VACUBE

Intelligent & Economical

Leybold

More than a vacuum pump...

At Leybold, we have been bringing useful innovations to the vacuum world since 1850. **VACUBE** exemplifies the quality of innovation with intelligent pumping. **VACUBE**, with oil lubricated technology and a variable frequency controller, delivers optimal pumping performance, energy savings and a better working environment for a wide range of industrial vacuum applications.

Energy-Efficient

VACUBE constantly adjusts its speed and uses the right amount of energy to pump **only what you need.**

Plug & Pump

VACUBE gives you **everything you need** to create vacuum **in a compact box:** inlet gas filter, inlet valve, vacuum pump, exhaust oil filters, cooling system, frequency controller and electrical cabinet. Quick and easy installation & set up.

Extended Uptime

We build **VACUBE** with robust material. The internal controller monitors and optimizes cooling. You get **longer maintenance intervals** and a vacuum pump that **delivers extended uptime.**

Smart Control

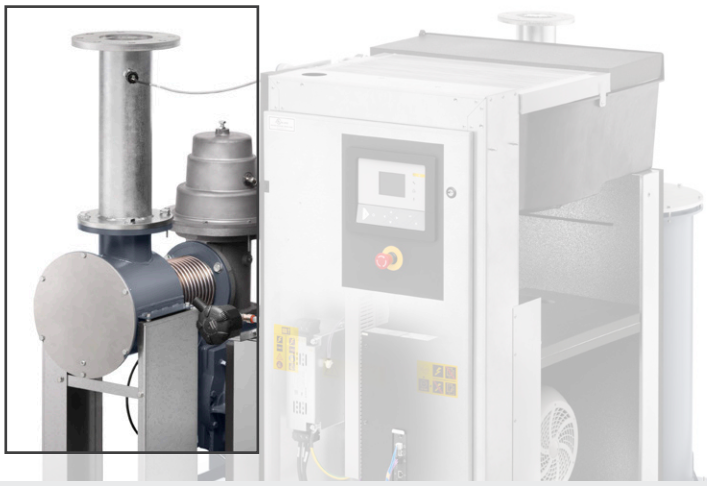
VACUBE come with a built-in **VAControl™** to give you added features and excellent connectivity.

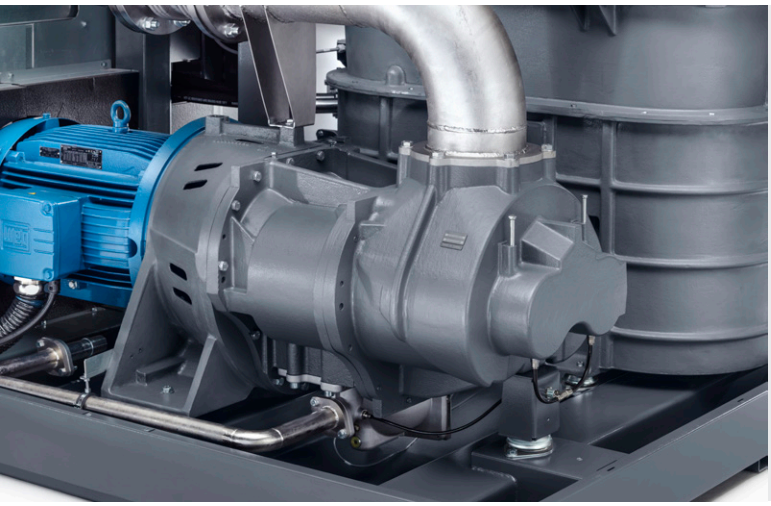
All connections on top:

- Inlet and exhaust pipes are located on top of the machine for easy connection.
- Exhaust pipes offer a drain point to remove condensation.
- The radiator and fan blow heat out the top to avoid heating up nearby machines.

Inlet filter and valve:

- The inlet filter protects the pump from particles over 5µm and is easy to access and clean when required.
- The inlet valve works in combination with the frequency controller to optimize performance & power consumption





Lubricated screw technology:

- Lubricated technology for high efficiency at all pressures
- High-precision screws for enhanced performance

On-board Leybold VAControl™ for industry 4.0:

- High-performance controller with two processors
- Ability to control & optimize performance
- Ability to securely manage local and remote pump connections. Remote includes: LAN, Wi-Fi , cellular 4G and IP internet connections.
- Ready to connect to industrial communication protocols: Modbus, Profibus, Profinet and others.

VACUBE for your applications

Food industry

Meat or fresh products packaging
(skin, modified atmosphere MAP)

Canning

Freeze drying

Vacuum cooling

Forming and molding

Thermoforming of food packaging

Large plastic forming
(e.g. Automotive & truck components,
bathtubs, shower trays, white goods internals)

Glass forming (e.g., bottles and windshields)

Wood/lamination

Manufacturing of composites

Holding, lifting and moving

Pick and place
(e.g., electronics, glass panels,
pallet machines, etc.)

Woodworking

Machining of non-ferrous materials

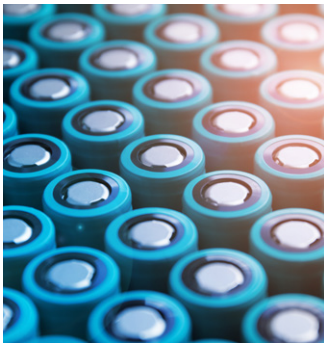
Dehumidifying and degassing

Vacuum cooling

Roof tiles and brick manufacturing

Pipeline drying

Lithium battery filling and degassing



Special demands

Altitude testing

Special evacuation duties

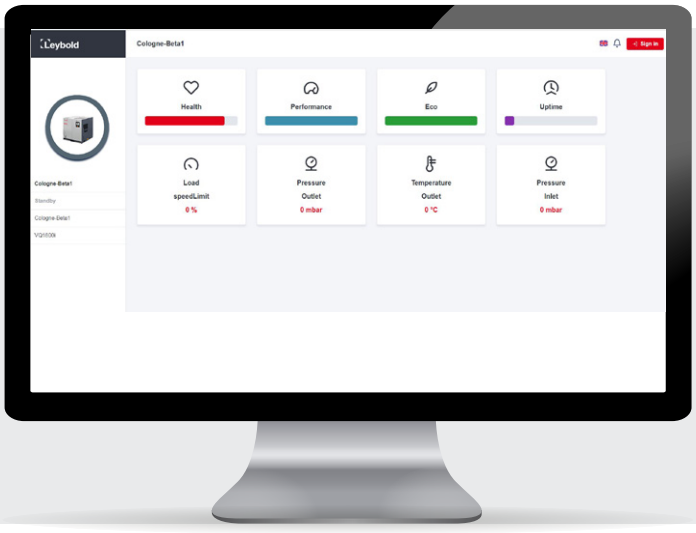
Please contact your local LEYBOLD representative to discuss your vacuum needs.

Managing your vacuum

The on-board Leybold VAControl™ is here to help you achieve optimal vacuum production

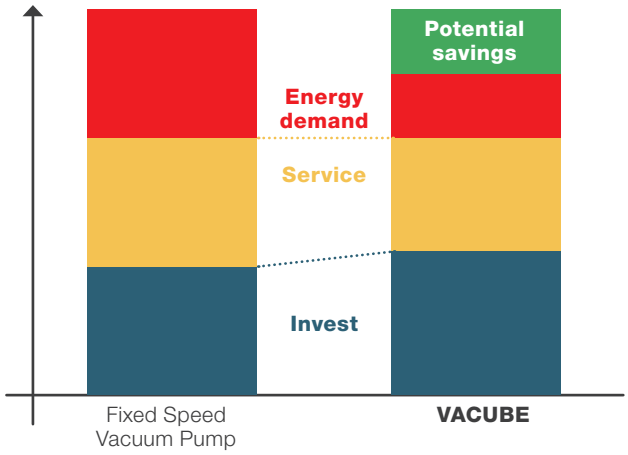
Leybold VAControl™ allows you to:

- Grant or block access to pump parameters
- Measure and control vacuum performance
- Track your energy consumption
- Anticipate maintenance and receive alerts
- Keep an eye on the pump from your desk or from anywhere in the world



Energy-optimized operation

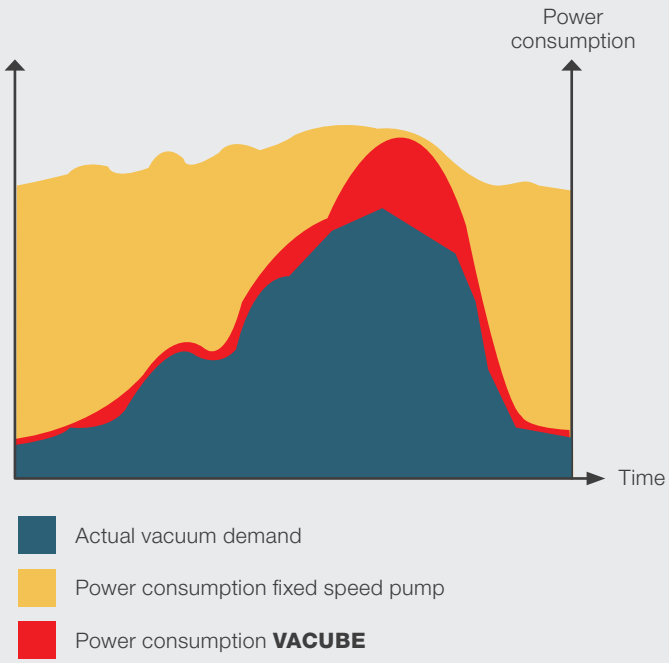
Whether your **VACUBE** is standalone or used in tandem with central vacuum systems, you'll enjoy significant energy savings. Power consumption changes in relation to realtime vacuum requirements.



Only pay for what you really need

With reduced vacuum demand, pumps without speed control simply lower the pressure level which is not what the process requires. Running at lower pressures, these pumps use only a little less energy.

With its rotary speed adjustment, **VACUBE** will maintain the pressure exactly as required. At reduced speeds, **VACUBE** proportionally reduces its power consumption, resulting in significant energy savings.



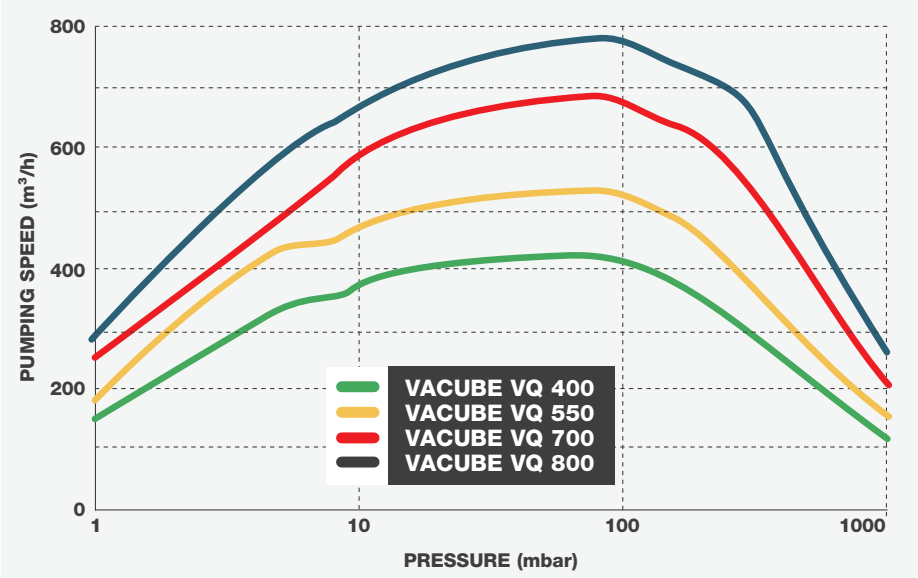
VACUBE models

VQ 400 – 800 i

- Compact canopy design
- Pallet format: easy to move and install
- Comes with high grade synthetic oil
- Choose between HMI or Touchpad interface
- Available in standard “i” and humid “iH” versions
- Now available with **VAControl™** controller on board

Technical Data		VACUBE			
		VQ 400 i	VQ 550 i	VQ 700 i	VQ 800 i
Max. pumping speed	m^3/h (cfm)	420 (247)	530 (310)	700 (412)	790 (465)
Ultimate pressure	mbar (Torr)	0.35 (0.26)			
Optimal pressure range	mbar (Torr)	5-400 (3,75-300)			
Motorshaft power	kW (hp)	5.5 (7.5)	7.5 (10)	11 (15)	15 (20)
Noise level (min–max)	dB(A)	51 – 65		51 – 73	51 – 76
Ambient temperature	°C (°F)	0 – 46 (32 – 115)			
Weight	kg (lbs)	500 (1102)		510 (1125)	520 (1147)
Protection class	IP	54			
Supply voltages*	kW	380 – 460V, 3ph, 50/60Hz			
Inlet flange		DN80 PN6			
Exhaust flange		DN65 non Std			

Pumping Speed

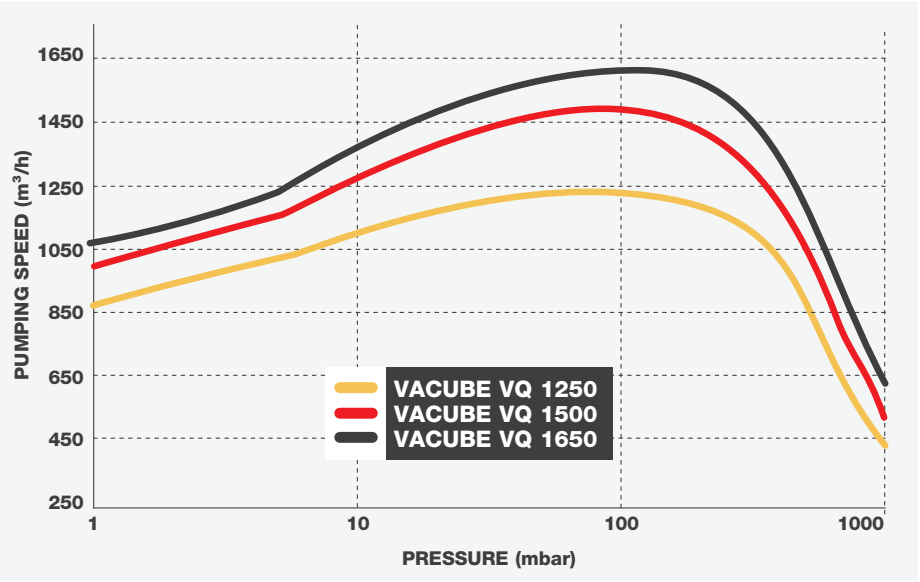


VQ 1250 – 1650 i

- Optimized canopy design: easily removable panels
- Wide pump speed variations for greater energy savings
- Comes with high grade synthetic oil
- Excellent thermal management- optional energy recovery
- Available in standard “i” and humid “iH” versions
- “iC” and “iCH” are available for short-cycle applications

Technical Data		VACUBE		
		VQ 1250 i	VQ 1500 i	VQ 1650 i
Max. pumping speed	m^3/h (cfm)	1250 (736)	1490 (877)	1620 (955)
Ultimate pressure	mbar (Torr)	0.35 (0.26)		
Optimal pressure range	mbar (Torr)	5-400 (3,75-300)		
Motorshaft power	kW (hp)	22 (29)	30 (40)	37 (50)
Noise level (min–max)	dB(A)	65 – 75		65 – 80
Ambient temperature	°C (°F)	0 – 46 (32 – 115)		
Weight	kg (lbs)	1058 (2333)		1073 (2366)
Protection class	IP	54		
Supply voltages*	kW	380 – 460V, 3ph, 50/60Hz		
Inlet flange		DN150 PN10		
Exhaust flange		DN100 PN10		

Pumping Speed



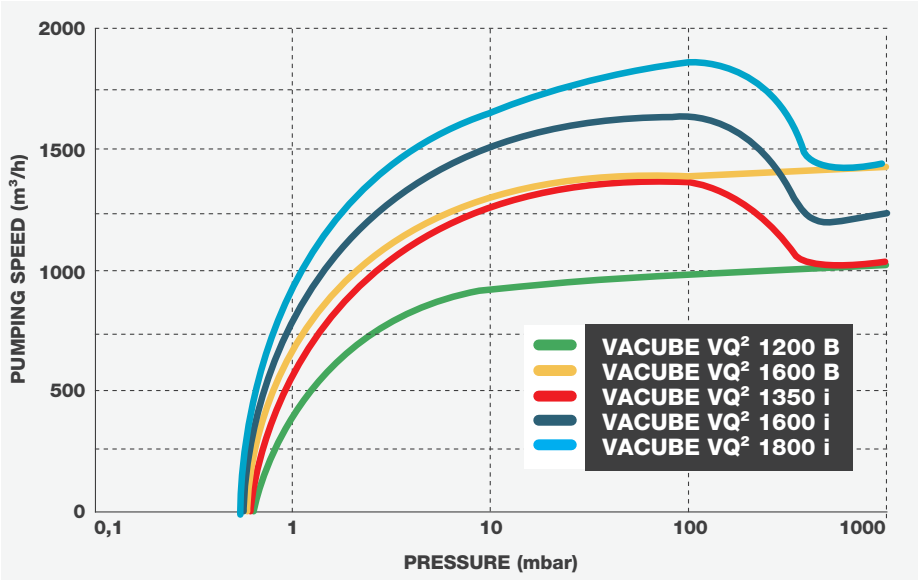
VACUBE models

VQ² 1200 – 1800 i

- IE5 motor
- Excellent pumping speeds at all pressures – perfect for pump-down as well as central vacuum applications
- Compact canopy design
- Pallet format: easy to move and install
- Comes with high grade synthetic oil
- Choose between HMI or Touchpad interface
- Available in standard “i” and humid “iH” versions
- Now available with **VAControl™** controller on board

Technical Data		VACUBE				
		VQ² 1200 B	VQ² 1600 B	VQ² 1350 i	VQ² 1600 i	VQ² 1800 i
Max. pumping speed	m³/h (cfm)	1050 (617)	1450 (853)	1370	1570	1770
Ultimate pressure	mbar (Torr)	0.35 (0.26)				
Optimal pressure range	mbar (Torr)	5-500 (3.75-375)				
Pumping speed at atm. pressure	m³/h (cfm)	1050 (617)	1450 (853)	1050 (617)	1280 (753)	1450 (853)
Motorshaft power	kW (hp)	22 (29)	37 (50)	22 (29)	30 (40)	37 (50)
Noise level (max)	dB(A)	76	78	76	78	78
Ambient temperature	°C (°F)	0 – 46 (32 – 115)				
Weight	kg	1210	1220	1210	1220	1230
Protection class	IP	54				
Supply voltages*	kW	380 – 460V, 3ph, 50/60Hz				
Motor efficiency and class		96% - Class IE4 / IE5				
Inlet flange		DN150 PN10				
Exhaust flange		DN125 PN10				

Pumping Speed



VQ² 1350 – 1800 iR

- IE5 motor
- Excellent pumping speeds at all pressures – perfect for pump-down as well as central vacuum applications
- Special design for assembling roots on the inlet flange
- Comes with high grade synthetic oil
- Plug&pump: roots are managed by the pump's controller
- Excellent thermal management- optional energy recovery
- **VAControl™** on board

Technical Data		VACUBE	
		VQ² 1350 iR	VQ² 1800 iR
Max. pumping speed	m³/h (cfm)	1340 (788)	1760 (1035)
Ultimate pressure	mbar (Torr)	0.35 (0.26)	
Optimal pressure range	mbar (Torr)	5-500 (3.75-375), 0.1-200 mbar with Booster	
Pumping speed at atm. pressure	m³/h	1050	1450
Motorshaft power	kW (hp)	22 (29)	37 (50)
Noise level (max)	dB(A)	74	78
Ambient temperature	°C (°F)	0 – 46 (32 – 115)	
Weight	kg	1290	
Protection class	IP	54	
Supply voltages*	kW	380 – 460V, 3ph, 50/60Hz	
Inlet flange		DN150 PN10	
Exhaust flange		DN100 PN10	

VQ² offers more benefits:

Perfect for fast pump-down

Optimal for central vacuum at all pressures

Equipped for industry 4.0

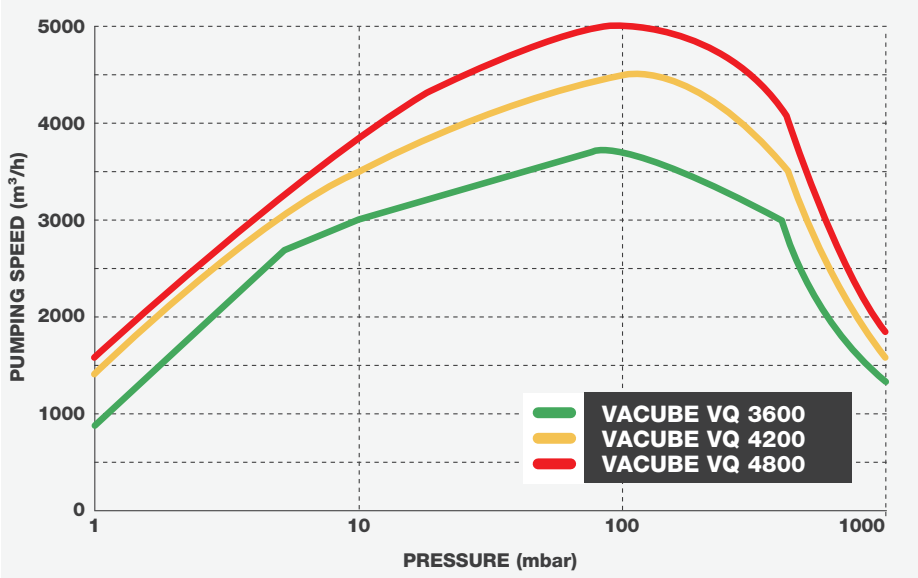
VACUBE models

VQ 3600 – 4800 i

- Very high pumping speeds
- Optimized canopy design: easily removeable panels
- Wide pump speed variations for greater energy savings
- Comes with high grade synthetic oil
- Excellent thermal management - optional energy recovery
- Available in standard “i” and humid “iH” versions

Technical Data		VACUBE		
		VQ 3600 i	VQ 4200 i	VQ 4800 i
Max. pumping speed	m^3/h (cfm)	3739 (2230)	4516 (2685)	4972 (2921)
Ultimate pressure	mbar (Torr)	0.35 (0.26)		
Optimal pressure range	mbar (Torr)	5-500 (3.75-375)		
Pumping speed at atm. pressure	m^3/h (cfm)	1240	1485	1672
Motorshaft power	kW (hp)	55 (74)	75 (101)	90 (121)
Noise level (min–max)	dB(A)	70 - 83	70 - 84	70 - 85
Ambient temperature	°C (°F)	0 – 46 (32 – 115)		
Weight	kg (lbs)	3945 (8697)	3980 (8774)	4000 (8818)
Protection class	IP	54		
Supply voltages*	kW	380 – 460V, 3ph, 50/60Hz		
Inlet flange		DN200 PN10 - ANSI8''		
Exhaust flange		DN150 PN10 - ANSI6''		

Pumping Speed



Additional products

Accessories

VACUBE is available with various accessories for your special process needs:

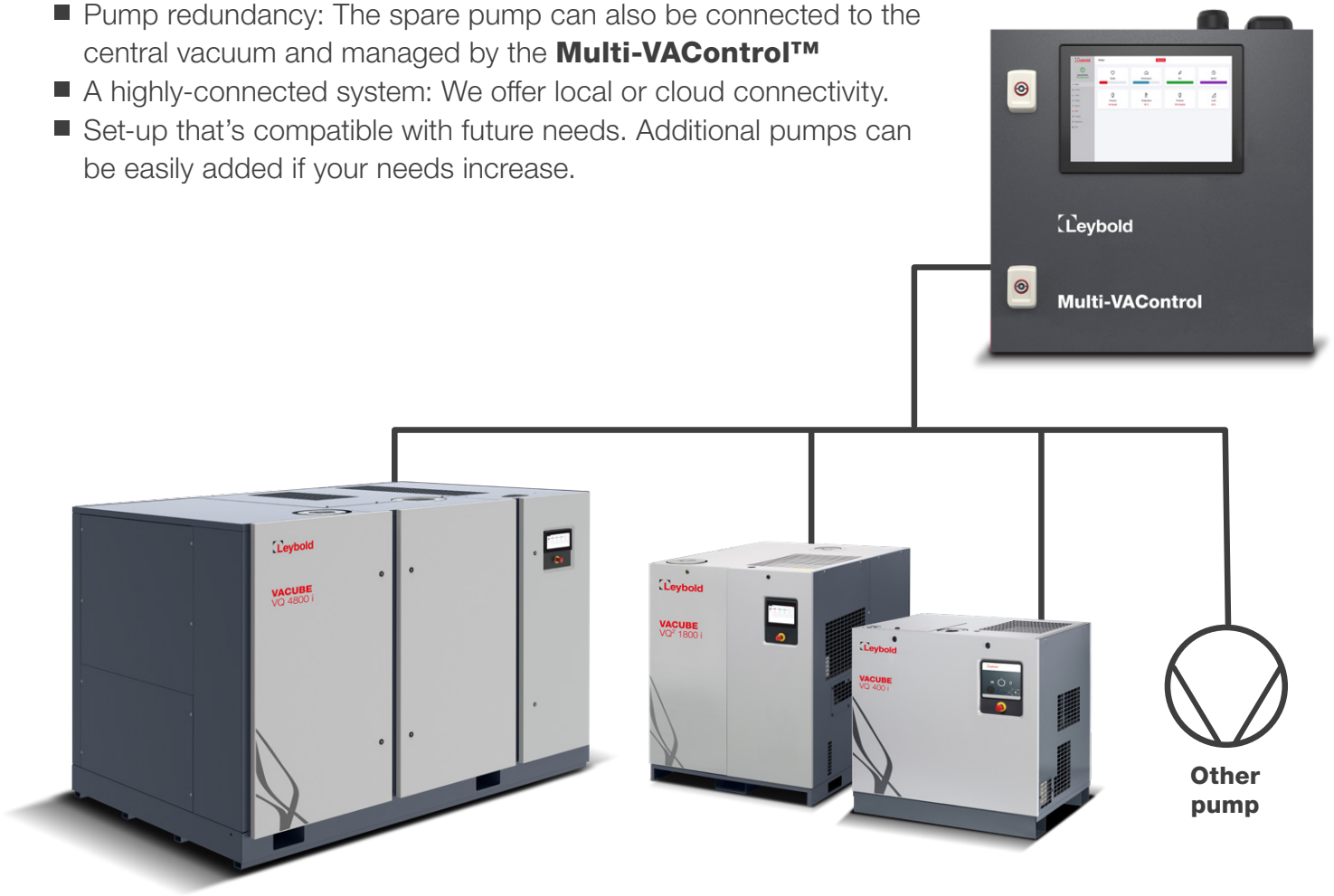
- Inlet and exhaust adaptors according to local requirements (BSP or NPT)
- Additional inlet filters and liquid separators for more challenging processes
- Power transformers compatible with local power grid specifications: 200-230V and 500-575V
- Optimized sensor options
- Gateway options for connectivity to industrial PLCs
- Your local LEYBOLD representative can help you find the best solution

Run VACUBE together:

Easily synchronize multiple **VACUBEs** with **Multi-VAControl™**

When one pump isn't enough, we offer a complete system with multiple VACUBE pumps, all centralized via the Multi-VAControl™. This solution offers:

- An easy-to-install solution for central vacuum systems: The central controller and pumps are connected by communication cables.
- Pump redundancy: The spare pump can also be connected to the central vacuum and managed by the **Multi-VAControl™**
- A highly-connected system: We offer local or cloud connectivity.
- Set-up that's compatible with future needs. Additional pumps can be easily added if your needs increase.



Service: Easy, Competent, Reliable

We are where you are

With our comprehensive range of innovative service solutions, we offer unrivaled support for your Leybold vacuum pumps, and we're committed to:

- **Providing you with reliable, first-class service throughout the life of your pump, no matter where in the world it's installed**
- **Maximizing your pump's uptime and ensuring it receives the best possible service**
- **Offering you specialized support with preventive maintenance and repairs**

Maintaining your uptime and reducing the risk of production downtime is critical. Wherever you are, Leybold is there to support you as your vacuum service partner. Our Field Service Team and our fully-equipped Service Technology Centers are at your disposal.

- Oil and spare parts
- Service agreements
- Exchange pumps
- On-site service
- Certified used vacuum pumps
- Pump repair centers
- Pump rentals

Leybold

Pioneering products. Passionately applied.

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