

**BUSCH  
GROUP**

**VACUUM AND  
OVERPRESSURE  
SOLUTIONS**

**U  
BUSCH** VACUUM  
SOLUTIONS

**PFEIFFER**  VACUUM+FAB  
SOLUTIONS

BUSCH GROUP

**BUSCH** VACUUM SOLUTIONS



**PFEIFFER** VACUUM+FAB SOLUTIONS



## BUSCH GROUP GLOBALLY

**The Busch Group is a leading global manufacturer of vacuum pumps, vacuum systems, blowers, compressors, leak detection technology, and gas abatement systems.**

**Under our umbrella, we proudly house three renowned brands: Busch Vacuum Solutions, Pfeiffer Vacuum, and Centrotherm Clean Solutions.**

**Headquartered in Germany, we extend our reach worldwide.**

We are a family business that is managed by the Busch family. More than 8,000 employees in 44 countries worldwide work for the group.

Our headquarters are in Maulburg, Baden-Württemberg, in the tri-country region of Germany, France and Switzerland.

The Busch Group manufactures in its 23 own production plants in Germany, Switzerland, the United Kingdom, the Czech Republic, France, India, Romania, South Korea, China, the USA and Vietnam.

Our annual consolidated revenue is close to 2 billion Euro.

Ayhan and Dr Karl Busch founded the company together in 1963 and developed the first vacuum pump specifically designed for food packaging. As the company evolved into a global pioneer in the vacuum industry, their three children, Ayla, Sami, and Kaya Busch, joined the management team, introducing new perspectives and approaches to the company.

The Group is more than an ordinary family business. All employees are part of the global Busch family. The African team is ready to support you.

### THE BUSCH FAMILY



# BUSCH GROUP AFRICA

**YOUR PARTNER. FOR ALL YOUR VACUUM AND BLOWER NEEDS.**

**Busch Group Africa was established in 2007, with headquarters and service center located in Johannesburg. Additionally, we have sales and service centres in Cape Town, Durban, Ghana, Kenya and Egypt.**

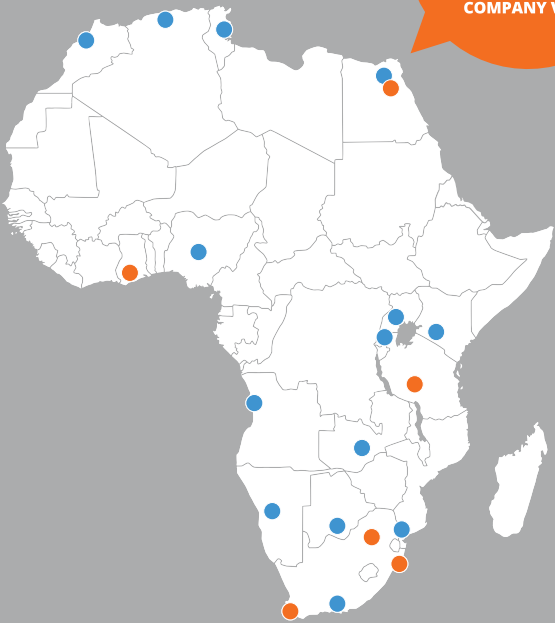
**All six regional offices are equipped to service and overhaul Busch, Pfeiffer as well as competitor pumps and blowers within our workshops or directly at your site.**

**We aim to be a full solutions provider, with in house engineers that have extensive vacuum and blower application experience and can assist with system designs for skids and centralised systems.**

**We strive to support our customers by increasing their productivity and reducing operational costs through the reduction of energy and water consumption.**



WATCH OUR  
COMPANY VIDEO



- BUSCH PFEIFFER REGIONAL OFFICES
- BUSCH PFEIFFER DISTRIBUTION PARTNERS

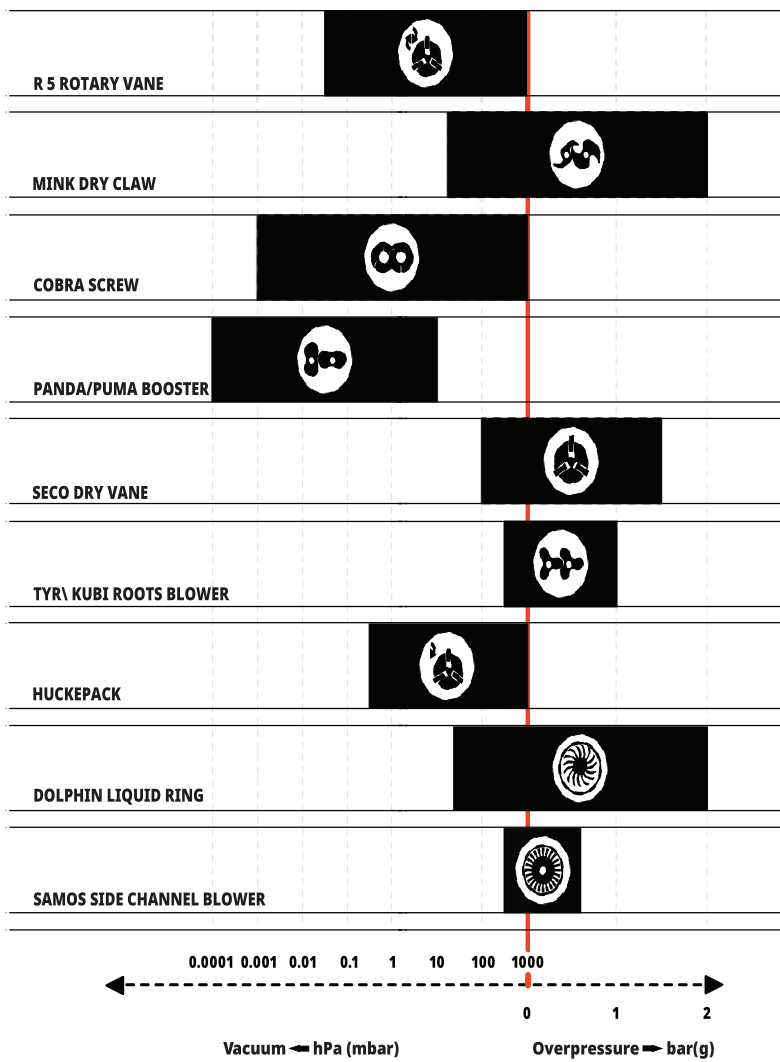
**BUSCH PFEIFFER HEAD OFFICE  
JOHANNESBURG**



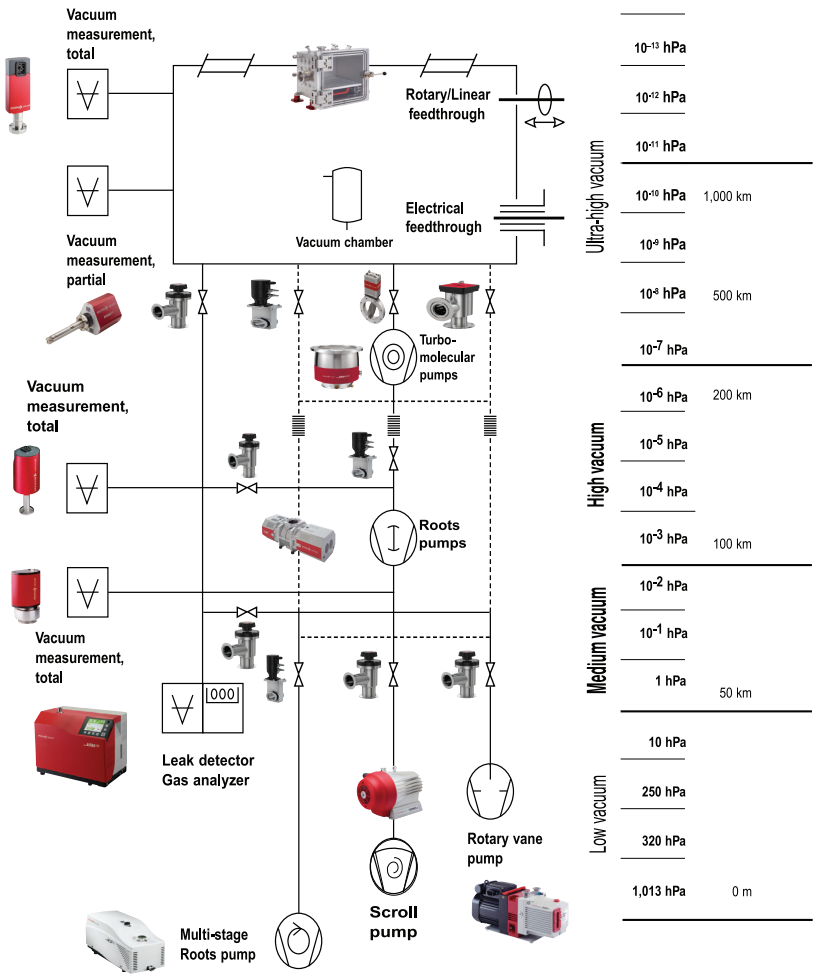
# BUSSCH VACUUM SOLUTIONS



MORE ABOUT OUR SOLUTIONS



# PFEIFFER VACUUM+FAB SOLUTIONS



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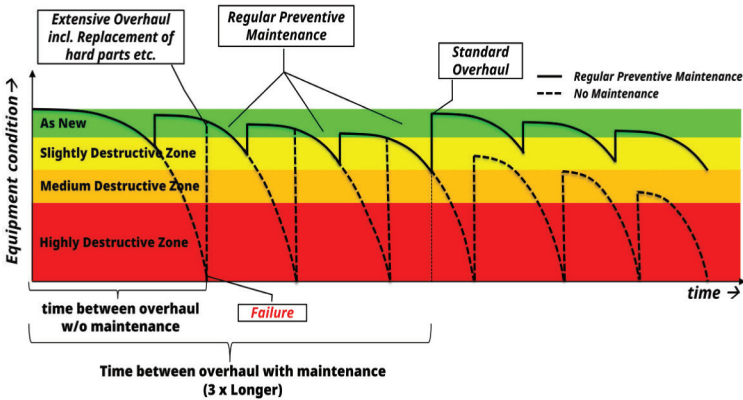
### Pfeiffer Vacuum

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## Field Service For Busch and Pfeiffer

**Preventive maintenance, on-site repairs or 24/7 breakdown support. For maximum uptime of your vacuum and overpressure equipment.**

- > 12 months Busch warranty on every maintenance
- > OEM spare parts and consumables
- > Experienced service technicians with access to our global network of expertise
- > Servicing work in accordance with manufacturers' specifications
- > Vacuum Diagnostics



## Workshop Overhauls For Busch and Pfeiffer

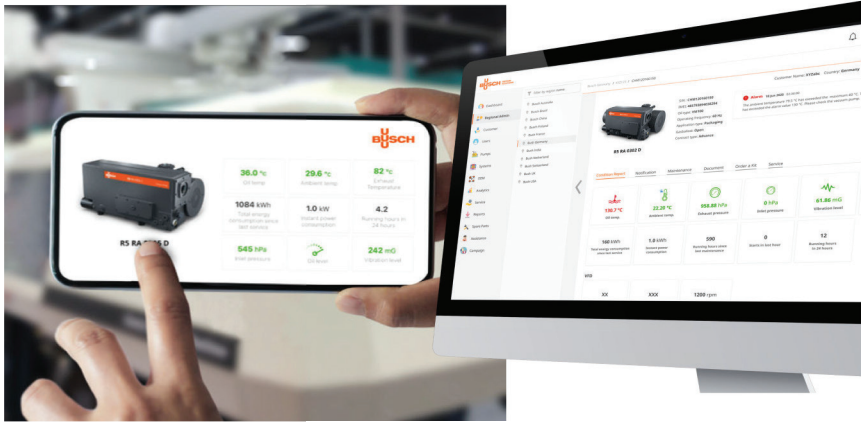
**We have the training and certification required to undertake any vacuum pump and blower equipment repair and overhaul. With our state of the art repair centres at each branch, we offer a high level of quality and workmanship on our repairs with a lean process flow.**

- > 12 months warranty on Busch and Pfeiffer services, overhauls and repairs.
- > Pre and Post repair test results
- > Repair Test Certification
- > Volumetric Flow testing and certification
- > Critical Dimensions reporting
- > Loan Pump Fleet
- > Service Exchange
- > Decontamination facilities



## OTTO - Online Condition Monitoring

**Digital Services IoT solution from Busch. Online Condition Monitoring system for your vacuum pumps and Systems to prevent unplanned downtime.**



## Volumetric Flow Measurement

**We have the training and certificates required to undertake any vacuum pump volumetric performance test in accordance to ISO 21360.**

- > Volume Flow rates up to 5000 m3/hr.
- > On-Site Volumetric flow performance testing capabilities



## Turbo Pump Repairs and Service Exchange

**We have trained level 3 certified Pfeiffer Technicians and the ability to repair Turbo Molecular and other Ultra high Vacuum pumps in Africa with our state of the art, class 10000 clean room.**



## Gauge Calibration

**Calibration of pressure gauges to the highest accuracy with a calibration range of 10<sup>13</sup> - 1.10<sup>-4</sup> mBar.**



- > For static and dynamic calibration.
- > Up to 3 reference gauges for medium accuracy.
- > Can calibrate all types of pressure gauges within range.



## Helium Leak Detection as a Service

**By use of our mobile in-house tracer gas helium leak detector, Our field service team has the ability to perform a Helium leak detection for you on-site and accurately identify where your system may be leaking.**



- > Tracer Gas Helium Leak Detection
- > On-site evaluation and Detection
- > Immediate results

## Vacuum Diagnostics

**Vacuum diagnostics is a critical assessment conducted to evaluate the efficiency and effectiveness of vacuum pumps, blowers and systems. It serves as a proactive measure to address potential issues before they impact productivity or product quality, as well as optimising the process.**

- > Pump Inspections
- > Evaluate vacuum demand efficiency
- > Analyse efficiency of complete vacuum system
- > Evaluate energy and water usage efficiency
- > End Pressure, vibration, noise and power evaluations
- > Detailed Diagnostics reporting and improvement suggestions



## Training and Development Facilities

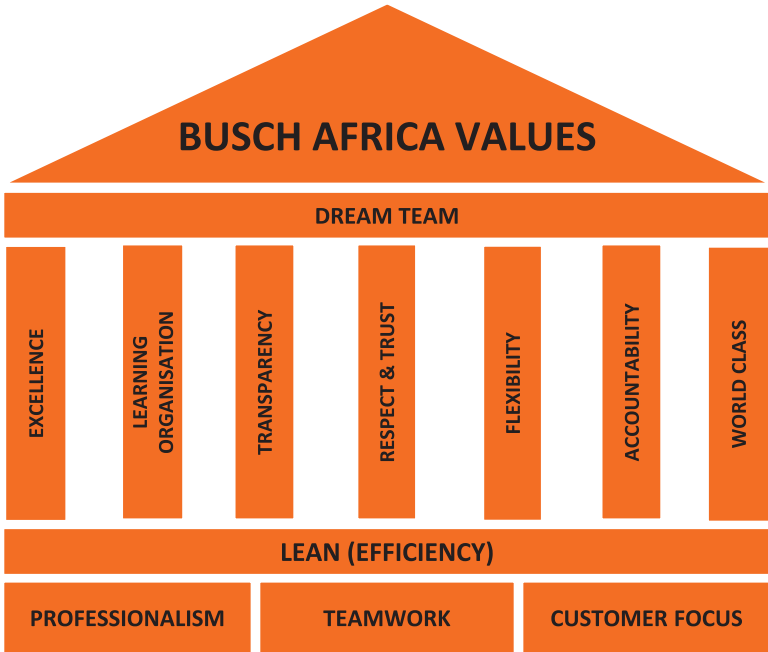
**Featuring a 40-seater training room, 12-seater boardroom, and a fully equipped Busch and Pfeiffer lean workshop.**

Our training room and boardroom are designed to support both internal learning and client training sessions. Each space is equipped with advanced audio-visual technology and presentation facilities. The training room features flexible seating arrangements to accommodate a variety of workshops and technical demonstrations. It opens directly into the workshop - enabling a seamless transition between theoretical and practical learning.



## Shaping the Smartest Vacuum and Blower Company

At Busch and Pfeiffer, we strive to be the smartest vacuum and blower company on the African continent, delivering a customer experience that truly creates a “WOW” factor. Our commitment goes beyond products and services - it's about building lasting partnerships, driving innovation, and continuously improving to meet the evolving needs of our customers.



The Busch Experience is defined by our core values of Professionalism, Customer Focus, and Teamwork. The spirit of our team reflects the enduring words of the late Dr. Ing. Karl Busch, “Nit luck Lo,” meaning “never give up.” This philosophy drives our passion, resilience, and dedication to excellence across the continent.

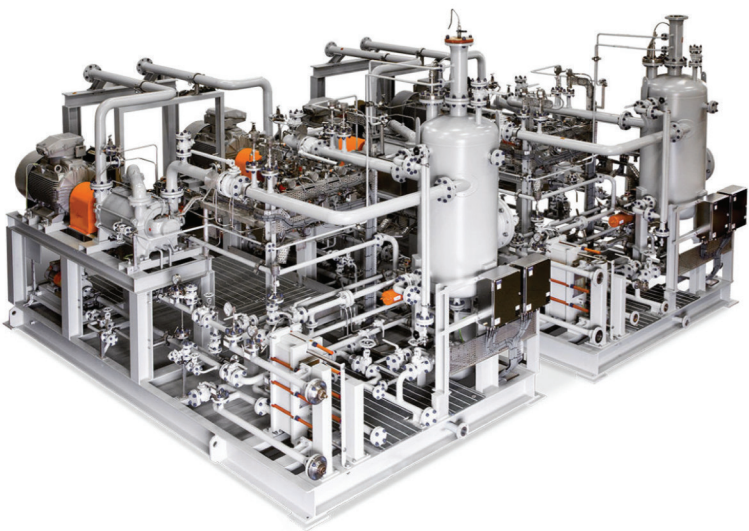


**Busch is one of the world's leading providers of customized vacuum and overpressure systems with more than 50 years experience in conceiving, designing and building of individual systems for all industry sectors.**

- > Customized System solutions
- > Medical Vacuum and Air systems
- > Clay brick extrusion Systems
- > Vacuum Priming Systems
- > Sugar Tanker Offloading Systems
- > Anesthetic Gas systems
- > Liquid Ring Re-circulating Systems
- > VacuBase Systems
- > VacuDry Systems
- > CandyVac Systems
- > and Many More.



### **Condenser evacuation and exhausting system**



### **Monoethylene glycol (MEG) regeneration system**



**Vertical Stacked 3 pump medical vacuum system**



**Horizontal 3 pump medical vacuum system**



**2 pump AGSS medical anesthetic gas evacuation system**



**Helium Recovery System**



**Dry Screw Clay Brick Extrusion System**



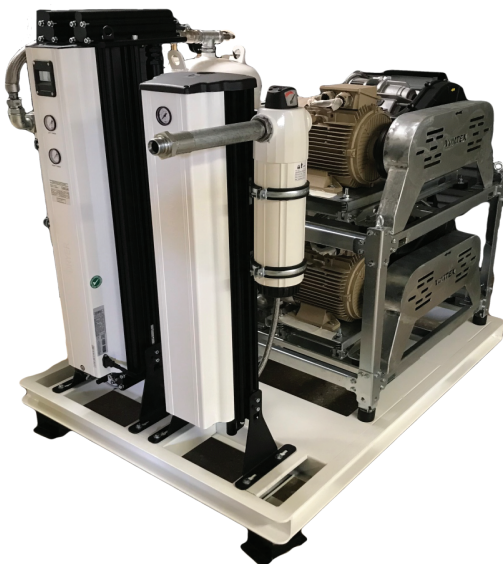
**Liquid Ring APOVAC Vacuum System**



**PSA Nitrogen Generator - 2 Bed Absorber System**



**Dessicant Air Dryer**



**Breathing Air Purifier System**



**High Pressure Die Cast Vacuum Systems**

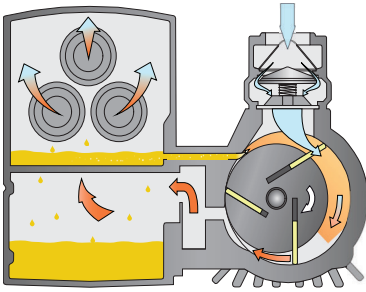


**Customised High Vacuum Chamber**

## Oil-Lubricated Rotary Vane Vacuum Pumps

### BUSCH R5

Ultimate pressure: 0.05 – 20 hPa (mbar)  
Nominal pumping speed 50 Hz: 3 – 1,600 m<sup>3</sup>/h  
Nominal pumping speed 60 Hz: 4.8 – 1,800 m<sup>3</sup>/h

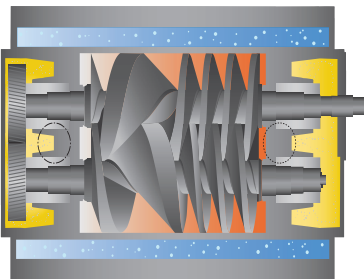


**Robustness and reliability of operation are the outstanding qualities of R 5 rotary vane vacuum pumps. These are just some of the reasons why proven Busch rotary vane technology has long established itself as the industry standard.**

## Dry Screw Vacuum Pumps

### BUSCH COBRA for Industry

Ultimate pressure: 0.01 – 1 hPa (mbar)  
Nominal pumping speed 50 Hz: 110 – 2,000 m<sup>3</sup>/h  
Nominal pumping speed 60 Hz: 130 – 2,500 m<sup>3</sup>/h

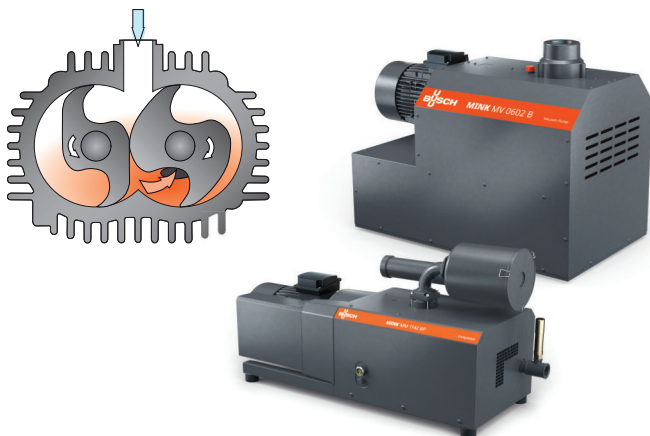


**COBRA Industry dry screw vacuum pumps are ideally suited to industrial applications which require reliable and contamination-free extraction of gases and vapours.**

## Dry Claw Vacuum Pumps and Compressors

### BUSCH MINK

Ultimate pressure: 20 – 200 hPa (mbar) Overpressure: 2 bar(g)  
Nominal pumping speed 50 Hz: 40 – 950 m<sup>3</sup>/h Nominal pumping speed 60 Hz: 40 – 1,150 m<sup>3</sup>/h

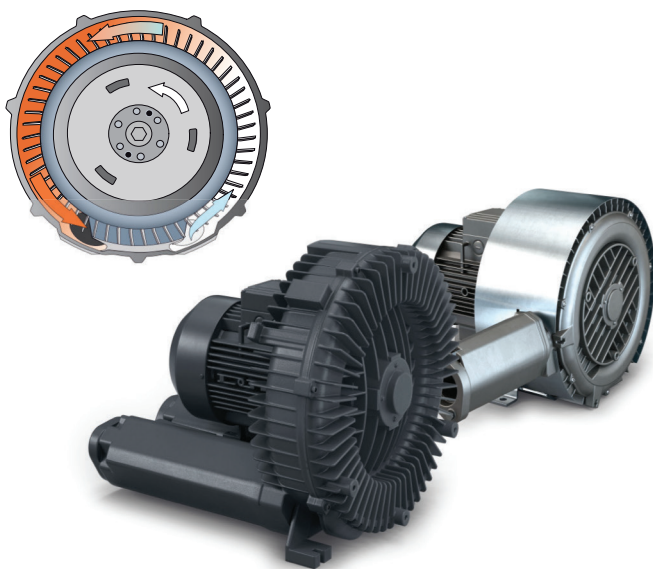


**Mink claw technology is dry, contact-free and combines performance, reliability and efficiency through an innovative design. It can be used for Vacuum Generation.**

## Side Channel Blowers

### BUSCH SAMOS

Pressure differential:  $\Delta p$  max.  
Vacuum: -490 hPa (mbar)  
Overpressure: +670 hPa (mbar)  
Volume flow: 40 – 2,640 m<sup>3</sup>/h



**Samos side channel blowers are suitable for pressure and vacuum duties and specially suited to all applications where a pulsation-free volume flow is required.**

## Oil-Injected Screw and Oil-Free Scroll Compressors

### BUSCH VORTEX ERS/MC/VSD/VOFS

Working pressure: 7.5 bar – 13 bar

Free Air Delivery VSD: Air Capacity 14.4m<sup>3</sup>/hr – 3048 m<sup>3</sup>/hr

Free Air Delivery 50 Hz: Air Capacity 10.2m<sup>3</sup>/hr – 211.2m<sup>3</sup>/hr

Motor Power: 1.5kW – 315kW



The series offers compact, plug-and-play screw and scroll compressors engineered for efficiency and quiet operation. Housed in a sleek, enclosed cabinet, the units are perfect for space-sensitive environments. The range includes single and two-stage compressors, with options for a built-in dryer, integrated air tank, variable speed drive (VSD) and advanced PLC control- delivering a complete compressed air solution.

## Oil-Free Turbo Blower

### FALCON

Pressure differential:  $\Delta p$  0.6 bar(g)-1.2bar(g)

Nominal pumping speed: 840 m<sup>3</sup>/h - 25 500 m<sup>3</sup>/h



This amazing blower is oil-free, and comes with a single or double impeller and ultra-high speed motor. It easy to maintain, has low noise levels, low vibration, and low power consumption with effective heat management thanks to the dual cooling system.

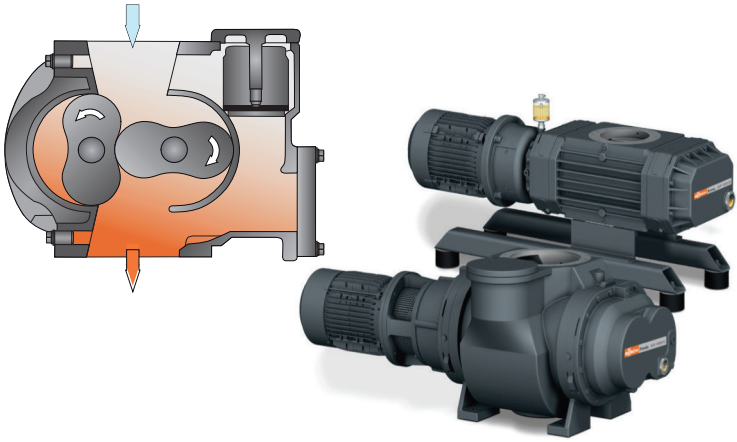
## Vacuum Boosters

### BUSCH PANDA/PUMA

Pressure differential:  $\Delta p$  max. 100 hPa (mbar)

Nominal pumping speed 50 Hz: 250 – 9,535 m<sup>3</sup>/h

Nominal pumping speed 60 Hz: 300 – 11,675 m<sup>3</sup>/h



**Due to their high pumping speed and ultimate pressure, Panda/Pump vacuum boosters increase the performance of vacuum pumps.**

**Their exceptional volumetric efficiency and oil and contact free operation ensure highly efficient performance.**

## Dry-Running Rotary Vane Vacuum Pumps and Compressors

### BUSCH SECO

Ultimate pressure: 100 – 150 hPa (mbar)

Overpressure: 0.6 – 1.5 bar(g)

Nominal pumping speed 50 Hz: 3 – 124 m<sup>3</sup>/h

Nominal pumping speed 60 Hz: 3.6 – 146 m<sup>3</sup>/h



**Compact, reliable and extremely powerful – these are the stand-out features of Seco rotary vane vacuum pumps. Due to their lubricant-free operating principle, they can be used in many industrial applications where rapid and reliable vacuum is required.**

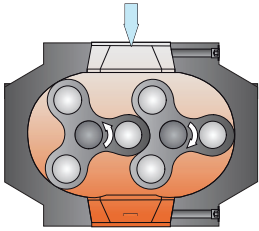
## Roots Type Rotary Lobe Blowers

### BUSCH TYR/KUBI

Vacuum: -800 hPa (mbar)

Overpressure: +1,000 hPa (mbar)

Volume flow: 20 – 20 000 m<sup>3</sup>/h



**Tyr/Kubi rotary lobe blowers were developed by Busch as modern high-performance vacuum and overpressure generators. They have established new standards of noise levels, compactness and efficiency.**

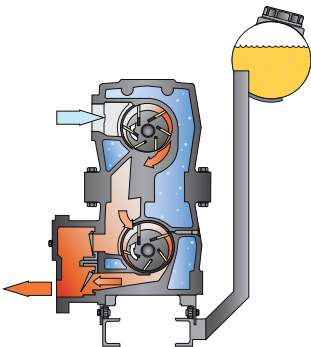
## Once-Through Oil-Lubricated Rotary Vane Vacuum Pumps

### BUSCH HUCKEPACK

Ultimate pressure: 0.5 hPa (mbar)

Nominal pumping speed 50 Hz: 160 – 630 m<sup>3</sup>/h

Nominal pumping speed 60 Hz: 190 – 760 m<sup>3</sup>/h



**Huckepack once-through oil-lubricated rotary vane vacuum pumps have proven themselves in the toughest of applications, and have demonstrated their robustness and operational reliability for decades.**

## Liquid Ring Vacuum Pumps and Compressors

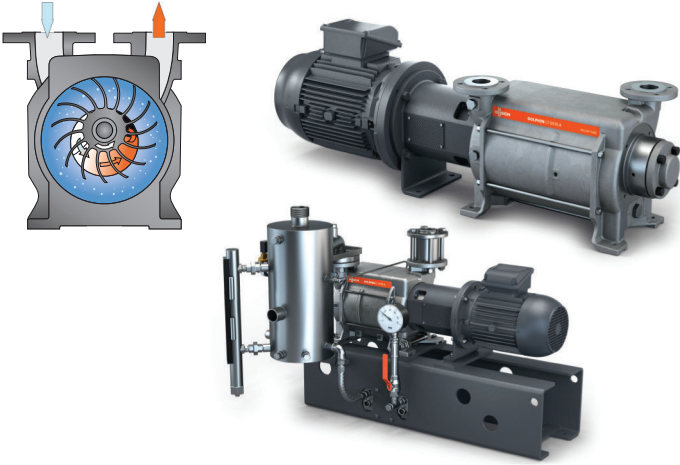
### BUSCH DOLPHIN

*Ultimate pressure: 33 – 160 hPa (mbar)*

*Overpressure: 2 bar(g)*

*Nominal pumping speed 50 Hz: 25 – 26,800 m<sup>3</sup>/h*

*Nominal pumping speed 60 Hz: 31 – 26,800 m<sup>3</sup>/h*



**Dolphin are the reliable liquid ring vacuum pumps from Busch, available as single- or two-stage versions. Their robust technology allows them to be used in all industrial sectors, even in critical applications.**

## Spare Parts and Accessories

### For Complete Vacuum Pump and Blower Range

*Inlet filters, Oil, Exhaust Filters, Separators, Gasket Kits, Vanes, Couplings, Sleeves, Bearings, Rubber feet, and many more...*

**Quality matters, especially in terms of accessories and spare parts. Only Busch Genuine Accessories and Spare Parts guarantee the optimum performance, operational security and warranty of your vacuum pumps, blowers and compressors.**



## Single and Two-Stage Oil-Lubricated Rotary Vane Vacuum Pumps

### PFEIFFER SmartVane/DuoVane

Ultimate pressure:  $5 \cdot 10^{-4}$  – 0.2 hPa (mbar)

Nominal pumping speed 50 Hz: 1.25 – 630 m<sup>3</sup>/h



The two-stage high-performance rotary vane pumps cover all low and medium vacuum applications. Applications range from mass spectrometry or optical coating to critical industrial applications such as drying processes, metallurgical processes or resin casting systems.

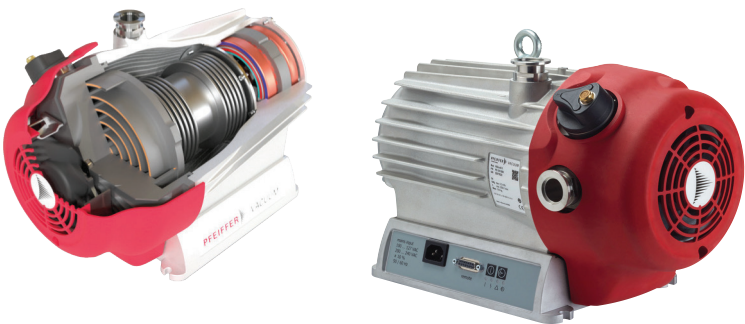
## Oil Free Scroll Vacuum Pumps

### PFEIFFER HiScroll

Ultimate pressure:  $7 \cdot 10^{-3}$  –  $2 \cdot 10^{-2}$  hPa (mbar)

Nominal pumping speed 50 Hz: 6.1 – 46 m<sup>3</sup>/h

Nominal pumping speed 60 Hz: 6.1 – 46 m<sup>3</sup>/h



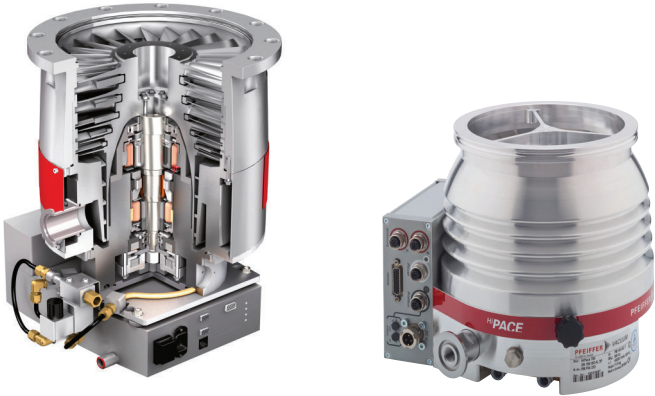
The HiScroll consists of hermetically sealed scroll pumps. The pumps are characterized in particular by their high efficiency and low noise level. The pumps are characterized in particular by their high performance when evacuating against atmosphere. Their powerful IPM<sup>1)</sup> synchro-nous motors with sensor less INFORM<sup>®</sup> control<sup>2)</sup> achieve up to 15% higher efficiency compared to conventional drives. This enables maximum performance at low temperatures, resulting in more efficient cooling of compact systems and equipment.

## Turbomolecular Vacuum Pumps

### PFEIFFER HiPace Neo/Splitflow/ATH

*Ultimate pressure:  $1 \cdot 10^{-10}$  – 10 hPa (mbar)*

*Nominal pumping speed: 10 – 2778 l/s*



**HiPace turbomolecular pumps are reliable, robust and suitable for many vacuum solutions. Their high compression ratio for light gases is ideal for high vacuum applications. A large selection of standard accessories and communications completes the HiPace portfolio.**

## Diaphragm Vacuum Pumps

### PFEIFFER MVP

*Ultimate pressure: 0.5 – 3 hPa (mbar)*

*Nominal pumping speed: 0.25 – 4.3 m<sup>3</sup>/h*



**Diaphragm pumps function completely without any oil and do not generate any particles. As a result these pumps are ideally suited for applications in which a clean and dry vacuum is necessary. Another major benefit of diaphragm pumps is their long lifetime. At sensitive locations, diaphragm pumps not only perform reliably, but with a minimum of vibration and noise. The noise level is usually below 50 dB(A).**

## Roots and Multistage Roots Vacuum Pumps

### PFEIFFER OktaLine/HiLobe/ACP

Ultimate pressure:  $5 \cdot 10^{-4}$  hPa (mbar)  
Pressure differential:  $\Delta p$  max. 75 hPa (mbar)  
Nominal pumping speed: 14 – 13 600 m<sup>3</sup>/h



The two-stage high-performance rotary vane pumps cover all low and medium vacuum applications. Applications range from mass spectrometry or optical coating to critical industrial applications such as drying processes, metallurgical processes or resin casting systems.

## Helium Leak Detection

### PFEIFFER ASM/ASI

Min detectable leak rate for Helium (Vac LD): up to  $1 \cdot 10^{-12}$  mbar l/s  
Min detectable leak rate for Helium (Sniffer): up to  $1 \cdot 10^{-8}$  mbar l/s  
Backing Pump Capacity: 1.7 – 35 m<sup>3</sup>/h



Our portable leak detectors are used both for mobile leak detection „on site“, as well as for worldwide service jobs in a variety of different locations They stand out above all due to their high performance combined with low weight

## Pumping Stations

### PFEIFFER HiCube/CombiLine

Ultimate pressure:  $1 \cdot 10^{-10}$  –  $1 \cdot 10^{-7}$  hPa (mbar)  
 Pumping speed for N<sub>2</sub>: 22 – 686 l/s



HiCube turbo pumping stations are defined by their modular design. Turbopumps and backing pumps can be independently selected. This makes it possible to configure pumping stations which are adapted to all high and ultra-high vacuum requirements. The robust workmanship and the ready-to-connect, fully automated pump unit guarantee maximum reliability.

## Vacuum Gauges

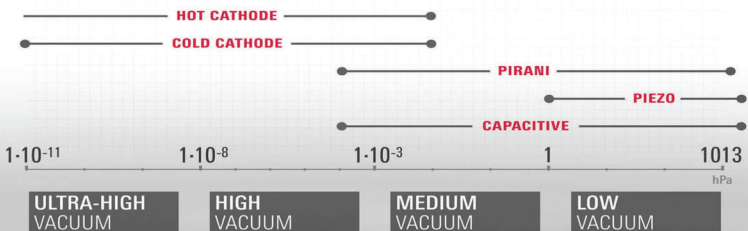
### PFEIFFER DigiLine/ActiveLine/ModuLine Omnicontrol

Measurement Range :  $1 \cdot 10^{-11}$  – 1000 hPa (mbar)



PFEIFFER VACUUM

#### Measuring Vacuum



## High Vacuum Components and Valves

### PFEIFFER Components/Feedthroughs/Manipulators

*Standard and custom-made vacuum components, chambers and solutions*



**Discover our extensive range of chambers and components for your vacuum applications. Rely on Pfeiffer Vacuum as a trusted partner for first-class quality and precision-engineered products**

# CONTACT US!

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