

# COVAL

vacuum managers

## VACUUM HANDLING SOLUTIONS FOR PRODUCTS, PACKAGING AND PACKING



## ADVANCED VACUUM SOLUTIONS

# Vacuum Managers

COVAL strives to contribute to the performance and safety of industrial processes by vacuum handling objects of all sizes, weights and materials.

For this, we have developed expertise in four complementary lines of business:

- The development of technological solutions based on **'just innovation'**
- Manufacturing of vacuum pumps and suction cups in **France**
- Distribution of the product range by our **sales team, 5 subsidiaries, and a network of selected distributors**
- Provide support both prior to and following the sale of a product with 3 primary goals: analyze the application, aid decision making and train users.

COVAL is a company which shares with its customers its values of **technical know-how, productivity, commitment, flexibility and responsibility.**

COVAL provides a comprehensive range of vacuum handling services for its customers - that's why COVAL employees are **Vacuum Managers.**



## We offer you much more than just vacuum

*Around us, the world is changing: redefinition of family life, aging population, stronger awareness about health and individual well-being.... All changes which directly affect our consumption habits and therefore everyday products, their design, their production, their packaging. Each company must seize, integrate and respond to these evolutions to keep pace with its market.*

*They must rely on capable partners, with flexibility to respond to their new challenges:*

- Making production lines more versatile
- Manufacturing while respecting the environment and food safety
- Increasing productivity while maintaining a high level of quality
- Reducing production and maintenance costs

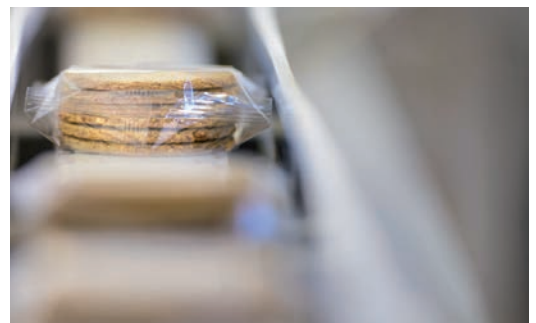
For more than 30 years, COVAL has developed a range of vacuum pumps and suction cups which enable you **to grip and move products, as well as, primary and secondary packaging of all shapes, weights and materials, on production and packing lines.**

To respond to your constant challenges in the field, COVAL relies on:

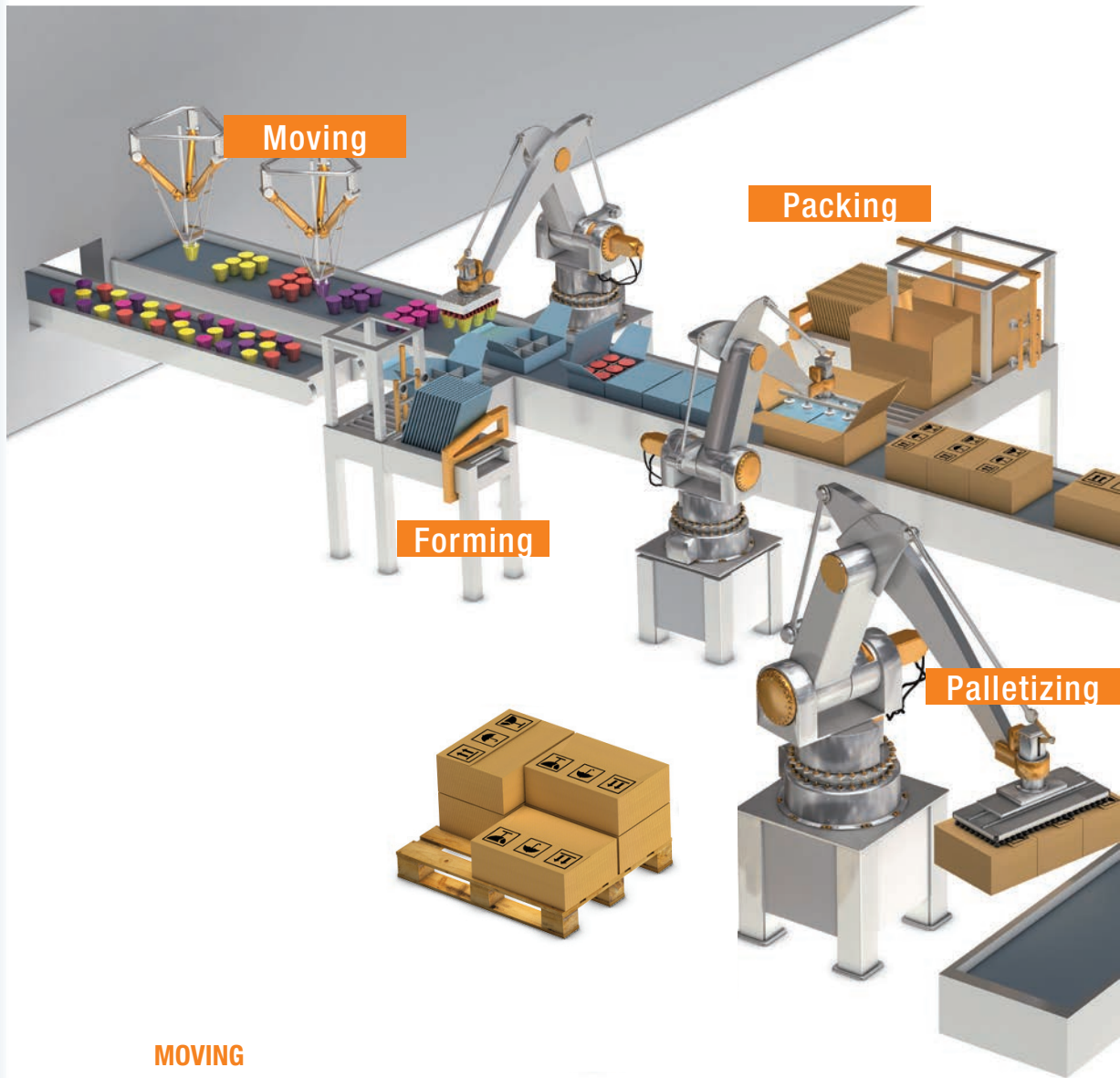
- A strong capacity for development and innovation
- A team 100% dedicated to Packaging
- A full product range dedicated to handling, packaging and packing
- Experience and solid expertise acquired from world leaders

Our uniqueness is our capacity, via our products, service and expertise, to **not limit our customers or their project needs.** We are always able to analyze, offer, develop, produce and accompany THE perfectly adapted solution to their requirements.

**We are Vacuum Managers, every day!**







## MOVING



MVS / VSA suction cups  
CIL / VR / GVR micro-ejectors

- Suction cup design and materials optimized for high output
- Maintenance-free vacuum output pumps with a high degree of reliability

## FORMING



VP / VSA suction cups  
LEM / LEM+ / GEM vacuum pumps

- Vacuum pumps and suction cups adapted for porous materials
- Reduction in vacuum consumption

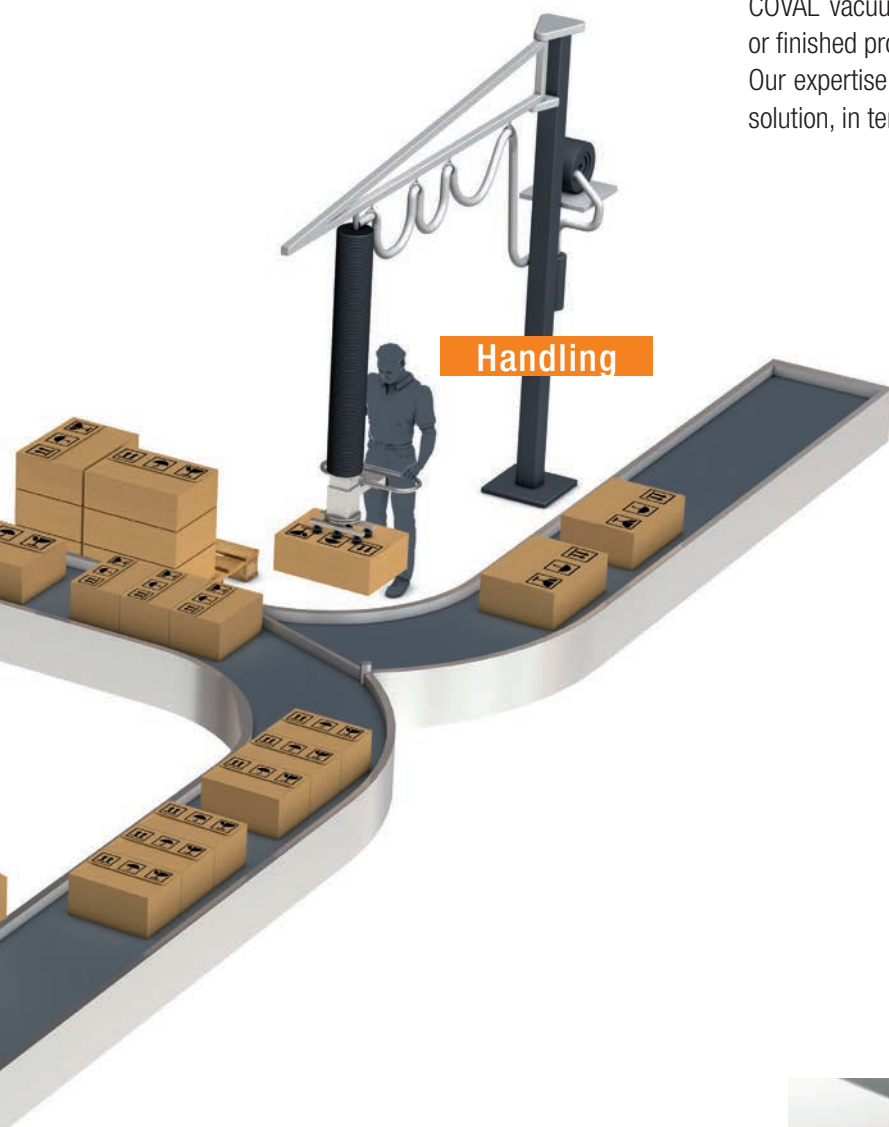
## PACKING



VSA suction cup  
GEM, LEM, LEM+, LEMAX and LEMAX+ vacuum pumps  
MVG vacuum gripper

- A broad range of solutions for gripping and transferring packaging of all shapes and materials

# along the line



COVAL vacuum pumps and suction cups are present wherever raw or finished products are packaged, put in boxes and palletized. Our expertise is to accompany you in the choice of the most efficient solution, in terms of quality, productivity and energy efficiency.

## Industries that we work with:

- Food processing
- Health and Beauty
- Household equipment
- Technological equipment

## Machines that we equip

- Pick and place
- Box forming
- Bagging
- Case packers
- Palletizers

## Products that we handle

- Cardboard
- Paper
- Plastic
- Flow pack
- Aluminium
- Tin

## HANDLING



Lifting tube  
Cyclone

- Reduction in operator Repetitive Strain Injury
- Protection of the loads and operator even in the case of a power cut

## PALLETIZING



CVG series vacuum gripper  
MVG modular vacuum gripper

- Gripping several cardboard boxes at a time
- Multi-zone
- Optimization of palletization plan



# A range of technologies perfectly suited for all manufacturers' requirements

## ■ Energy efficiency

Using less energy lowers the environmental impact of production and reduces production costs.

## ■ Reliability

Eliminating machine down-time for maintenance due in part to a non-clogging silencer and optimal design in vacuum pumps, helps increase productivity of packaging lines.

## ■ Ergonomics

Accelerate the handling and use of products making operators more versatile.

## ■ Flexibility

Enabling a product to adapt itself to your production line helps provide flexibility and reactivity.

## ■ Very high output

Combining suction cups and pumps developed specially for very high outputs, to meet the expectations of the most demanding customers.

## Vacuum pumps

### LEM and LEM+ series

Mini vacuum pump integrated with intelligence dialogue

- Plug & Play installation
- Very compact
- Wide range with many accessories
- Optimal ergonomics for adjustment, operation, maintenance
- ASR : 40% energy savings

#### Use

Handling all porous or airtight pieces



### LEMAX and LEMAX+ series

Mini vacuum pump with « ASC » integrated

- Very compact and light
- More than 90% energy savings
- Operational silence
- Auto-adaptation depending on the material to be handled

#### Use

Handling all airtight or low porosity pieces



### GEM series

Vacuum pumps with integrated pressure regulators

- Very compact 'all-in-one' solution
- M12 connector simplifying installation and use
- 2 vacuum levels available : 60% and 85%
- 5 nozzle diameters (1.2; 1.5; 2.0; 2.5 and 3.0 mm)



### CMS series

Multi-stage vacuum generators

- High volume tank drainage
- Handling porous pieces
- Supply to the CVG and MVG series vacuum grippers



## Suction cups

### Standard suction cups

**VP, VPG, VSA, VS, VSP, VPO, VPU, VPF, VSAG, VSAJ, VSAB, VSG**

Compatible with numerous materials : cardboard, glass, hard and soft plastic, flow pack...

- 4 standard materials: nitrile, natural rubber, silicone, Siton®
- ø 5 mm to 88 mm
- Round, oblong, flat shapes, 1.5 and 2.5 bellows





■ Twintech™\* 

Integrates all the functions (control valve, pressure regulation, 'product gripped' control signal, integrated vacuum switch) in a single compact and light module. The vacuum pump is placed closer to the suction cups, reducing the cycle duration and limiting energy loss during handling.

■ ASR\* (Air Saving Regulator) 

Whatever the pressure supplied by the compressed air network (between 4.5 and 7 bar), this is automatically optimized by ASR to 3.5 bar and generates energy savings of 40% on average. ASR technology avoids the need for an external pressure regulator and eliminates the risk of altering settings and of unnecessary consumption.

■ ASC (AIR SAVING CONTROL)\* 

is a regulation system which stops air consumption when the set vacuum level is attained. It provides up to 90% energy savings and a significant reduction in noise level.



## Vacuum grippers

### MVG

Modular vacuum gripper

- Customized sizes
- Selection of gripping zones
- Compactness and lightweight



### CVG

Vacuum gripper

- Many possible combinations
- Integration of all functions
- Adapted to a large number of industries.



## Accessories

### Vacuum switches

Electronic, electric or pneumatic  
PSD, PSK, PSA100, PSE, PSP



### Spring systems

1/8G – 1/4G – 3/8G Standard  
or anti-rotation TS – YS – TSOP – TSOG



### Vacuum filter

1/8G – 1/4G – 3/8G – 3/4G – 2"  
Filtering cartridge:  
paper, stainless steel  
or polyamide  
FVI – FVU – FVUM – FVG



## COVAL at the heart of the food processing industry

Located in France, the second largest exporting country of food processing products in the world, COVAL has a continued relationship with the Food Processing Industry sector.

- Strong presence at the heart of the food processing sector
- Ranges of silicone suction cups, compatible with FDA food standards and European directives
- Specific suction cups for optimized product gripping
- Vacuum pumps and suction cups for all packing

## Suction cups in touch with your products

### Silicone suction cups

- Diameter 1 mm to 88 mm
- Round and oblong shapes
- Flat, 1.5 and 2.5 bellows
- Metal detectable silicone version



### Specific suction cups

- Flexible, high speed suction cups, MVS series
- Bakery suction cups, VSD - VSE – VSP series
- Suction cups for egg handling, VSO series



# COVAL, as close as possible to your production



- Factory
- Head office
- Subsidiaries
- Distributors



Distributed by:



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