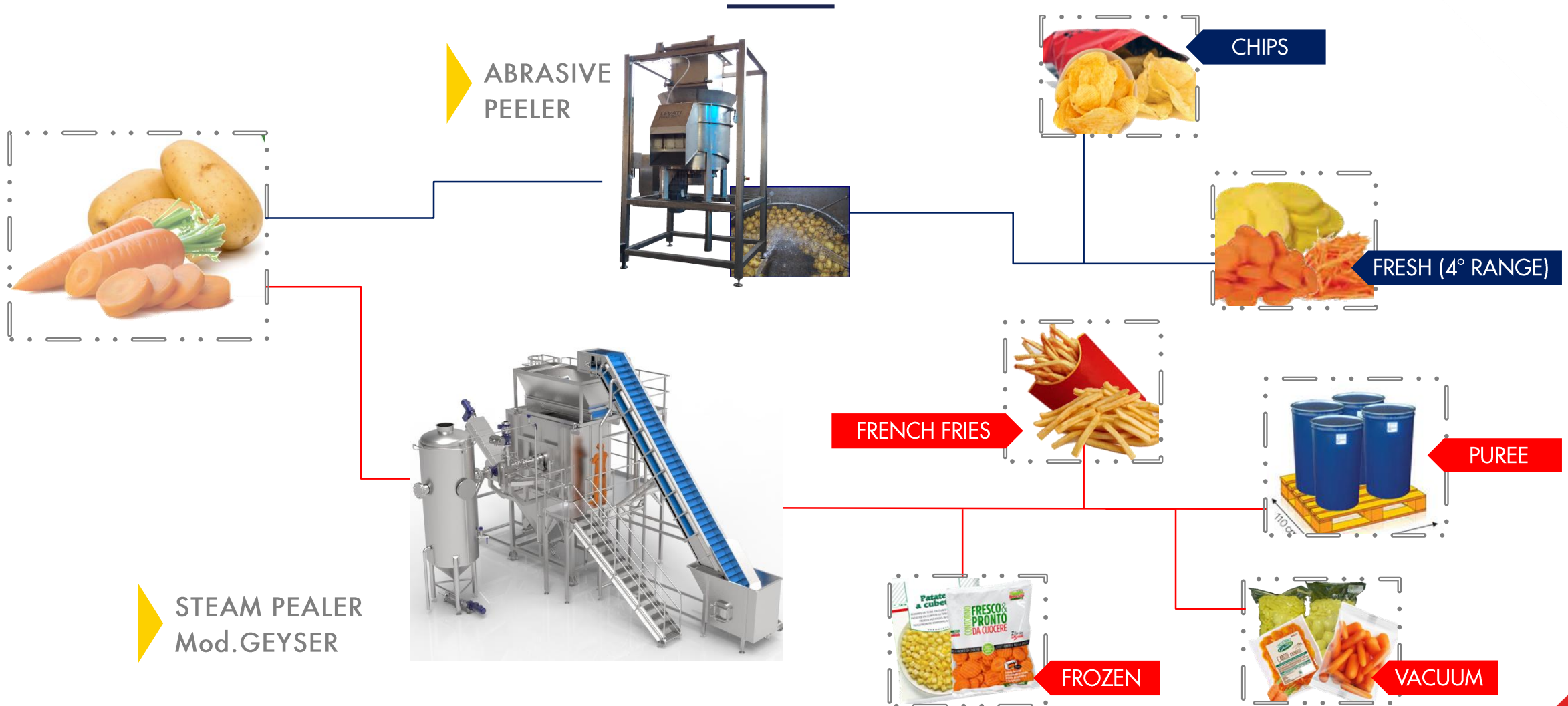
STEAM/PRESSURE

From 2000 up to 25000 KG/H



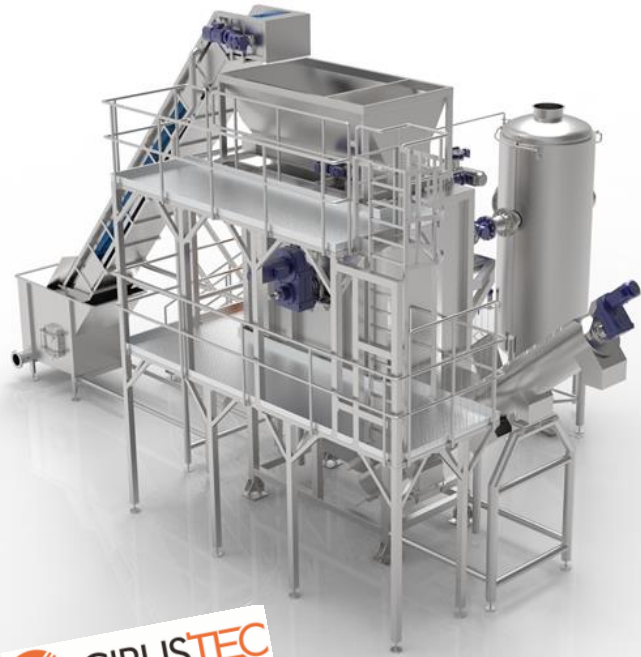
VEGETABLE  
SOLUTIONS

# RAW MATERIAL to FINAL PRODUCTS





# FOCUS EQUIPMENT



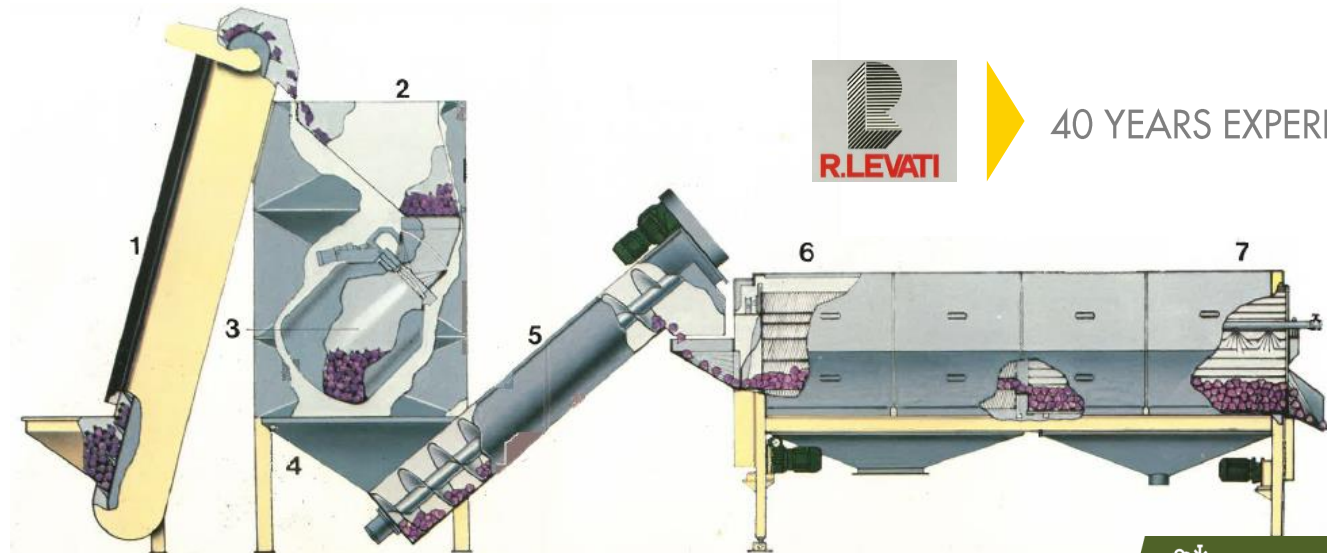
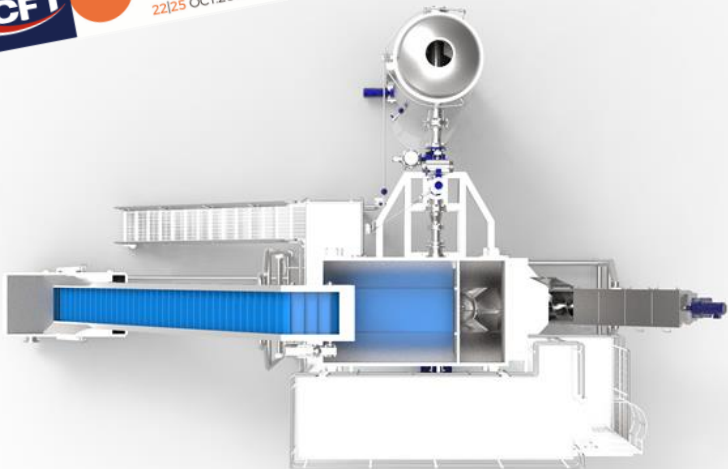
GEYSER – STEAM PEELER special vessel design for optimal product mixing and perfect treatment

- complete stainless steel execution including pressure vessel
- complete range of capacity from 2 up to 25 tons/h with more than 40 years manufacturing experience!



▶ GEYSER/STEAM PEELER

From 2000 up to 25000 KG/H



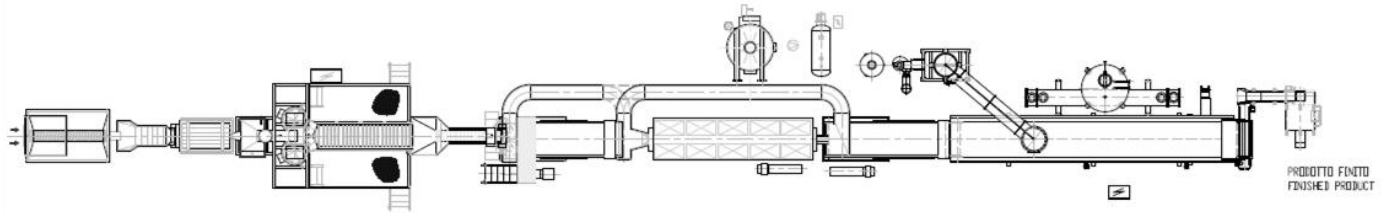
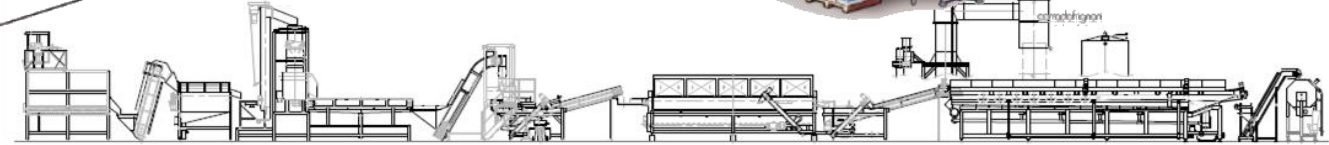
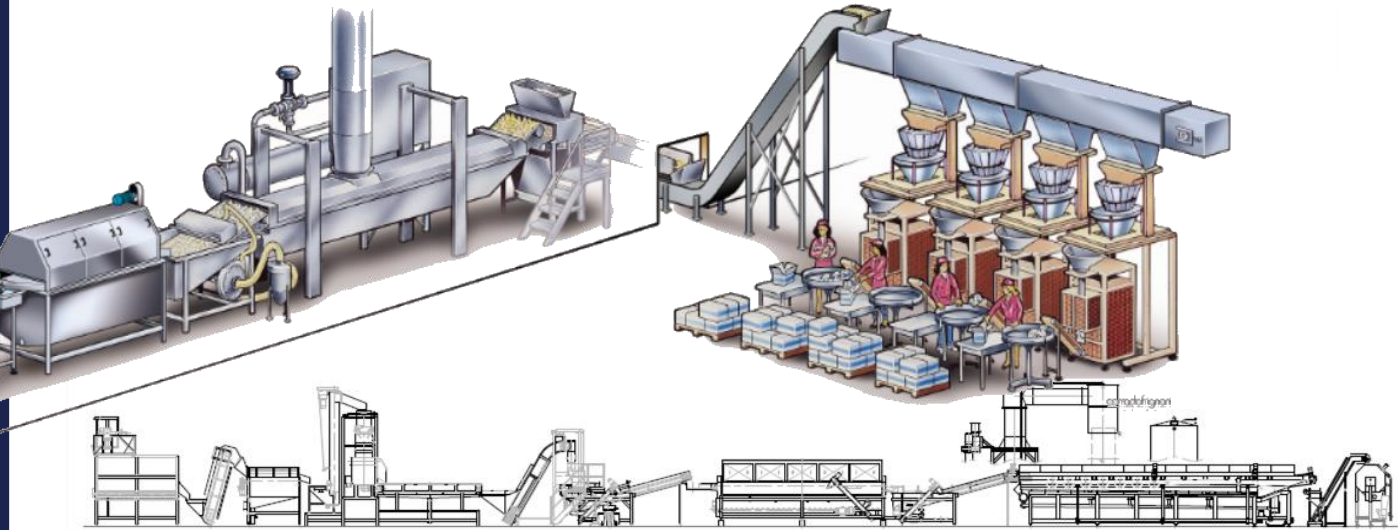
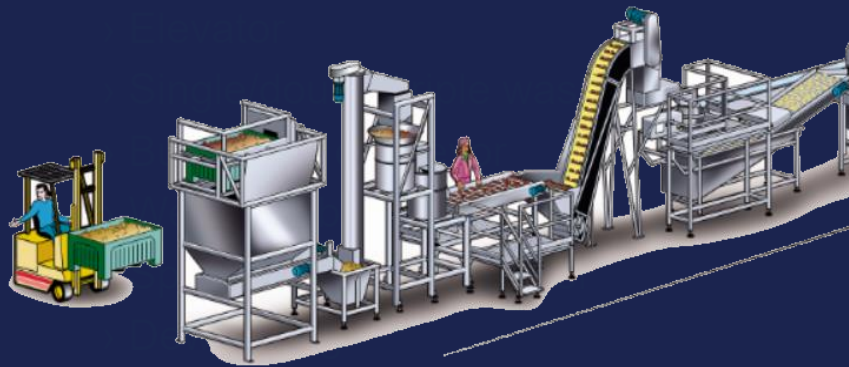
40 YEARS EXPERIENCE!



VEGETABLE  
SOLUTIONS

# POTATO CHIPS

Complete solutions for POTATO CHIPS production.



## CAPACITY RANGE

From 200 up to 2000 KG/H  
(OUTPUT)

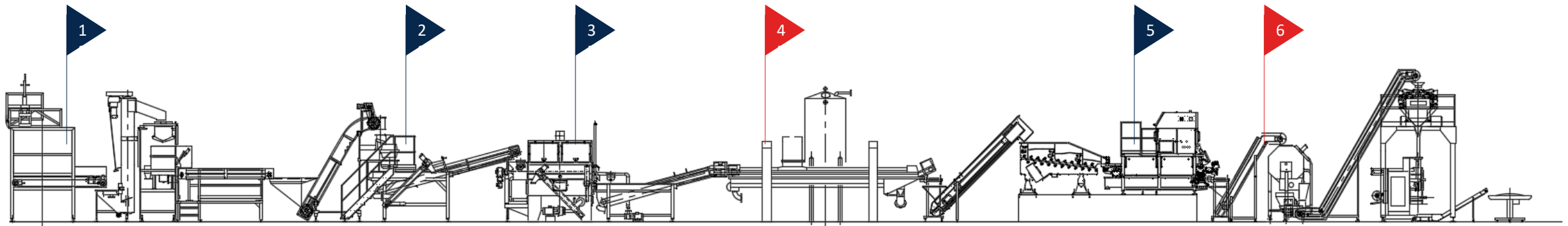
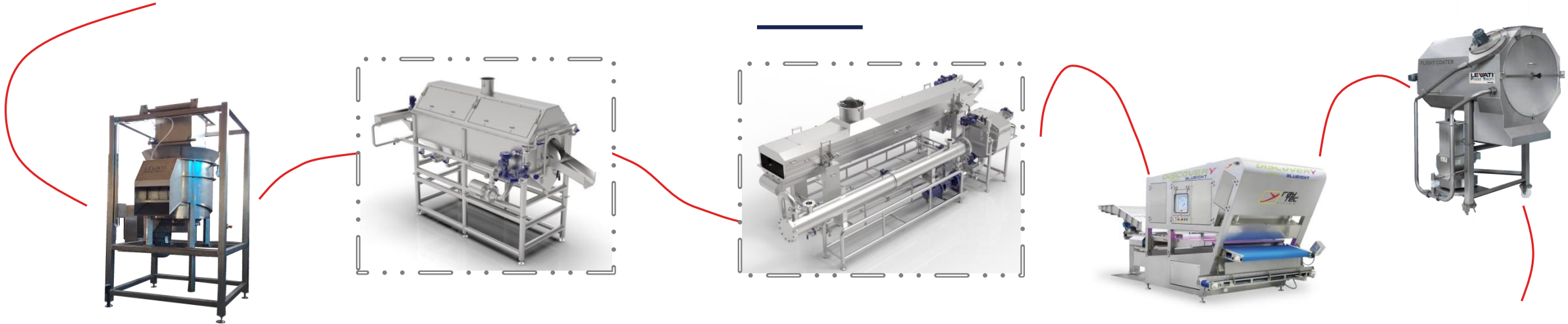
## POTATO CHIPS

- ▶ FLAT CHIPS
- ▶ CRINKLE
- ▶ V-SHAPE CUT
- ▶ FLAVORED



VEGETABLE  
SOLUTIONS

# POTATO CHIPS



## LEGENDA (main plant)

1	LOADING/WASHING/DESTONING	3	DRUM BLANCHER	5	RAYTEC OPTICAL SORTING
2	ABRASIVE PEELER	4	FRYER	6	FLIGHT COATER (FLAVORING)



# FOCUS EQUIPMENT



## CONTINUOUS FRYER

*SUITABLE FOR CHIPS, FRENCH FRIES AND VEGETABLES*

- Constant working temperature
- Low oil volume
- Multi-Point oil system
- Easy to clean
- Integrated Oil heat exchanger and circulation group

## FLIGHT COATER (FLAVORING MACHINE)

- The flight coater allow to flavour homogeneously the product
- Savings of give-away flavours
- Prevention of cross-contamination
- Prevention of allergen concerns
- Reduction of clean-up times.



# FRENCH FRIES

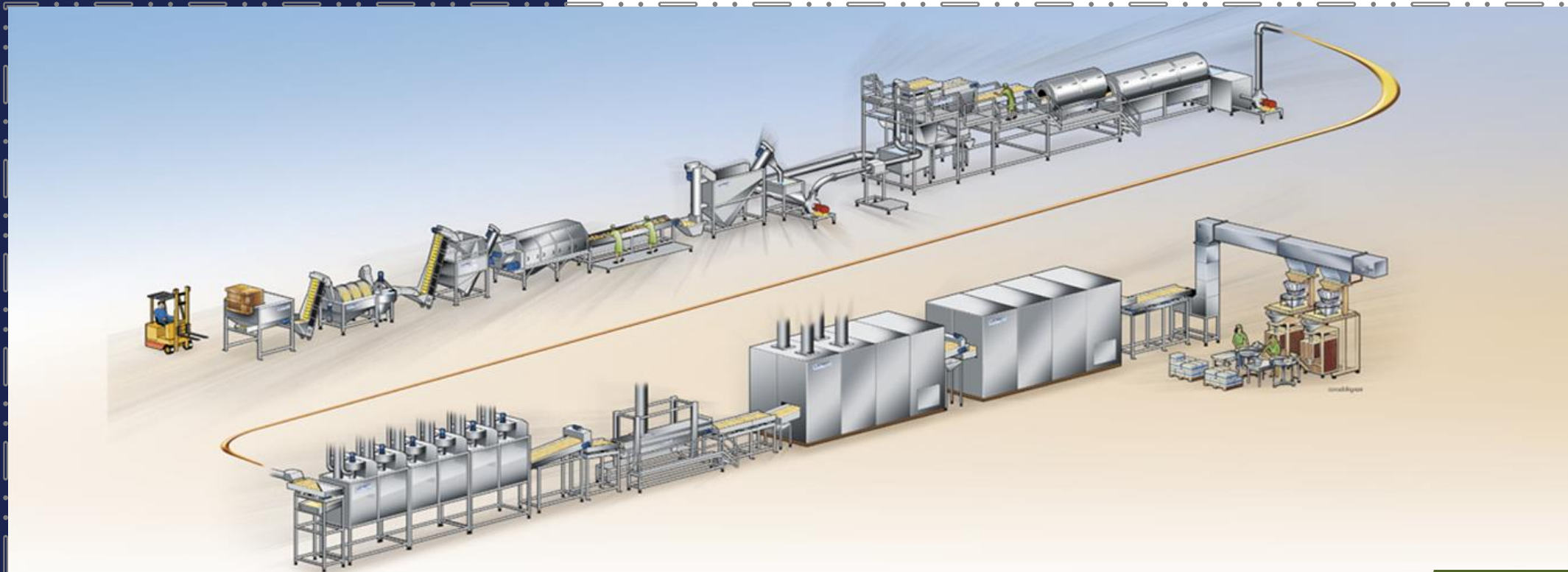


▶ CAPACITY RANGE

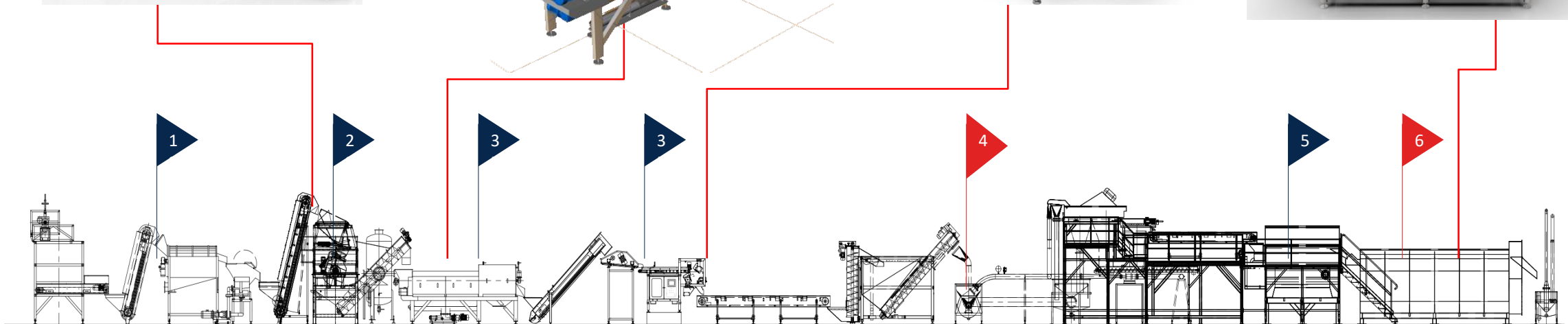
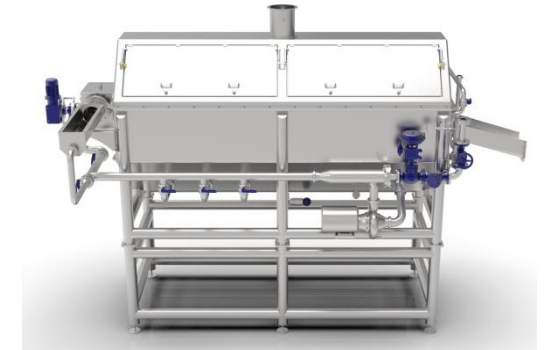
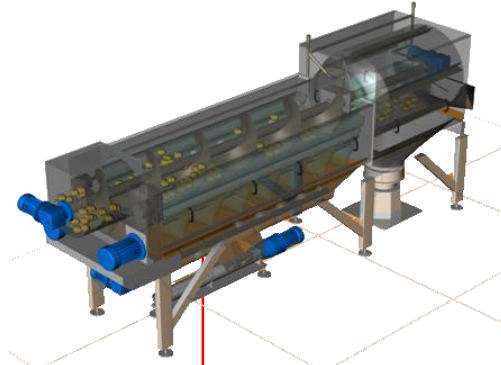
From 500 up to 10.000 KG/H  
(OUTPUT)

## FRENCH FRIES

- ▶ WEGGES
- ▶ CRINKLE
- ▶ BABY
- ▶ FLAVORED



# FRENCH FRIES

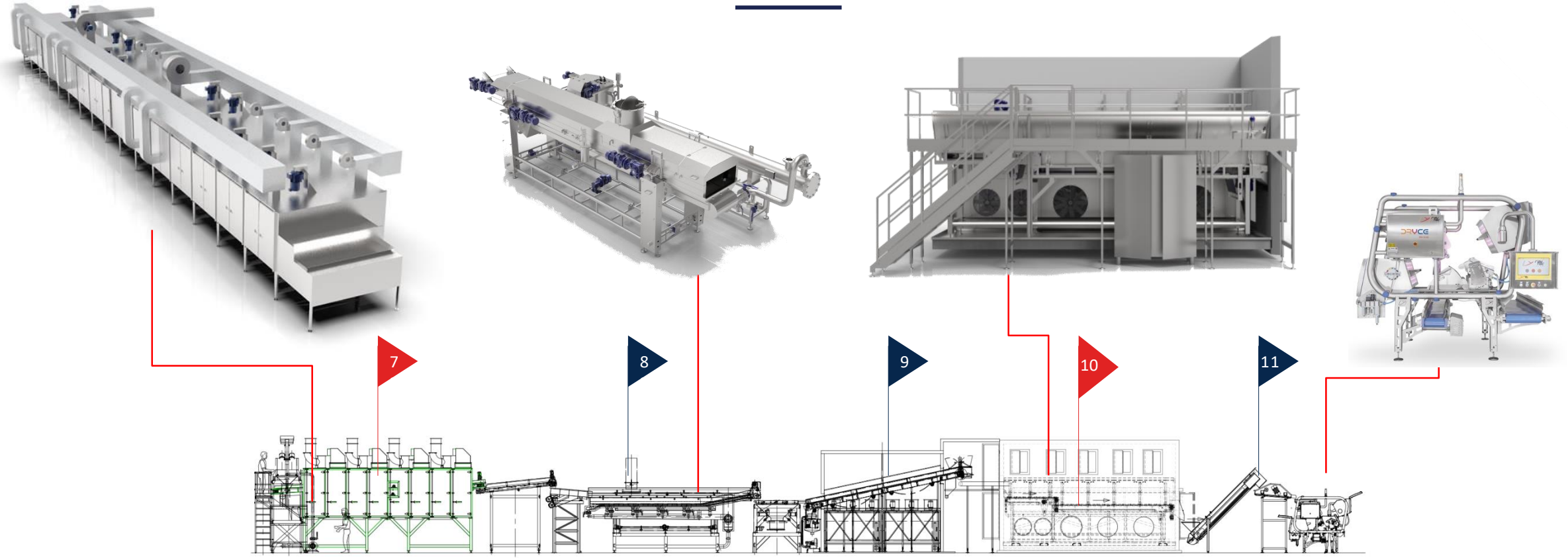


## LEGENDA (main plant)






<b>1</b>	LOADING/WASHING/DESTONING	<b>3</b>	BRUSHER	<b>5</b>	HIDRO CUTTING FOR STICKS
<b>2</b>	STEAM PEELER mod.GEYSER	<b>4</b>	RAYTEC OPTICAL SORTER	<b>6</b>	BLANCHING SECTION



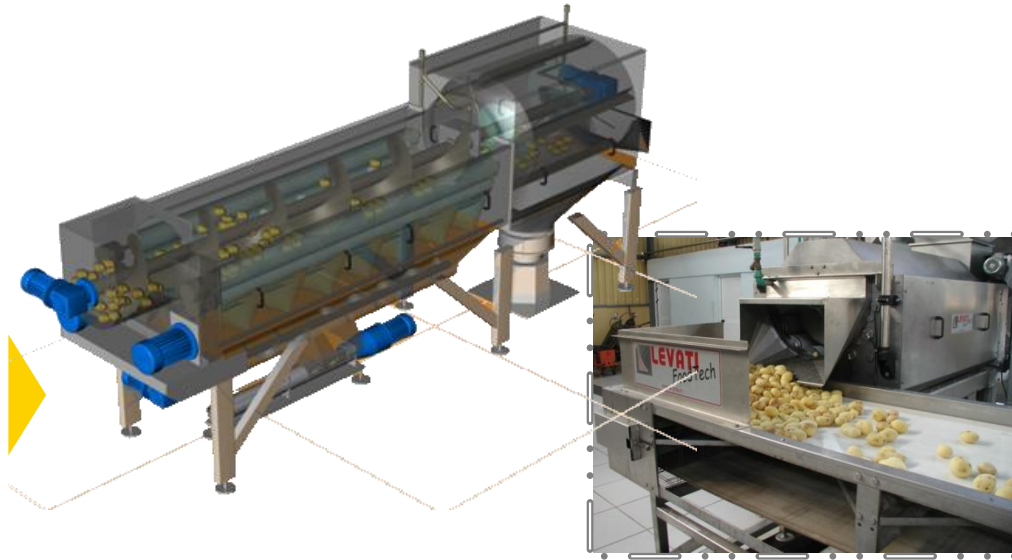
# FRENCH FRIES



## LEGENDA (main plant)

 7	PRE-DRYER SECTION	 9	PRE-COOLER	 11	RAYTEC «DRYCE» OPTICAL SORTING
 8	FRYER	 10	IQF FREEZER mod.MECFLOW		

# FOCUS EQUIPMENT



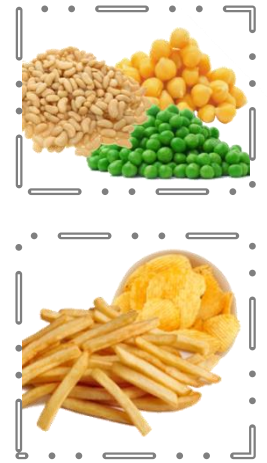
## BRUSHER

- The brusher remove the peels from the potatoes.
- The rollers with brushes are mounted on the cradle around the conveying screw. The brushes are driven by two motors (one for each side) with soft-start.
- Each brush is self-cleaning and discharge the peels directly in the collecting hopper. The peels are dry in order to be used as animal feed.
- The brusher is equipped with C.I.P. piping.

## DRUM BLANCHER

*SUITABLE FOR LEGUME, PULSES, CHIPS, FRIES AND VEGETABLE*

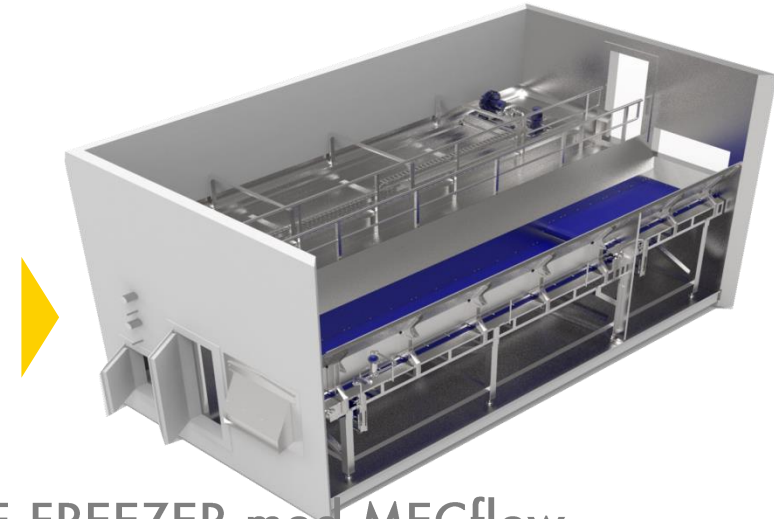
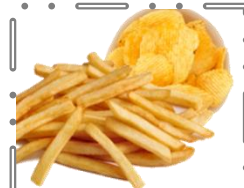
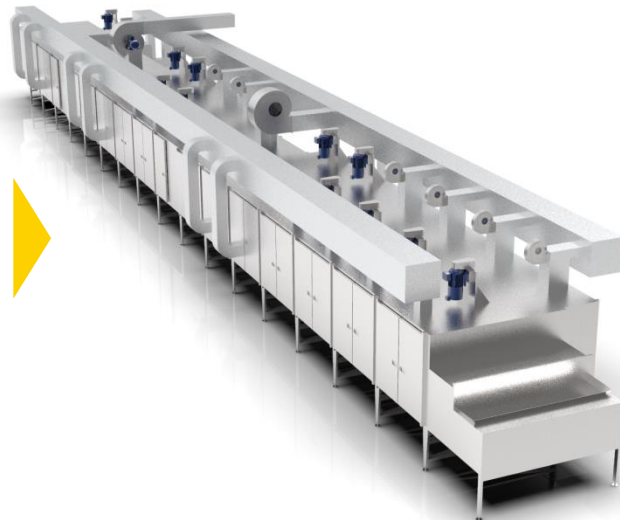
- Blancher is used for enzymatic inactivation.
- Common feature of the blanchers are:
- Temperature control system (P.I.D.) to have a perfect tuning of the temperature; the steam is injected in the water by means of a special designed injector.



# FOCUS EQUIPMENT

## DRYER mod.MECdry

- modular belt dryer to speed up and carefully control the drying process in the first phases
- Typical configurations consist of two or three Stages/belts each one composed of several Sections
- Each Stage is formed by Inlet Section, Processing Sections
- Outlet Section, Perforated belt, Air exhaust system
- Wide range of application and configuration according to single different products



## IQF FREEZER mod.MECflow

- Deep freezing process by cold air circulation and fluidization
- Short dwell time: 2 to 8 min FLUIDIZED BED SYSTEMS (IQF)
- Low energy consumption thanks to high efficiency axial fans
- Long time between defrosts with SRS
- Reliable transport system: plastic belt with st. steel joints
- Mechanical Pulsator for enhanced product stirring



# SPINACH & LEAF

Complete solutions for SPINACH & LEAF processing and freezing



▶ CAPACITY RANGE

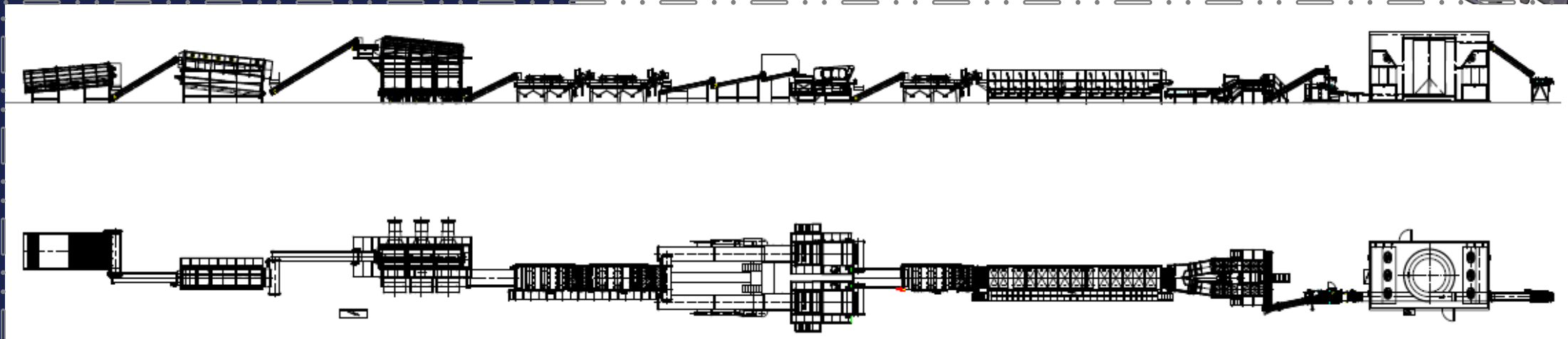
From 2000 up to 6000 KG/H  
(EACH/SINGLE LINE)



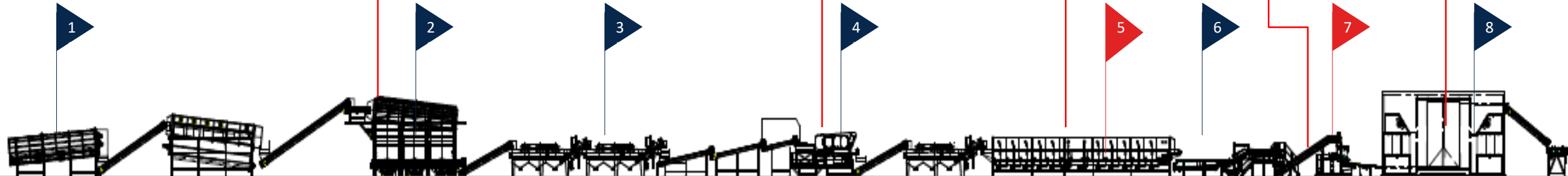
▶ SPINACH

▶ CUBE

▶ LEAF



# SPINACH & LEAF



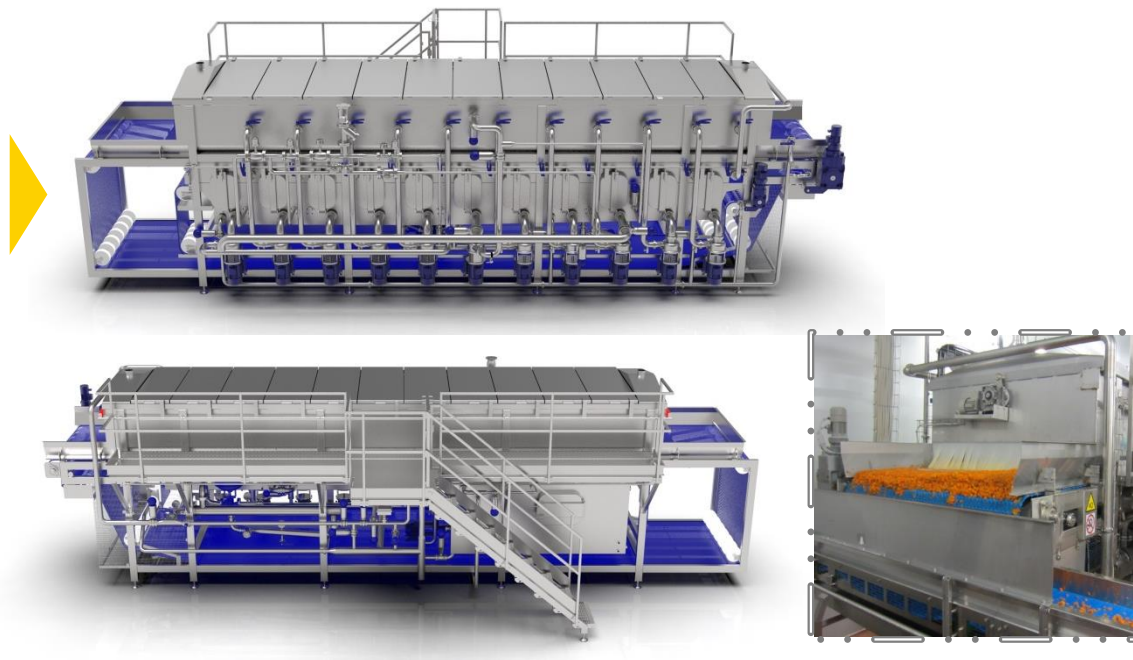
## LEGENDA (main plant)

1	LOADING/WASHING/DESTONING	3	WASHING SECTION	5	BLANCHER/COOLER	5	«DOSAFORM» PORTIONING
2	AIR SEPARATOR /CLEANING	4	«DISCOVERY» RAYTEC OPTICAL SORTER	6	ACQUASORT	6	SPIRAL FREEZER «SPIRALFREEZE»

# FOCUS EQUIPMENT

## WATER BLANCHER/COOLER

- Multistage belt machine
- Water blancher with heating and cooling with energy recovery system
- Machine suitable for a wide range of naked and delicatated products



## «DOSAFORM» PORTIONING MACHINE

- Dosaform is the leading whole-leaf spinach forming machine in Europe
- Specifically designed for whole-leaf vegetables
- No need of (centrifugal) dewatering
- No need of operators
- No need of knife sharpening
- Extremely sturdy and reliable
- Wide range of models available



# LEGUME and PULSES

Complete PROCESSING (rehydration, blanching and preparation), STERILIZATION and PACKAGING line for LEGUME/PULSES in CANS, JARS and FLEXIBLE POUCHES

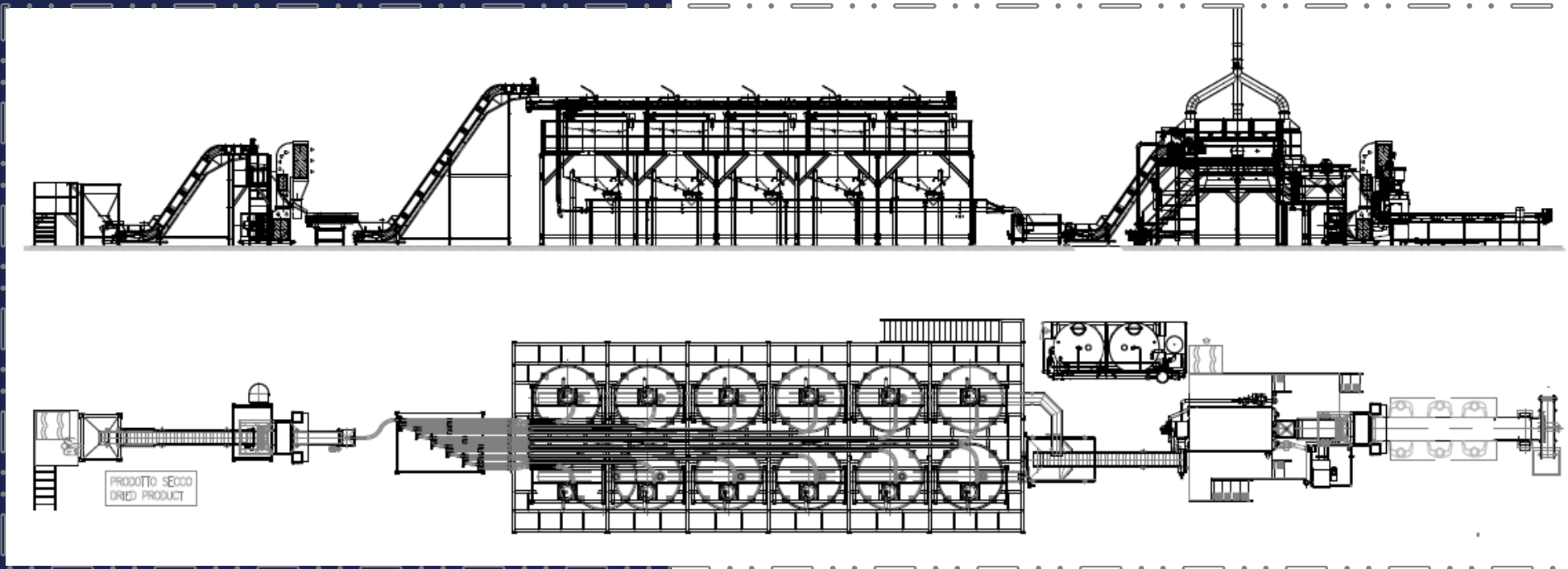
## LEGUME/PULSES

- ▶ BEANS
- ▶ PEAS
- ▶ CHICK PEAS
- ▶ BEAKED BEANS

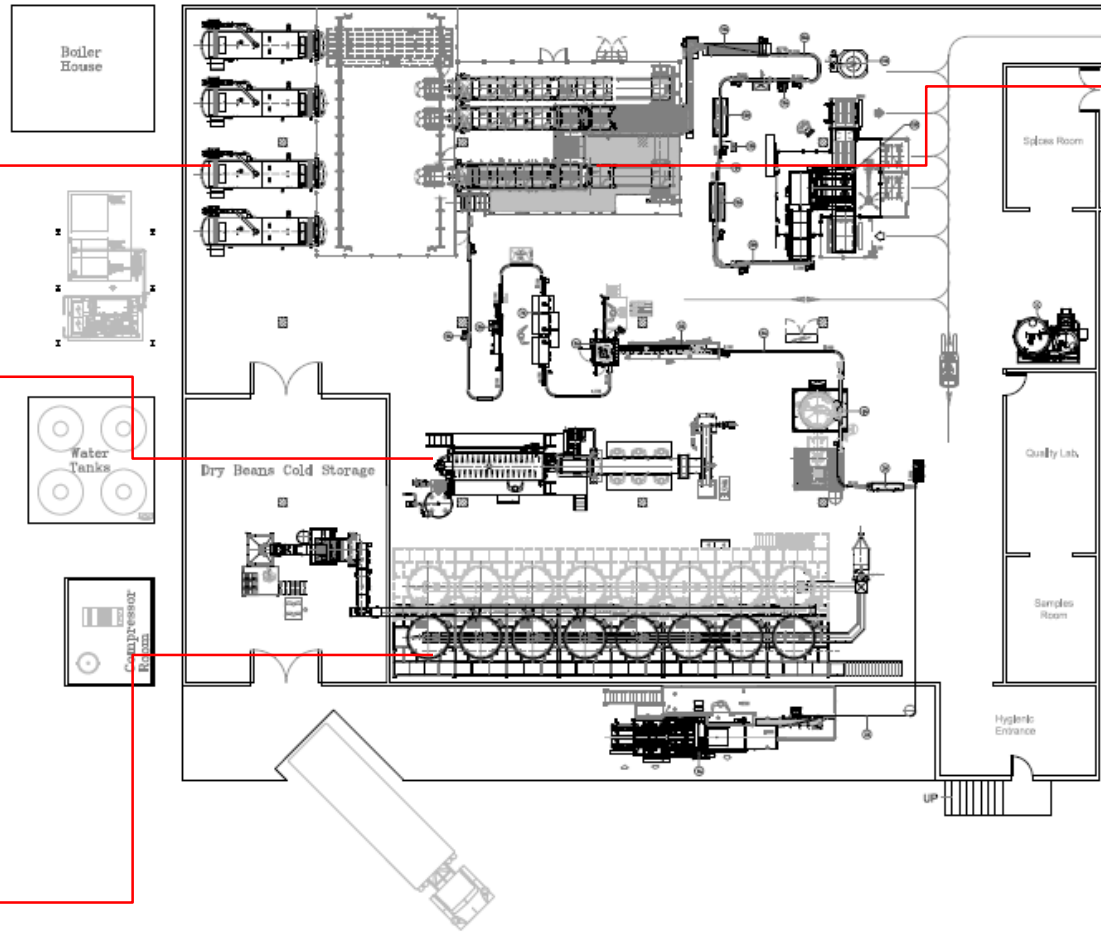
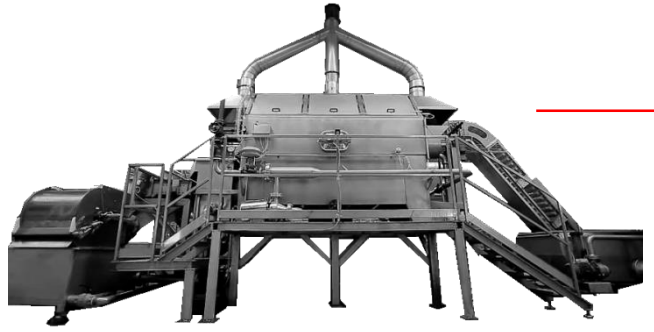


## CAPACITY RANGE

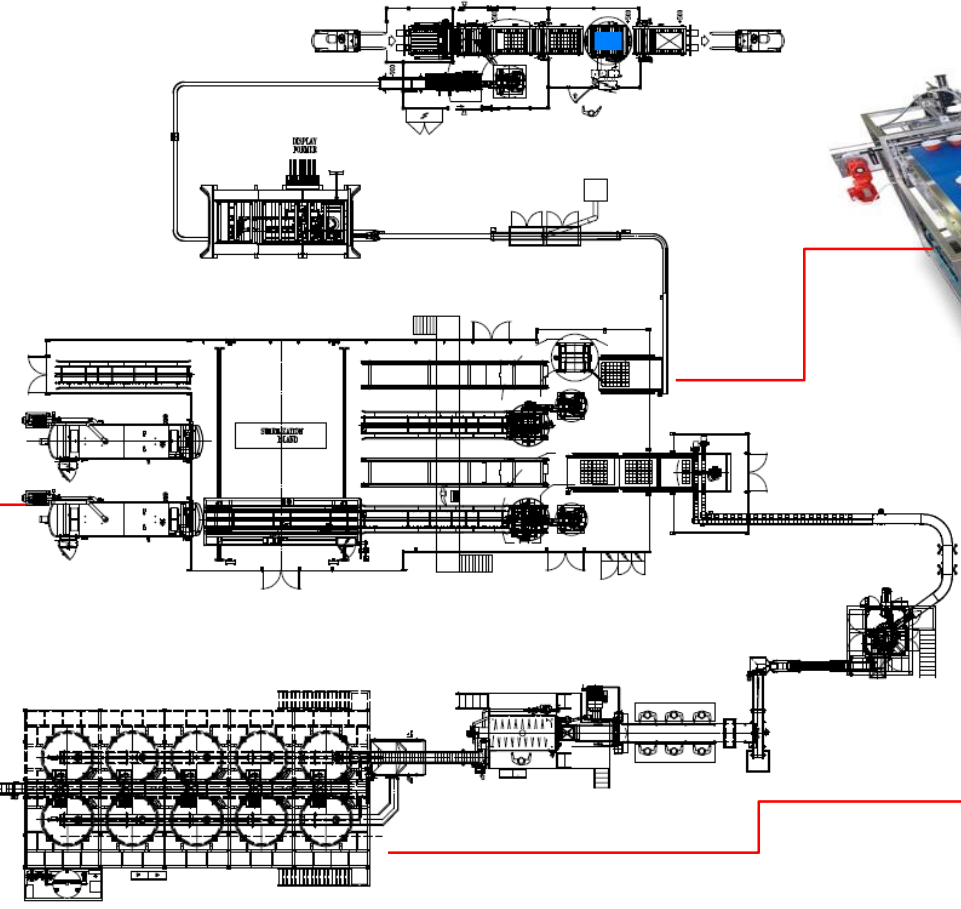
From 1000 up to 10.000 KG/H  
(SOAKED PRODUCT OUTLET)



# INTEGRATED SOLUTIONS



# INTEGRATED SOLUTIONS





# PESTO SAUCE

Complete PESTO sauce preparation from raw material to final product

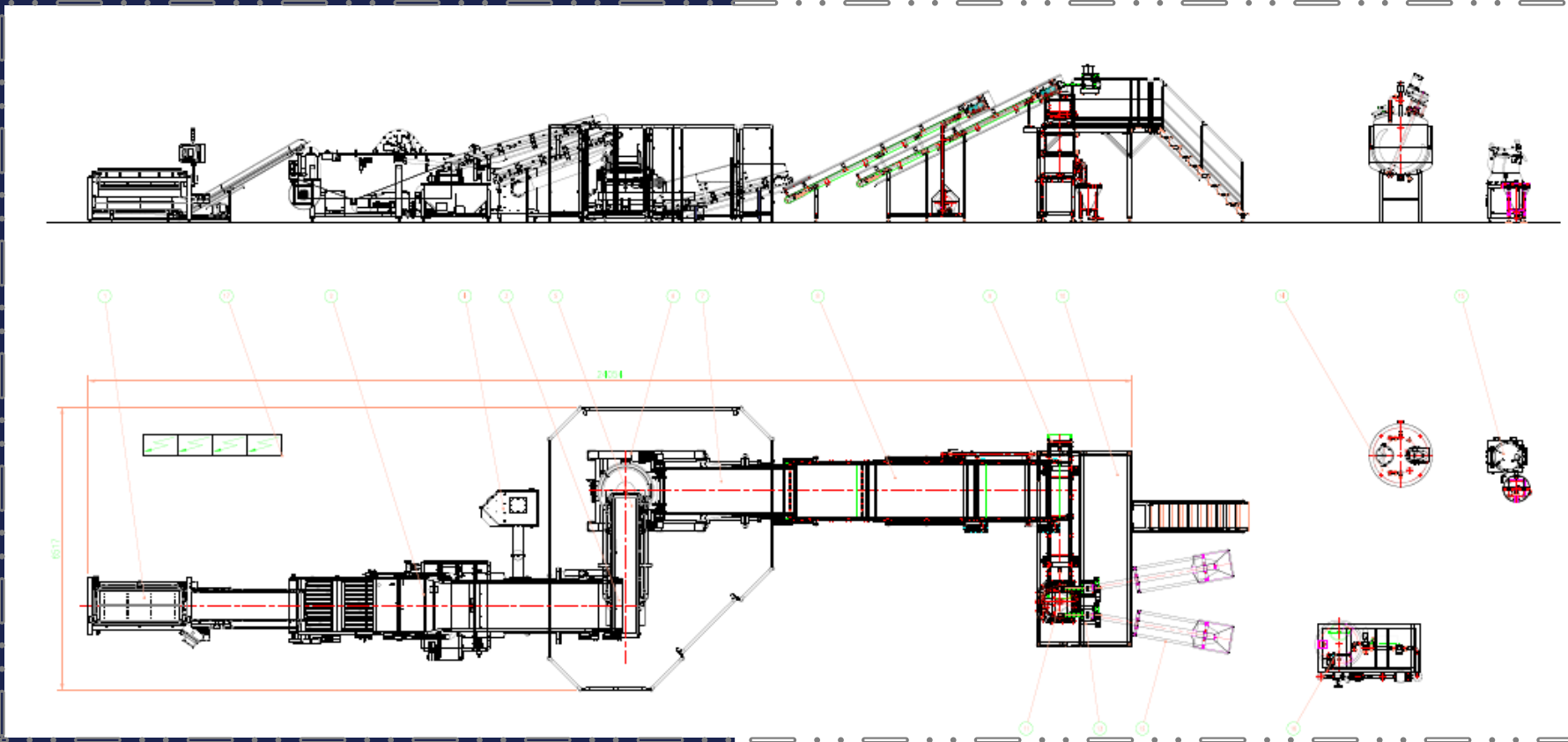
## PESTO SAUCE

- ▶ BASIL PESTO
- ▶ RED PESTO
- ▶ GENOVESE

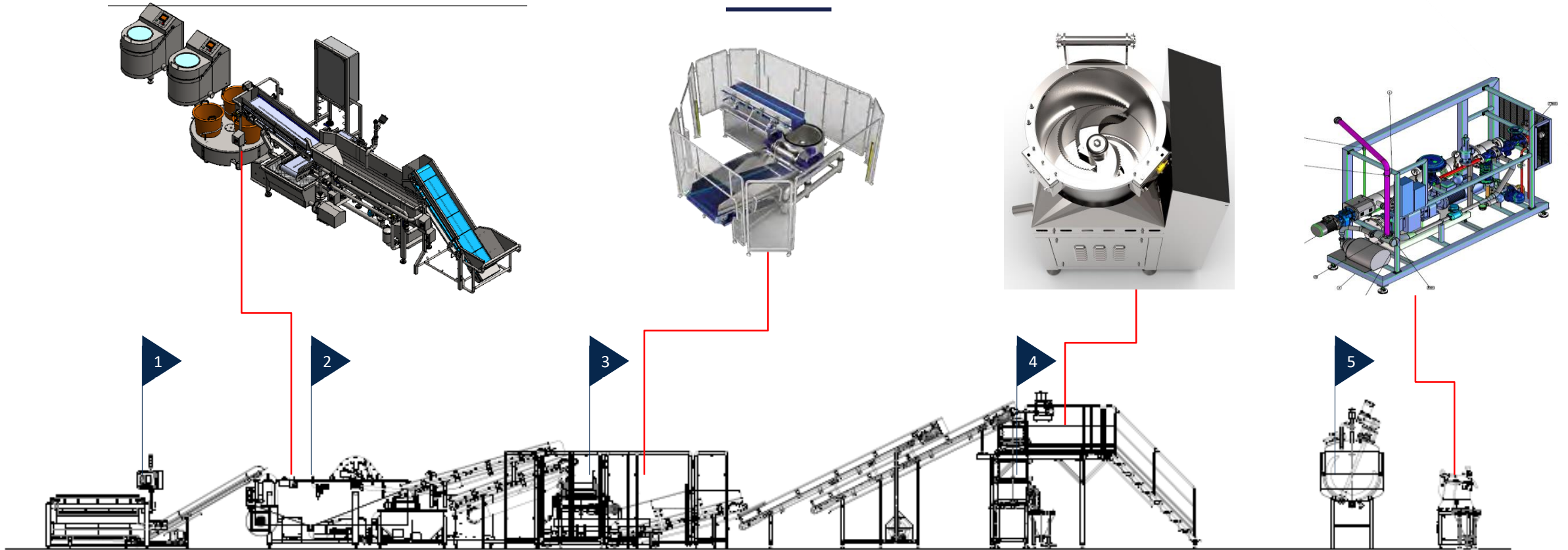


▶ CAPACITY RANGE

From 200 up to 4.000 KG/H (FINAL PRODUCT)



# PESTO LINE



## LEGENDA (main plant)

1	LOADING STATION FOR BASIL/LEAF	3	DRYING SECTION (SPIN DRYER)	5	BLENDING AND FORMULATION
2	WASHING SECTION	4	AUTOMATIC CUTTER	6	SCRAPE SURFACE HEAT-EXCHANGER



# ▶ SOUP and FORMULATED

Integrated plant for **SOUP, SAUCE AND READY MEAL** products preparation, formulation

## SOUP

- ▶ FRESH SOUP
- ▶ MINISTRONE
- ▶ VELLUTATA



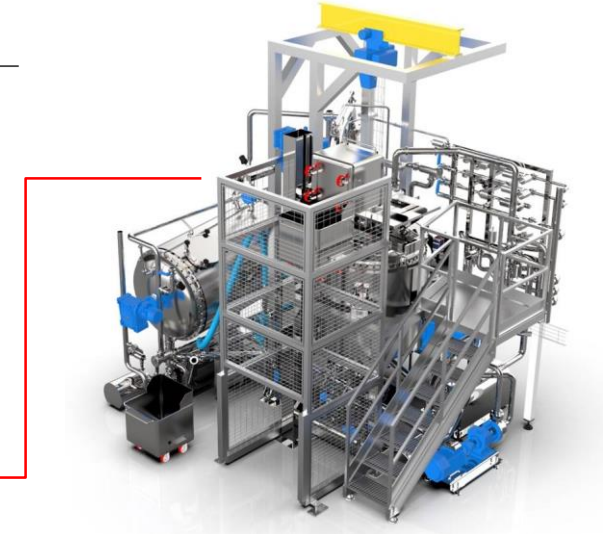
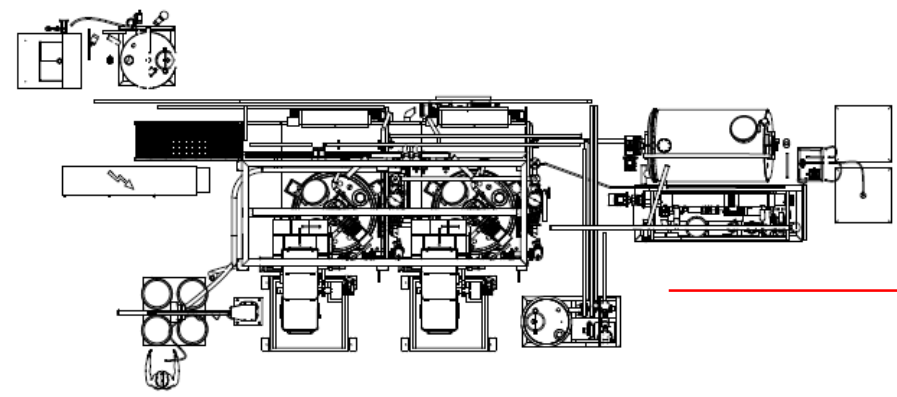
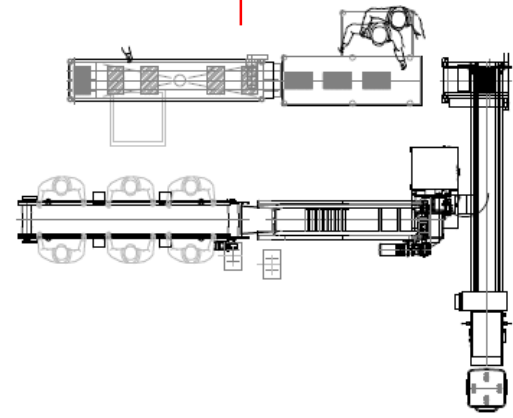
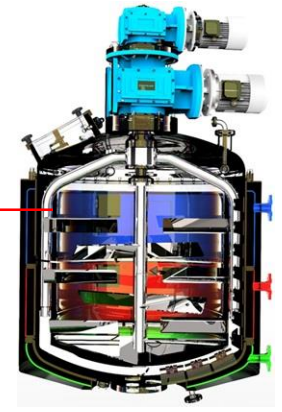
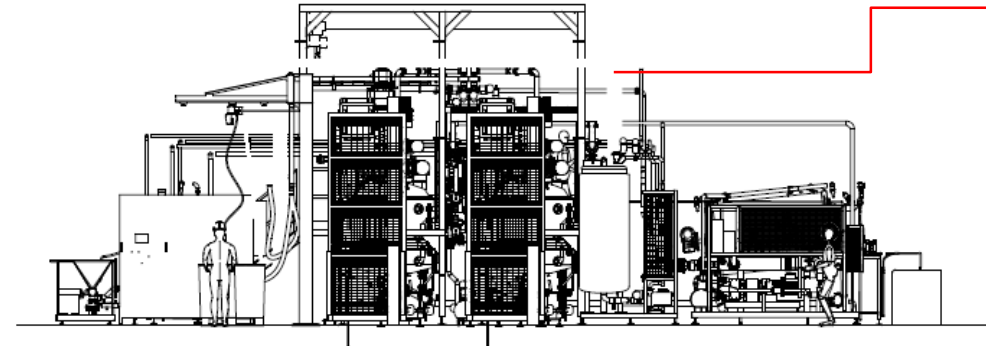
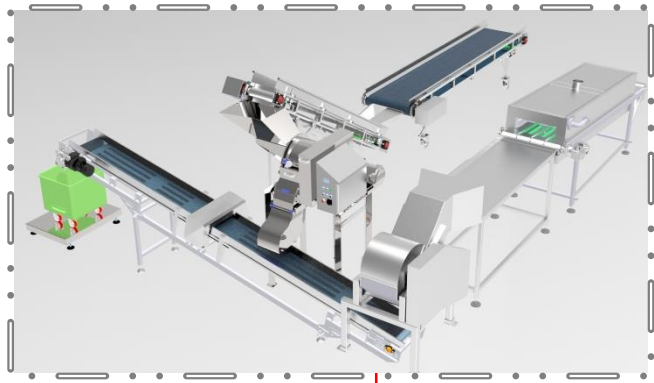
## ▶ CAPACITY RANGE

From 800 up to 8.000 KG/H (FINAL PRODUCT)



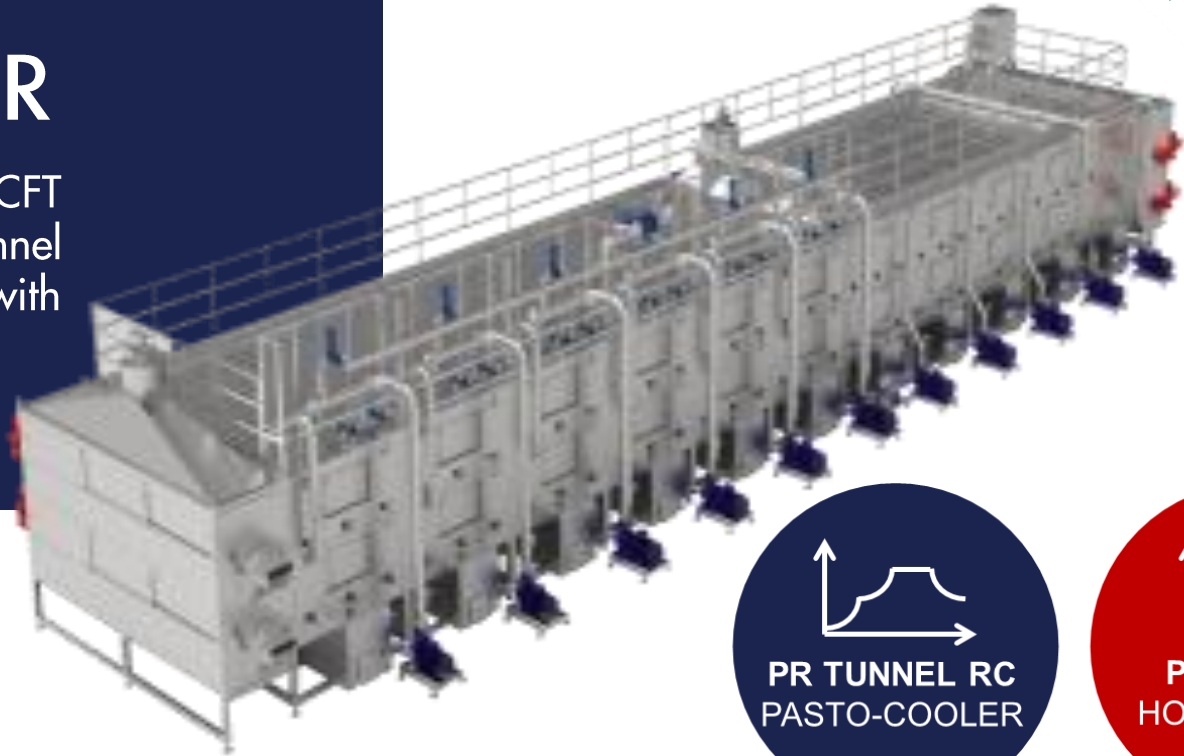


# INTEGRATED SOLUTIONS

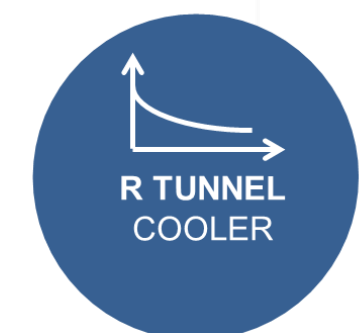
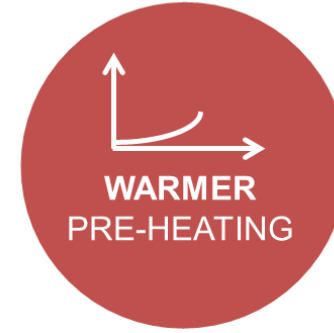
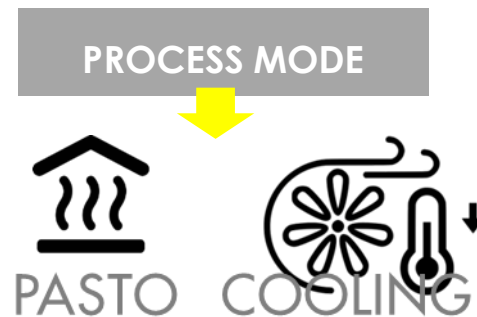


# TUNNEL PASTEURIZER-COOLER

With more than 450 units installed worldwide, CFT produce a complete range of thermal treatment tunnel for container «Hot-filled» or «Cold-Filled» with BEVERAGE and FOOD products



- CUSTOMIZED PROCESS and TECHNOLOGY ACCORDING TO PRODUCT and CONTAINER
- From **6 m<sup>2</sup>** to, **300 m<sup>2</sup>** surface, SINGLE or DOUBLE DECK
- MODULAR DESIGN and CUSTOMIZED LAYOUT
- WATER SPRAY TECHNOLOGY (HOT/COLD WATER)
- RELIABLE AND FLEXIBLE SOLUTIONS







**JAM**

*Glass Jars*



**PICKLES**

*Glass Jars*



**JUICE**

*Bottles*



**SAUCE**

*Tin cans*



**JUICE**

*Gable-Top*



**BABYFOOD**

*Jars*



**BEER**

*bottles/cans*



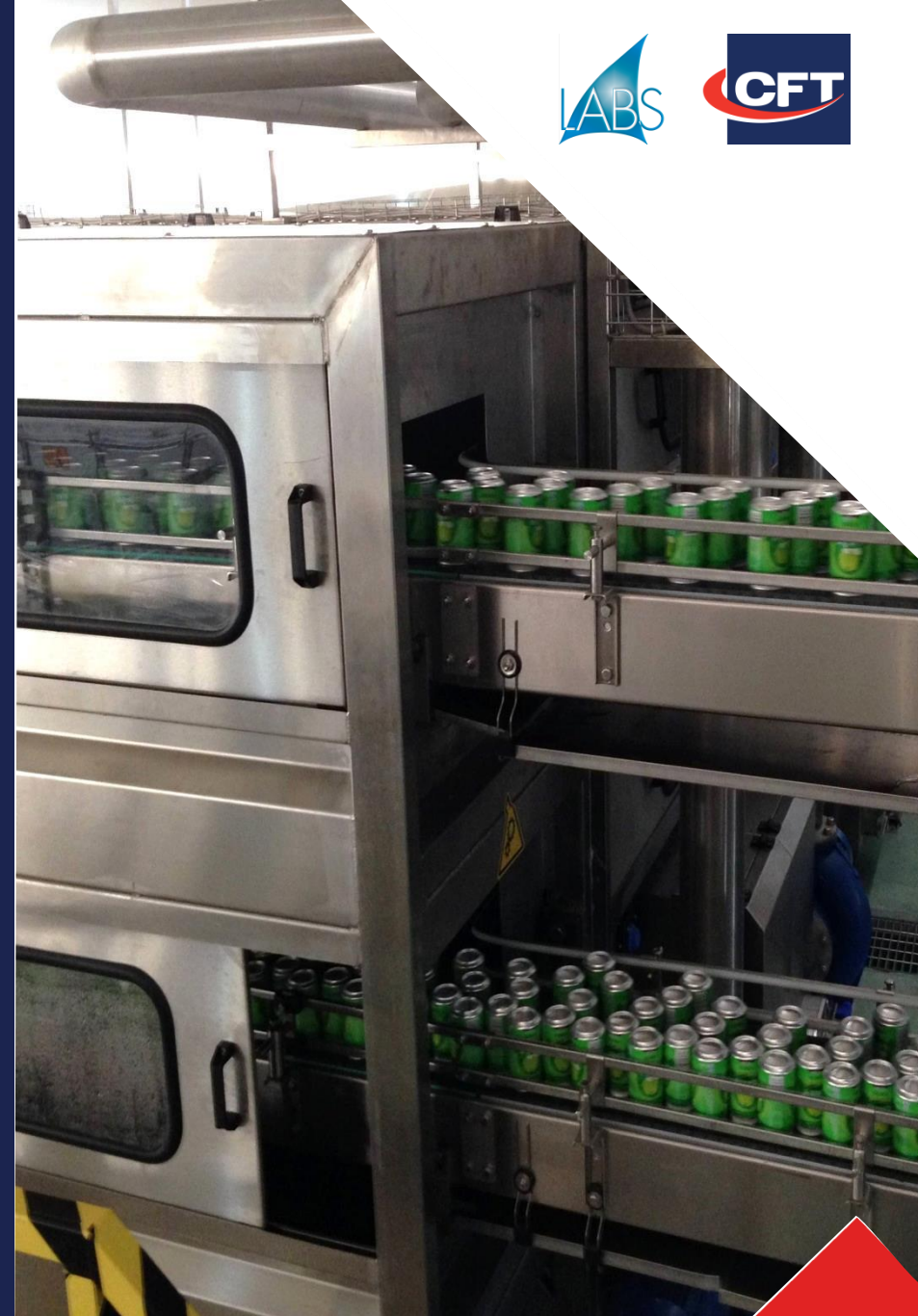
**KETCHUP**

*Shape bott.*



**SAUCE**

*Flexible pack*





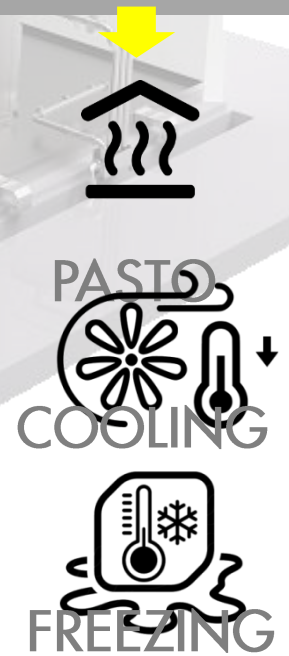
# ▶ SPIRALS

Complete range of thermal treatment spiral solutions, air and water flow technology, for pasteurization, cooling, refrigeration, cooking, proofing and drying for non-packaged and packaged food products

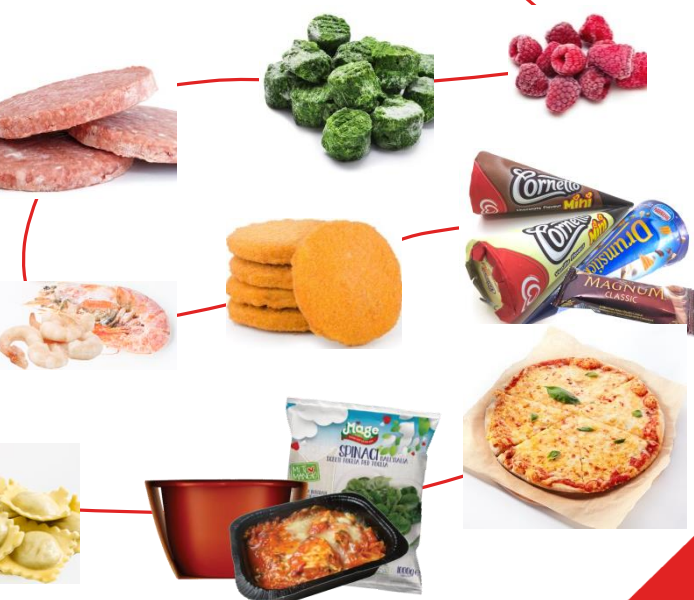
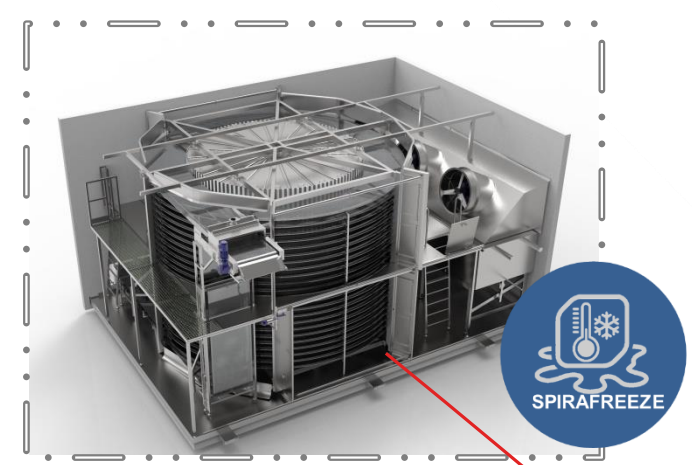
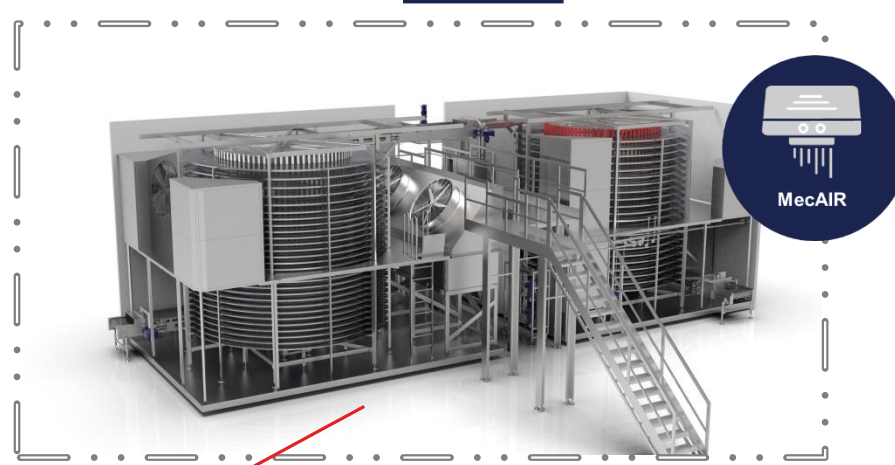
- MecSPRAY
- MecAIR
- SpiraFREEZE



MODEL/TYPE



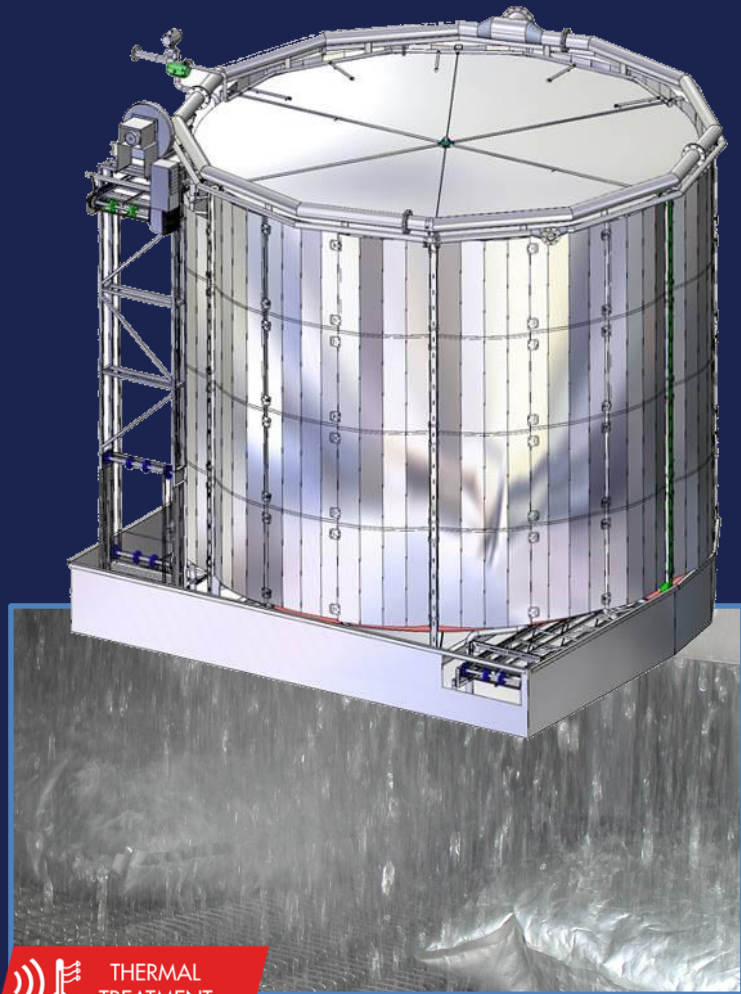
# SPIRALS = WIDE RANGE OF APPLICATION







# MecSPRAY SPIRALS



THermal  
TREATMENT



## KEY TOPICS



- PASTEURIZING/COOLING Process at medium-high capacity with **WATER SPRAY SYSTEM** indicated for medium/big packaging formats (> 3 kgs) and in any case for product with long thermic cycle;
- Fast heating /cooling of pouches with impact nozzles
- Reduced water consumption with Cooling tower/chiller water saving.



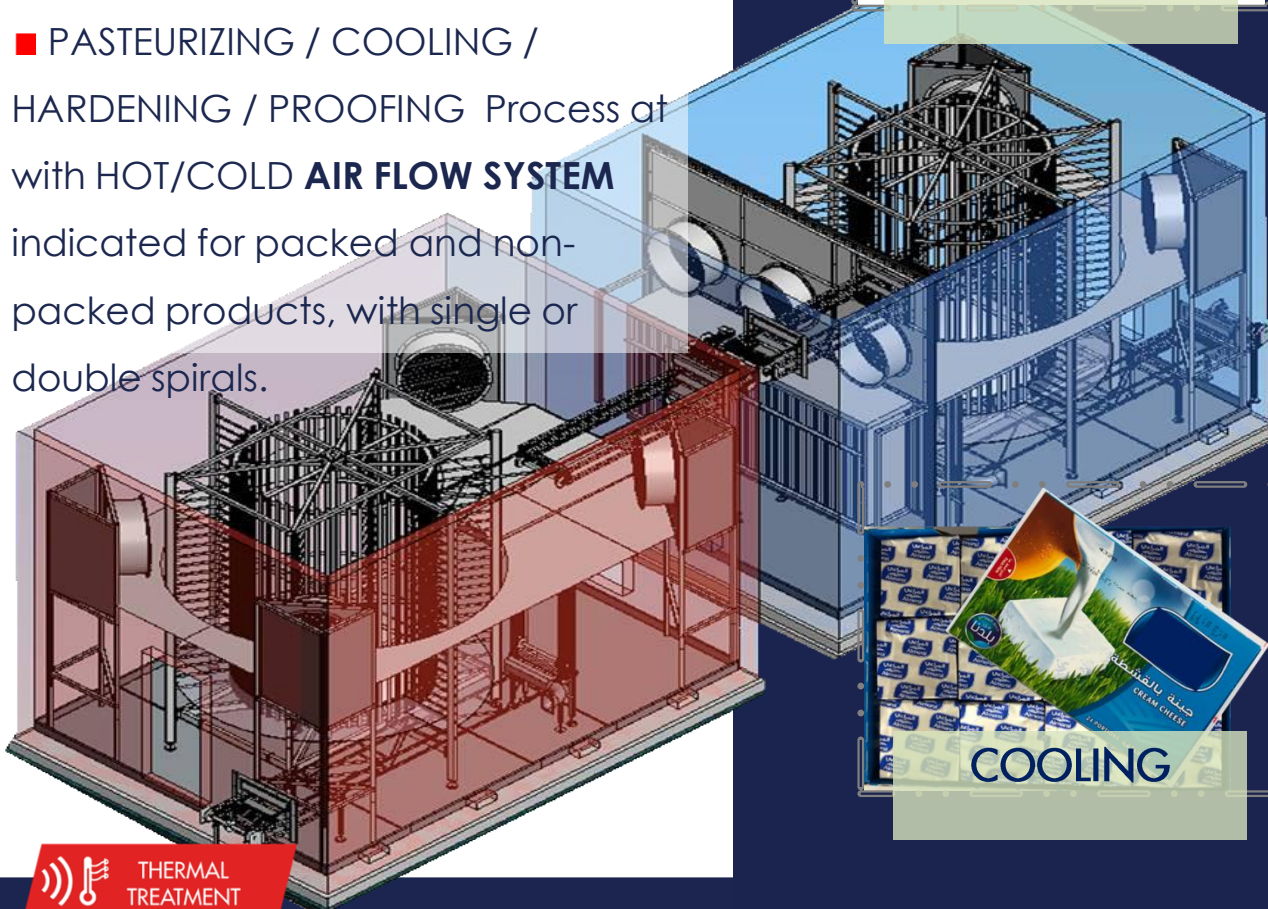




# MecAIR SPIRALS

## KEY TOPICS

■ PASTEURIZING / COOLING / HARDENING / PROOFING Process at with HOT/COLD AIR FLOW SYSTEM indicated for packed and non-packed products, with single or double spirals.



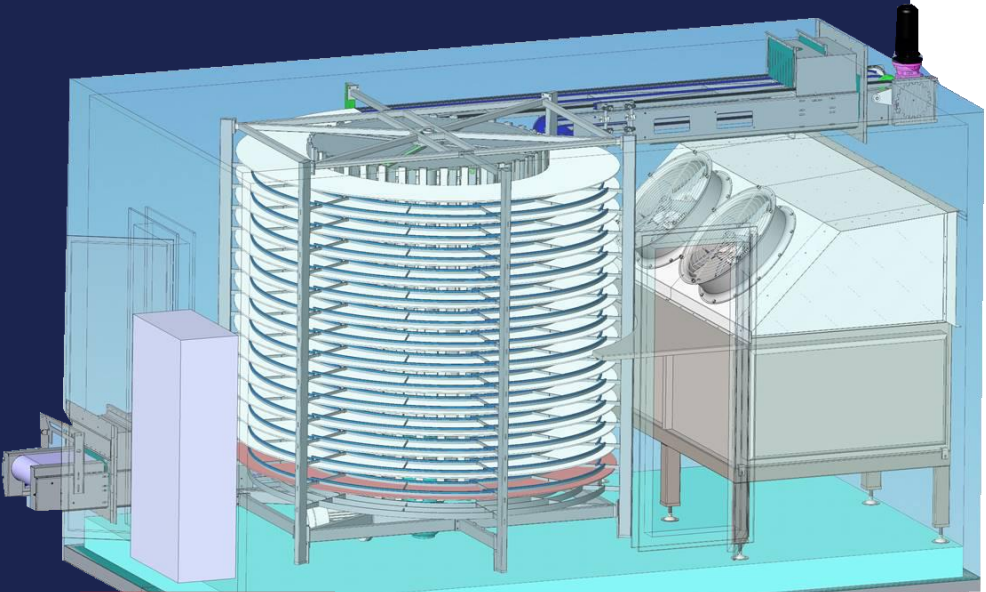




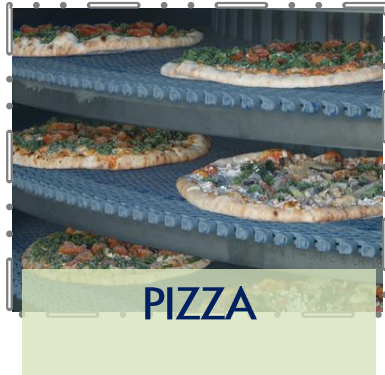
# SpiraFREEZE SPIRALS

KEY TOPICS

■ **FREEZING** process for **NAKED PRODUCTS** of MEDIUM-LARGE DIMENSION (not fragile) and **PACKAGED PRODUCTS**



THERMAL TREATMENT



PIZZA



BREAD & PASTRY



GRILLED VEGETABLE



FISH



SPINACH PORTION



HAMBURGER and MEAT



CONVENIENCE



PACKED BAGS



PACKED PRODUCTS

# MECFlow – Fluid bed IQF freezer

FREEZING process for **NAKED PRODUCTS** of **SMALL DIMENSION** (fragile)

- **DEEP FREEZING** → **COLD AIR CIRCULATION**
- **IQF FREEZING** → **COLD AIR CIRCULATION + PRODUCT FLUIDISATION**



Capacity RANGE



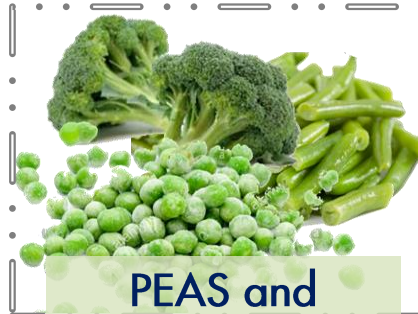
From 500 KG/H  
Up to 15.000 KG/H



DICED PEPPER



BERRIES &  
STRAWBERRY



PEAS and  
VEGETABLES



FRENCH FRIES



DICED  
CARROTS



# MECDry

Complete range of **DRYER** for a wide range of application

- **BATCH TROLLEY DRYER**
- **CONTINUOUS TROLLEY DRYER**
- **CONTINUOUS BELT DRYER**



ONION



CARROTS



SPINACH LEAVES



APPLE CHIPS



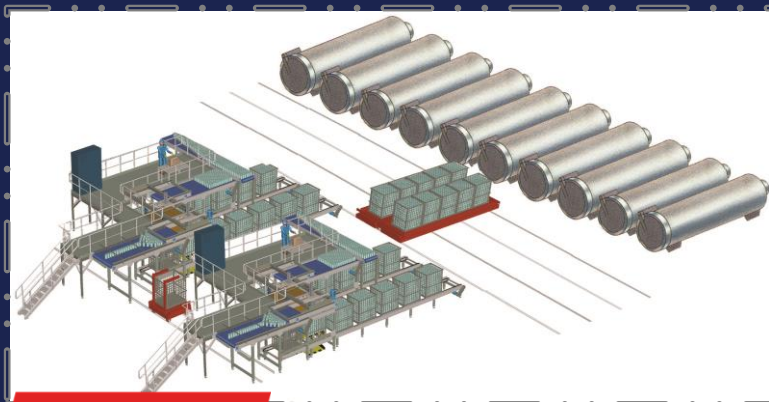
PARSLEY



FRUITS

# STERILIZATION SYSTEM

- ✓ 50 YEARS OF EXPERIENCE
- ✓ MORE THAN 1700 EQUIPMENT'S INSTALLED
- ✓ LATEST AUTOMATION AND PROCESS CONTROL DEVELOPMENT





# MARKET & PRODUCTS

- VEGETABLES
- BABY FOOD
- READY MEALS
- SOUPS
- SAUCES
- MEAT
- TUNA FISH & FISH
- PET FOOD
- PRE-COOKED RICE
- MILK, COFFE, TEA BASED DRINKS

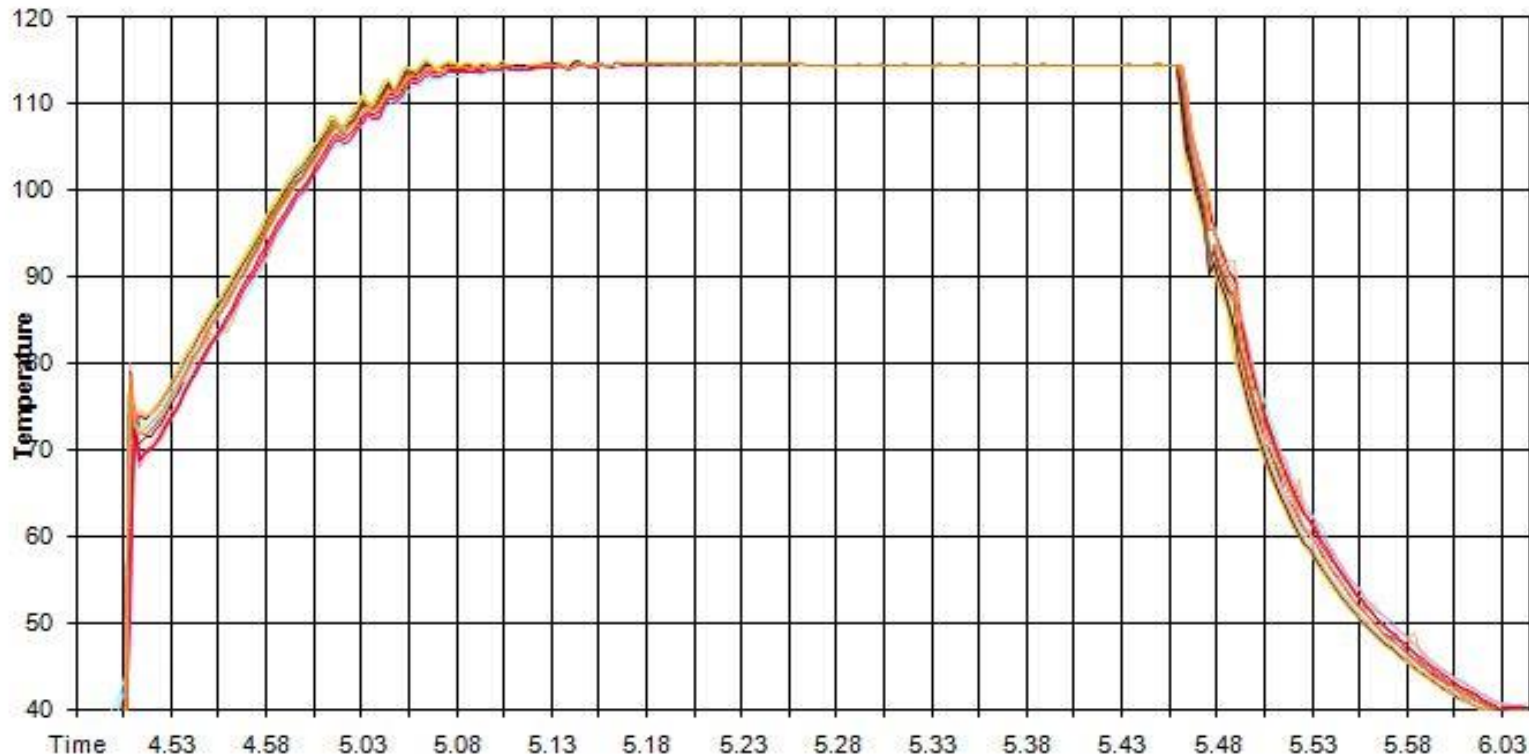




# STERILIZATION GOAL

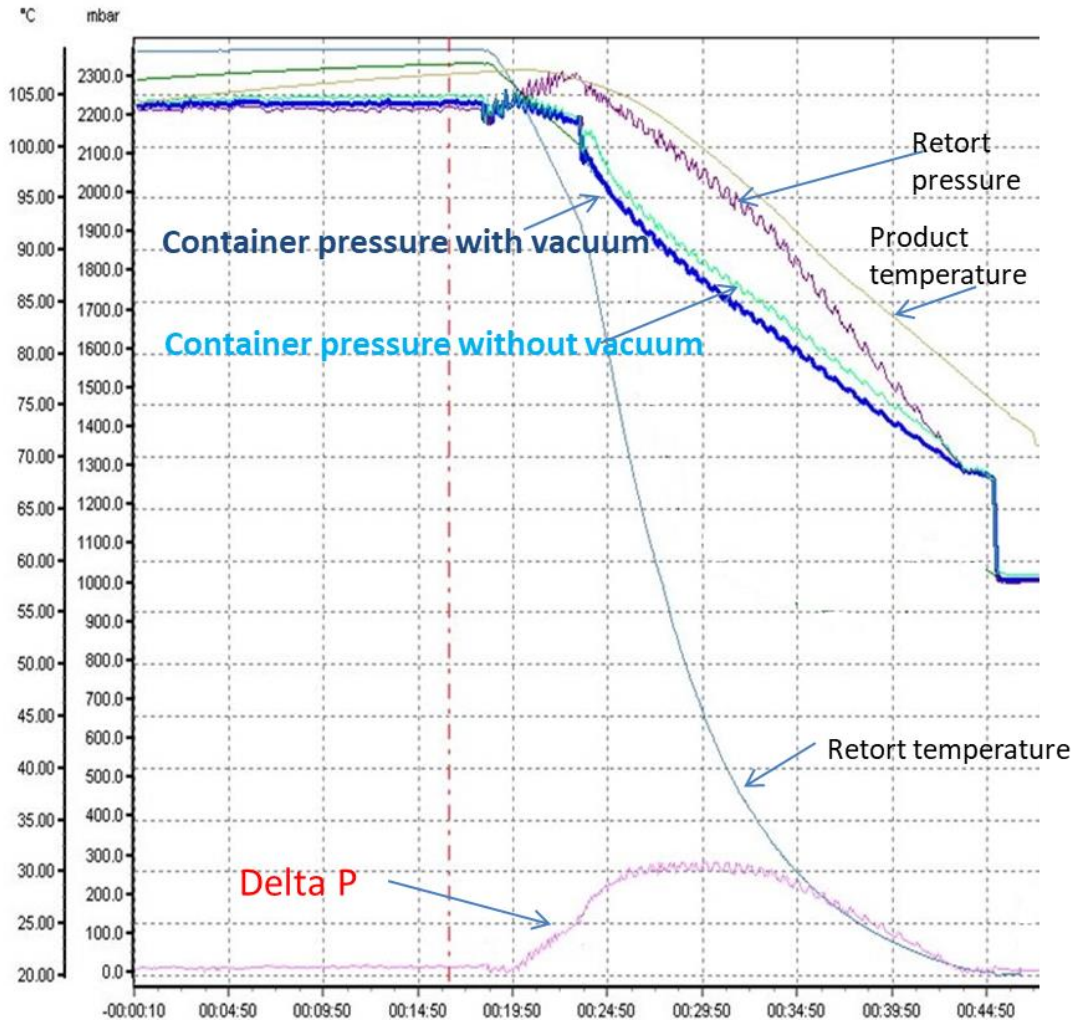
## ▶ TEMPERATURE DISTRIBUTION UNIFORMITY

AUTOCLAVE Ø1200 X 4000 WATER SPRAY N°18 DATATRACE



“Extend shelf life in already airtight packed foods by reducing the microbial population (including bacteria and sporogenous forms) and deterioration kinetics with thermal treatment over 100°C”

# STERILIZATION GOAL



## PACKAGING INTEGRITY

Pasta filled at 30°C  
Sauce filled at 60°C

Recipe:

Warm Up.1 80°C 0,8 Bar

Warm Up.2 90°C 1,2 Bar

Holding 113°C 1,2 Bar

Cond. 90°C 1,3 Bar

Cooling 1 - 50°C 0,9 Bar

Cooling 2 - 30°C 0,3 Bar

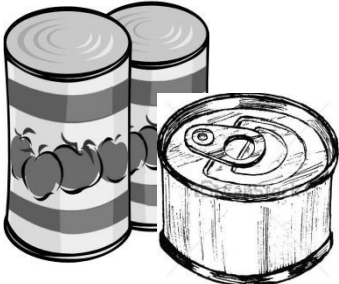


STATIC RETORT

# 1 EQUIPMENT – 3 TECHNOLOGIES



**WATERSPRAY SYSTEM**  
for glass bottles  
and aluminium cans



**STEAM SYSTEM**  
CANS up to 500 g

**STEAM AIR SYSTEM**  
plastic trays, cups  
and pouches





# CIBUSTEC PILOT PLANT

**LEVATI**<sup>®</sup>  
Food Tech

## PILOT PLANT ROTARY RETORT

SR 800X800 1D S WR SA HE



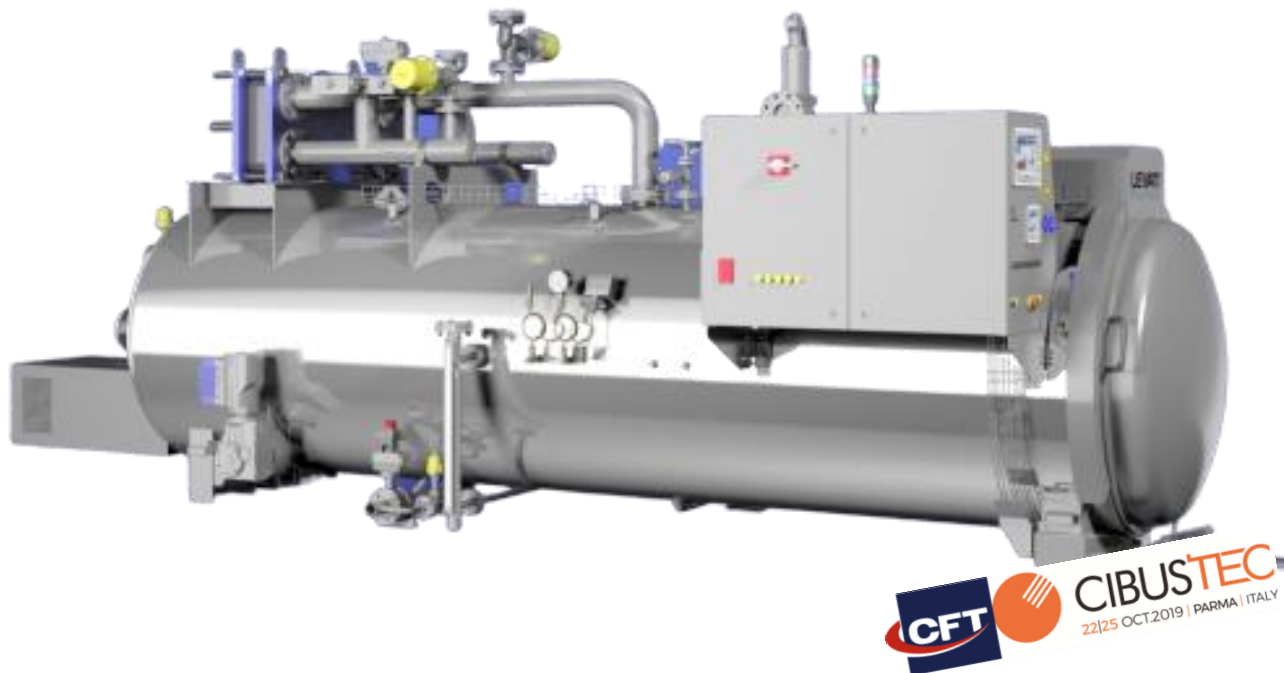
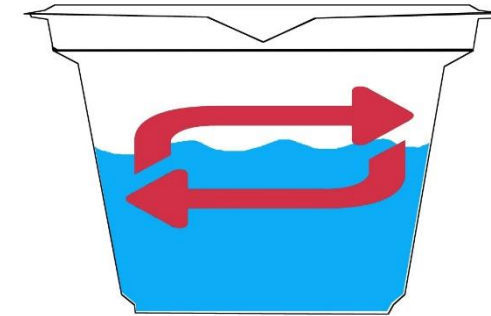
- S SATURATED STEAM , WR WATER RAIN, SA STEAM/AIR MIX CYCLES
- DISPLAY AND RECORD OF ALL PROCESS PARAMETERS IN REAL-TIME
- TOTAL FLEXIBILITY BETWEEN STATIC-TILTING-PENDULUM-ROTATION IN EVERY CYCLE STEP

**“**  
**ONE MACHINE THREE STERILIZATION CYCLES S-WR-SA**  
**TOTAL FLEXIBILITY IN THE CYCLES AND ROTATION MODE**  
**UP-SCALABILITY OF LAB TEST TO INDUSTRIAL SYSTEM**



# CIBUSTEC GINYUS SWING

▶ **SWING AGITATING RETORT BACK AND FORTH LONGWISE INSIDE**



Patent system:

- 1) TOTAL FLEXIBILITY MOVEMENT: not only speed settable but also stroke, acceleration, deceleration and multiple stop and go settable etc..
- 2) ON BOARD – reduced footprint usage and low installation/start up cost
- 3) NO LUBRICATED part inside retort
- 4) Can process both WR and SA cycles

# CIBUSTEC GINYUS SWING

## GINYUS SWING AGITATING RETORT

SW 1200X4000 1D S WR SA 1HE



- MAXIMUM FLEXIBILITY IN SPEED, STROKE, ACCELERATION AND DECELERATION
- IDEAL FOR DAIRY PRODUCTS/ EXCELLENT FOR HIGH-DENSITY PRODUCTS
- SIMPLE INSTALLATION, REDUCED FOOTPRINT AND LOW MAINTENANCE



**ADJUSTABLE STROKE BETWEEN 0 AND 120MM  
TOTAL FLEXIBILITY IN AGITATION MOVEMENT  
DRASTIC REDUCTION OF THE MAILLARD EFFECT**

Swing is excellent for:

- MILK-BASED PRODUCTS
- LOW ACID DRINKS
- HIGH VISCOSITY PRODUCTS LIKE SOUPS AND CREAMS

in every kind of packaging as cups, trays, pouches, bottle and cans.





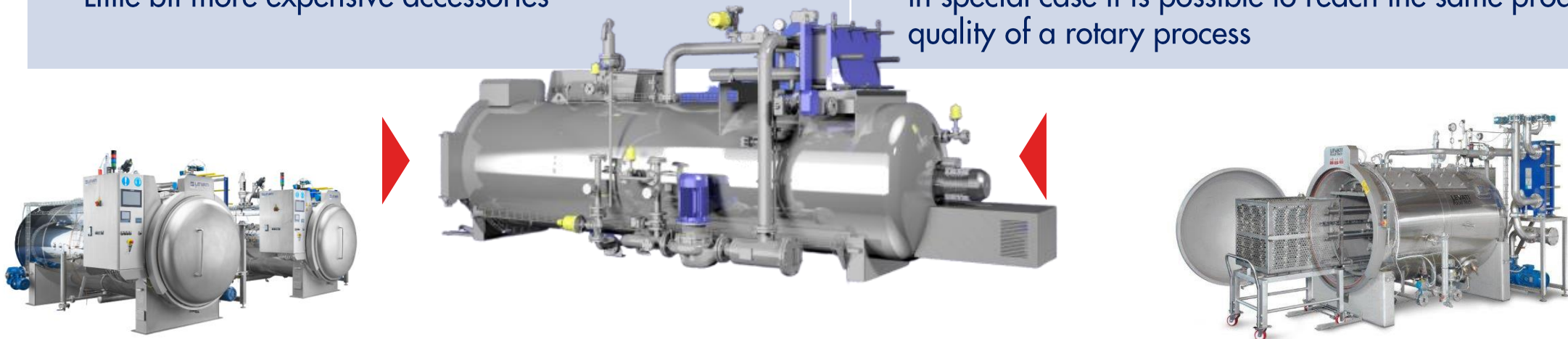
## ▶ SWING THE PERFECT COMBINATION BETWEEN STATIC AND ROTARY

### ADVANTAGES VS STATIC RETORT

- Drastic reduction of Maillard effect
- Reduced sterilization cycle
- More Homogeneous sterilization
- Best rate product quality / cost
- Little bit more expensive accessories

### ADVANTAGES VS ROTARY RETORT

- Very competitive price
- Reduced maintenance cost
- Less expensive crate
- Reduced footprint
- In special case it is possible to reach the same product quality of a rotary process



THANK YOU!



[www.cft-group.com](http://www.cft-group.com)