

# **CVS Central Vacuum Stations**

Modular, ready-to-operate systems for varying vacuum demands with BASIC or PLC control



# Vacuum Expertise for

## **SOGEVAC Central Vacuum Stations**

cover the demands of numerous small vacuum consumers, increasing the availability of the vacuum service. CVS Central Vacuum Stations provide the essential performance and reliability to succeed under challenging production conditions.



**CVS 60**  
with 1 x SOGEVAC SV 40 B



**CVS 160**  
with 2 x SOGEVAC SV 100 B

Vacuum pumps and system solutions provided by Leybold always deliver first rate performance, thus ensuring the optimum operating pressure, cycle time and system availability in harsh industrial applications.

## Modular turn-key solutions

# Central Vacuum Stations

### Technical Features

- Typically consisting of
  - up to 3 SOGEVAC pumps (from 25 to 300 m<sup>3</sup>/h)
  - buffer vessel
  - manual valve (basic control) or electropneumatic valve (PLC control)
  - dust filter at the pump inlet
  - pressure gauge/sensor
  - two-stage pressure controller
  - electrical cabinet with controller
  - all connecting components
- Pumping speed 25 to 840 m<sup>3</sup>/h
- Ultimate pressure ≤ 0.5 mbar
- Vessel volume 60, 160, 300, 500 or 1000 liters
- Electric power from 0.8 to 18.9 kW
- Control type BASIC or PLC

### Benefits

- Industrial grade vacuum generator consisting of proven SOGEVAC single-stage rotary vane vacuum pumps
- Covers the demands of numerous small vacuum consumers
- Modular design, customized to customer specific processes
- Simple to operate
- Space-saving system solution
- High return on investment, excellent price-to-performance ratio
- Energy saving capabilities
- Low cost of ownership
- Cycle time reduction due to the buffer volume (infinite pumping speed effect)
- Complete turn-key systems, ready for operation

### SOGEVAC Vacuum Pumps

#### **The core piece of every CVS Central Vacuum Station**

- Proven industrial vacuum pumps
- High pumping speed to footprint ratio by compact design
- No oil emissions
- Lowest cost of ownership due to easy maintenance and minimized after-sales costs
- Lowest noise level for rotary vane pumps available on the market
- 400 V, 50 Hz / 460 V, 60 Hz versions available
- Proven SOGEVAC design with manual gas ballast and oil filter



# your vacuum requirements in **Industrial Processes**



## Typical Applications

- General applications demanding vacuum:
  - Transportation
  - Handling / lifting
  - Degassing
  - Automation (pick and place)
- Automotive industry
  - Thermoforming
  - Break filling, degassing
- Composites manufacturing
  - Resin Transfer Moulding (RTM)
- Vacuum pressing, like rubber, plastics, gaskets
- Food packaging/food processing
  - Vacuum filling
  - Thermoforming
  - Vacuum transportation, handling, lifting
  - Tray sealing / MAP packaging
  - Degassing
- Hospitals/Medical engineering
  - Bacteriological filters

### Application Example RTM

For some processes in the manufacture of composite materials it is necessary to have two different pressure levels, Resin Transfer Moulding (RTM) require a vacuum to close the mould while an adjustable vacuum level is used for the resin impregnation step. SOGEVAC Central Vacuum Stations provide the performance and reliability essential to success under challenging production conditions.

### Composites industry



### Plastics manufacturing



### Food packaging



# CVS Central Vacuum Stations

The full range for any vacuum demand

## Controller Options

### Basic

- Switching of the vacuum pumps simultaneously
- Two setpoints
  - S1 = pump(s) on
  - S2 = pump(s) off
- Pressure sensor
- Inlet filter at each pump
- Manual valve at each pump

### Full-featured

- 4 freely selectable switching thresholds
- Pressure sensor
- Inlet filter at each pump
- Independent pump control
- Master pump / spare pump mode
- Equal wear, sharing of operating hours among the pumps
- Automatic changeover to the spare pump in case of a pump failure or failure signal output
- Automatic start of the spare pump in case of pressure increase up to S3
- Delayed shutdown option to restrict the number of switching cycles to 6 per hour (10 minutes each)
- Electropneumatic valve
- Vacuum management via PLC

### Options for full-featured

- Remote control
  - Computer interface
  - SOGEVAC exhaust filter over-pressure switch or indicator
  - SOGEVAC service switch
  - Traffic light status
- For systems with SV 200/300:
- SOGEVAC oil level switch
  - SOGEVAC oil temperature switch

## Ordering Information

Central Vacuum Stations with basic control				
No. and type of SOGEVAC rotary vane vacuum pump(s):				
CVS 60	CVS 160	CVS 300	CVS 500	CVS 1000
1x SV 25 B 504309V001	1x SV 65 B 504310V001	1x SV 65 B 504311V001	1x SV 100 B 504312V006	1x SV 200 504313V011
1x SV 40 B 504309V002	1x SV 100 B 504310V004	1x SV 100 B 504311V004	2x SV 100 B 504312V007	2x SV 200 504313V012
			1x SV 200 504312V011	1x SV 300 B 504313V016
			2x SV 200 504312V012	2x SV 300 B 504313V017
			1x SV 300 B 504312V014	
			2x SV 300 B 504312V015	

## Ordering Information

Central Vacuum Stations with full-featured control				
No. and type of SOGEVAC rotary vane vacuum pump(s):				
CVS 60	CVS 160	CVS 300	CVS 500	CVS 1000
-	2x SV 65 B 504310V050	2x SV 65 B 504311V050	3x SV 65 B 504312V050	3x SV 65 B 504313V050
-	2x SV 100 B 504310V051	2x SV 100 B 504311V051	2x SV 100 B 504312V051	2x SV 100 B 504313V051
-			3x SV 100 B 504312V052	3x SV 100 B 504313V052
-			2x SV 200 504312V053	2x SV 200 504313V053
-			2x SV 300 B 504312V054	3x SV 200 504313V054
-				2x SV 300 B 504313V055
-				3x SV 300 B 504313V056

For detailed information, please refer to our general catalog.  
Visit our webshop [www.leyboldproducts.com](http://www.leyboldproducts.com).



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