



# COVAL

vacuum managers

## vacuum components

VACUUM PUMPS



SUCTION CUPS



ACCESSORIES



GRIPPERS



## ADVANCED VACUUM SOLUTIONS

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

## Standard Suction Cups

**SHAPES:** flat, extra flat, 1.5 and 2.5 bellows, oblong, Ø 1 to 600 mm.

**MATERIALS:** nitrile, silicone, natural rubber and Siton® (resistance to abrasion and temperature up to 320°F). Other special materials on request.

**APPLICATIONS/ADVANTAGES:** Flat suction cups for gripping flat objects, high precision, vertical loads. Bellows suction cups for round or cylindrical objects, height compensation. 2500 models, available in various materials to suit standard industrial applications.



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FPC, MVS, VPA, VPAG, VPAL, VSAF, VSAOF, VSBO, VSD, VSE, VPR, VPSC, VPYR, VS0, VSP

## Special Suction Cups

COVAL's ambition as vacuum managers has led the company to develop customized suction cups for one-off applications. The special suction cup ranges are the direct result of close partnerships with its clients.

**APPLICATIONS:** special suction cups for handling of light bulbs, CDs, paper products, bottles, bread, eggs, bags, FlowPack, cheese...

**MATERIALS:** nitrile, silicone, anti-static silicone, natural rubber, Siton®, ...



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SPL, VA, VPG, VSAG

## Heavy Load Suction Cups

A complete range of modular components adaptable to all types of needs for handling heavy loads (metal, glass, stone etc.).

**SHAPES:** flat and 1.5 bellows, oblong, Ø 120 to 600 mm.

**MATERIALS:** nitrile, silicone and Siton® (resistance to abrasion and temperature up to 320°F).



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CIL, VR, GVR, GVRL, CVPC, CVP

## Micro-Ejectors

This range is particularly suitable for robotics, multi-part or randomized part gripping.

**CHARACTERISTICS:** vacuum level range up to 85%, suction flow range up to 95 NI/min (3.4 SCFM), optimal supply pressure 5 bar (72 psi).

**ADVANTAGES:** simplicity of installation and usage, lightweight and compact, clog-free, optimal and efficient performance due to configurable vacuum flow, zero maintenance, silent functioning, customized modules on request.

CVPC

Controlled Vacuum Cartridges



CVP

Vacuum Cartridges

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GVP, GEMP, GVEC, LEMP

## Vacuum Pumps

Vacuum Pumps offers a variety of models and technical features depending on the type of gripping and your technical constraints.

**CHARACTERISTICS:** 3 vacuum levels (50%, 75% & 85%), suction flow up to 450 NI/min (16 SCFM), optimal pressure 4 bar (58 psi).

**ADVANTAGES:** simplicity of installation and usage, lightweight and compact, optimal and efficient performance due to configurable suction flow and maximum vacuum level, clog-free, silent functioning, customized modules on request.

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LEM, LEM+, LEMAX, LEMAX+, LEMCOM, GVMAX

## Intelligent Vacuum Pumps

The COVAL innovation of an intelligent vacuum pump series originates from Twintech technology. Twintech is an 'all in one' concept which for the first time integrates all the necessary components at the heart of the vacuum pump.

**CHARACTERISTICS:** 2 vacuum levels (60% & 85%), suction flow up to 450 NI/min (16 SCFM), optimal supply pressure 4 bar (58 psi), integrated pressure regulator.

**ADVANTAGES:** plug & play system, simplicity of installation & usage, modularity, lightweight and compact, guaranteed performance and efficiency, clog-free, silent functioning, energy savings due to automatic pressure regulation & vacuum regulation.



Mini Vacuum Pumps  
with Fieldbus Communication



LEMCOM

PROFI  
NET

EtherNet/IP

CANopen

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TS, YS, TSOP, TSO, L, PMG2, RSC, CSP, VSBM

## Suction Cup Accessories

COVAL offers a wide range of suction cup accessories adaptable to all types of applications such as spring systems, threaded extension rods, flow-restricting nozzles, automatic shut-off valves, non-return valves, and foam rings for gripping products with an uneven or ridged surface.



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FSL, FVU, FVUG, SILK, NVR, NVA, CBP, QR

## Peripherals, Vacuum Network

COVAL offers a complete range of peripherals, such as vacuum feeders, fittings, vacuum filters, liquid separating vacuum filters, Quick Release devices, Blow-off devices, and Pilot Control cartridges... necessary for optimizing the vacuum network.



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PSE, PSA, PSP, PSK, PSD, VAF111

## Vacuum Monitoring

Vacuum Switches are used to measure the vacuum level on an installation and deliver an electronic or pneumatic signal.

**ADVANTAGES:** high precision, universal solutions, variety of options: electric, electronic, digital or pneumatic.



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## Modular Vacuum Grippers

**CHARACTERISTICS:** The MVG series, using standard vacuum components, provides a made-to-order vacuum gripper solution to handle products of varied sizes, shapes and weights.

**ADVANTAGES:** Customized sizes (100 x 100mm to 1200 x 1000mm), configurable gripping interfaces (Suction cups, foam, or COVAL-flex) and multi-zoning possibilities. A reliable and efficient solution that is easy to install and use.



## Compact and Light Vacuum Grippers

**CHARACTERISTICS:** 3 models ranging from 424mm, 624mm & 824mm in length and 120mm in width. The CVGL range of grippers allows you to opt for a vacuum source mounted either onboard or independently.

**ADVANTAGES:** A reliable and economic solution adaptable to handling all types of objects varying in shape and size. Simple and flexible installation and usage.



## Coval Grippers

COVAL develops customized solutions, on demand, for automated applications in different sectors, such as packaging, food processing and plastic processing.

We are involved throughout the entire production chain, from individual handling of objects to complete end-of-line layer palletization.



**COVAL**  
vacuum managers

## A TECHNOLOGICAL PARTNER WITH WORLDWIDE VISION

COVAL, *vacuum managers*, conceives, manufactures and commercializes worldwide components and systems for vacuum automation.

Every year, we keep developing our network of partners (subsidiaries, distributors and independent agents) as our objective is to assist our clients in their quest for local and international markets.

Our mission, is to go beyond the limits of a simple component supplier and assist our clients at each step of our interaction by:

Organizing specialized training programs for our clients and partners.

Proposing efficient, economic and reliable solutions

Ensuring timely delivery and proper installation of our solutions.



**COVAL S.A.S.**  
Head Office



**COVAL INC.**



**COVAL IBERICA**



**COVAL GERMANY**



**COVAL ITALIA**



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Distributed by:

**NORTHWEST  
AUTOMATION  
PRODUCTS**



certified quality  
management system

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