

Vacuum solutions from a single source

Our complete product portfolio at a glance

Complete solutions

Pfeiffer Vacuum offers extensive solutions from a single source.

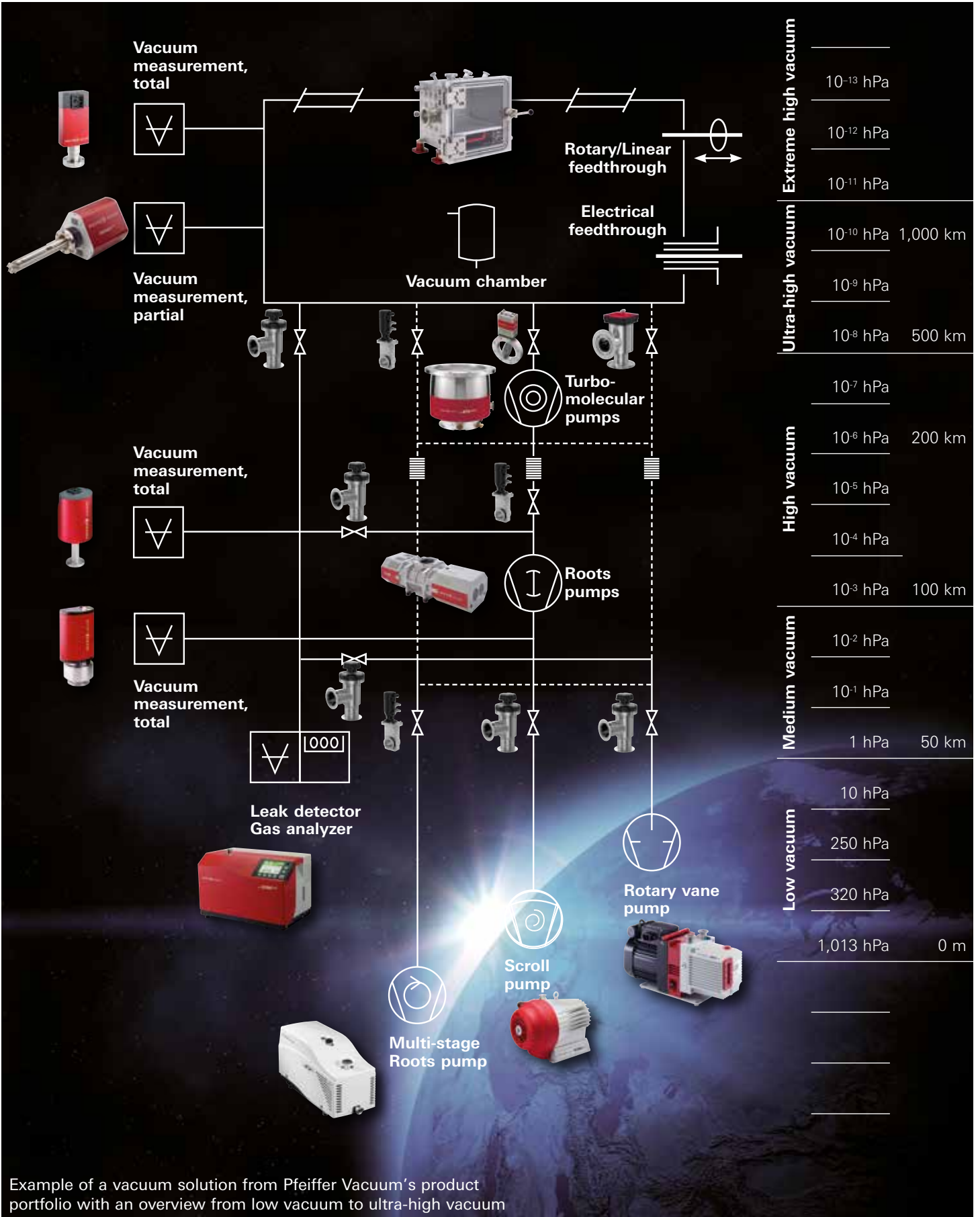
A strong partner with a complete product portfolio.

From consulting in the initial offer phase to the servicing of installed systems, Pfeiffer Vacuum stands for top quality products and services. Unique to Pfeiffer Vacuum is the **combination of extensive technical expertise, high value products, competent advice and customer friendly service.**

- **Whether for vacuum generation, measurement, analysis, leak detection, complete systems or components:** the Pfeiffer Vacuum product portfolio offers the perfect solution to meet every need. Excellent quality and state-of-the-art technology are standard with all products.
- The complete range also includes **extensive services:** Our product training and other courses provide the technical basics of vacuum technology along with important information about the proper operation of our products in the real world.
- To best meet your requirements, we offer a **broad range of consulting services.** We work closely with you right from the planning stage to best meet your needs. In addition, we also offer information in the form of a full catalog, a vacuum technology compendium, and the Internet. Pfeiffer Vacuum describes the scientific principles of vacuum technology, offers technical details and provides vacuum expertise – perfect for both practice and research.

Thanks to our service offices and our competent customer service, we can be on site quickly – anywhere, anytime. With repairs, support for independent maintenance, and product maintenance, we will help you – and only use genuine replacement parts.

Vacuum solutions from a single source – professional, customer friendly and competent.



Example of a vacuum solution from Pfeiffer Vacuum's product portfolio with an overview from low vacuum to ultra-high vacuum

Product safety

Safety for high demands



Our vacuum solutions range from the selection of individual components to complete vacuum systems. Important to note: The more complex the product, the more important product safety becomes. Safe products create a high level of protection for employees and long system life – so safety does have a direct impact on the economic feasibility of a product.

Our vacuum solutions are efficient and safe

Product safety in the European Union is primarily influenced by the EC directives, which we adhere to as a matter of course.

Many products are also certified in accordance with Underwriters Laboratories (UL) and SEMI guidelines and standards (SEMI = Semiconductor Equipment and Materials International). For example, our turbopumps meet the UL 61010 and SEMI S2 guidelines.

At www.pfeiffer-vacuum.com, our multi-lingual technical documents are ready for your download.

EC directives, depending on which of our products are used:

| Directive | Application to |
|------------------|---|
| 2006/42/EC | Machinery and partly completed machinery |
| 2014/35/EU | Electrical devices of 50 to 1,000 V AC or 75 to 1,500 V DC |
| 2014/30/EU | Electromagnetic compatibility |
| 2014/68/EU | Pressure devices (overpressure >500 hPa) |
| 2014/29/EU | Simple pressure vessels |
| 2014/34/EU | Equipment and protective systems intended for use in potentially explosive atmospheres (ATEX) |
| 2011/65/EU | ROHS Restriction of the use of certain Hazardous Substances |

Risk assessment in accordance with EN ISO 12100 “Safety of machinery”

Whenever individual products are combined with one another, tests need to be conducted to determine whether new risks are generated as a result of the new structure. Thanks to our extensive total solution program, we offer you the opportunity to acquire all relevant parts of a vacuum system from a single source – a huge advantage when it comes to assessing and guaranteeing product safety, since all the data needed to carry out a risk assessment in accordance with EN ISO 12100 can be obtained from the same source. Upon request, we will carry out an individual safety assessment for any combination of our products and then supply you with a corresponding solution. For example, we can manufacture vacuum chambers that perfectly adjust to the particular turbopump in use and whose connection flanges are able to cope with extraordinary loads during unusual events.

After-sales service comes naturally to us

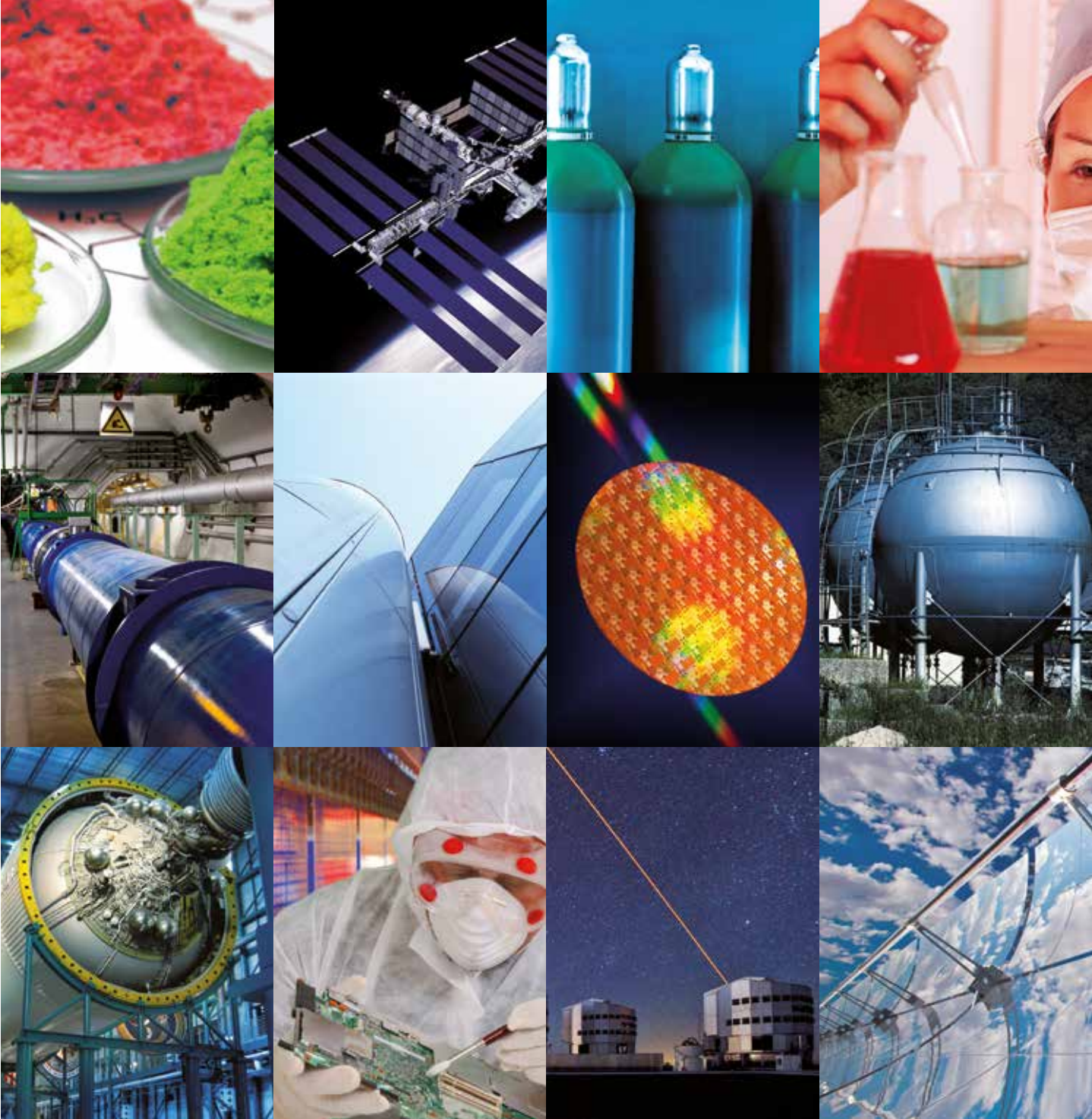
In the event of serious changes to your vacuum system, we are happy to assist with expert advice.

This is who we are – an overview of our strengths:

- Vacuum solutions from a single source – safe vacuum systems thanks to our extensive product range and components tested for safety
- As experts in vacuum solutions, we provide individual project consultation
- CE adherence and safety tested systems
- Additional safety certification for many products
- After-sales service provides you support when making adjustments to your current vacuum system

Market overview

Vacuum solutions for many applications and numerous markets



Technology needs vacuum.
We provide extensive solutions
for these markets:



Analytics

- Biotechnology
- Nanotechnology
- Quality assurance
- Surface analysis
- Spectroscopy



Industry

- Medical and Pharma
- Mobility
- Energy
- Process industry
- Industrial vacuum
- Thin film deposition

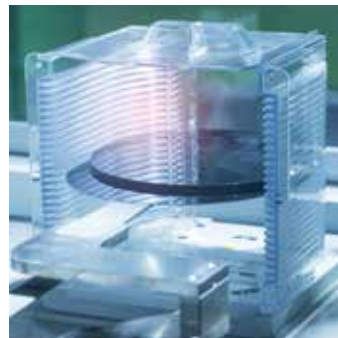


Research & development,

- Fusion reactors
- Accelerators
- Surface technology
- Space simulation chambers
- Superconductor applications
- Nanotechnology

Semiconductor and Emerging Technologies

- Ion implantation
- Plasma etching
- Deposition (PVD, CVD, ALD)
- Lithography
- Inspection




Vacuum generation



Single-stage and two-stage
rotary vane pumps



Single-stage rotary vane pumps

| HenaLine | Advantages | Benefits |
|--|---|--|
|  | <ul style="list-style-type: none"> ■ Low oil filling level | <ul style="list-style-type: none"> ■ Reduced operating costs |
| | <ul style="list-style-type: none"> ■ Water cooling available upon request | <ul style="list-style-type: none"> ■ Allowing applications under the hardest conditions with high thermal loads |
| | <ul style="list-style-type: none"> ■ Long oil life | <ul style="list-style-type: none"> ■ Cost savings through extended maintenance intervals |
| | <ul style="list-style-type: none"> ■ Integrated oil mist eliminator | <ul style="list-style-type: none"> ■ Reliable due to clean and oil-free exhaust |
| UnoLine Plus | Advantages | Benefits |
|  | <ul style="list-style-type: none"> ■ Robust through minimal wear | <ul style="list-style-type: none"> ■ Long lifetime |
| | <ul style="list-style-type: none"> ■ Resistant to dirt and grime | <ul style="list-style-type: none"> ■ Maximum process suitability |
| | <ul style="list-style-type: none"> ■ Integrated oil regeneration unit | <ul style="list-style-type: none"> ■ Reliable due to clean and oil-free exhaust |
| | <ul style="list-style-type: none"> ■ Extremely high water vapor capacity | <ul style="list-style-type: none"> ■ Ideally suited for drying processes |
| Pascal | Advantages | Benefits |
|  | <ul style="list-style-type: none"> ■ Low back diffusion | <ul style="list-style-type: none"> ■ High reliability for your processes |
| | <ul style="list-style-type: none"> ■ Easy access to all control elements and service ports through practical placement on the front side | <ul style="list-style-type: none"> ■ Easy to use and integrate |
| | <ul style="list-style-type: none"> ■ Compact design | <ul style="list-style-type: none"> ■ Simple system integration |
| | <ul style="list-style-type: none"> ■ Very few abrading parts | <ul style="list-style-type: none"> ■ Low cost of ownership and easy maintenance |

Two-stage rotary vane pumps

| DuoLine™ | Advantages | Benefits |
|---|---|---|
|  | <ul style="list-style-type: none"> ■ Hermetically sealed | <ul style="list-style-type: none"> ■ High operating safety |
| | <ul style="list-style-type: none"> ■ Standard magnetically coupled (M), corrosive gas version magnetically coupled (MC) available | <ul style="list-style-type: none"> ■ Optimal adaptation to your processes |
| | <ul style="list-style-type: none"> ■ Compact design | <ul style="list-style-type: none"> ■ Simple system integration |
| | <ul style="list-style-type: none"> ■ No maintenance of shaft seal rings (for M and MC) | <ul style="list-style-type: none"> ■ Cost savings for each pump and maintenance interval |
| Pascal ¹⁾ | Advantages | Benefits |
|  | <ul style="list-style-type: none"> ■ Low back diffusion | <ul style="list-style-type: none"> ■ High reliability for your processes |
| | <ul style="list-style-type: none"> ■ Easy access to all control elements and service ports through practical placement on the front side | <ul style="list-style-type: none"> ■ Easy to use and integrate |
| | <ul style="list-style-type: none"> ■ Gas ballast valve allows high gas flows | <ul style="list-style-type: none"> ■ High water vapor tolerance |
| | <ul style="list-style-type: none"> ■ Very few abrading parts | <ul style="list-style-type: none"> ■ Low cost of ownership and easy maintenance |

¹⁾ Various versions available:

- **SD version** for all vacuum applications with non-corrosive gases
- **I version** with additional oil pump for the requirements of instrumental analytics
- **C1 version** for applications with aggressive or corrosive gases
- **C2 version** for harsh duty applications with the most aggressive pumping environment

Vacuum generation

Diaphragm pumps, screw pumps



MVP diaphragm pumps



Advantages

- Particular high pumping speed in DC version
- Particular efficient in DC version
- Long diaphragm service life
- Easy diaphragm and valve replacement

Benefits

- Short cycle times due to quick pump down
- Low operating costs
- Long maintenance intervals
- Very maintenance friendly

HeptaDry® screw pumps



Advantages

- Energy saving operation through optimal rotor geometry
- No contact between operating fluid and process gas
- High pumping speed at atmospheric pressure
- Tolerant of dirt and contamination

Benefits

- Low cost of ownership
- No disposal costs for operating fluids in this process
- Short cycle times due to quick pump down
- High reliability for your processes

HiScroll scroll pumps



Advantages

- No hydrocarbons
- Low noise level, little vibration and compact design for use e.g. in the laboratory
- Safe operation
- Comfort and efficiency
- Sustainable operation

Benefits


- Absolutely dry and oil-free vacuum pump
- Quiet, self-regulating air cooling system
- Integrated safety valve and hermetically sealed pump system
- Low CoO thanks to highest quality, short service times and long maintenance intervals
- Less heat generation and lower cooling requirements due to 15% higher motor efficiency


Vacuum generation


Multi-stage Roots pumps




Clean processes


| ACP 15–40 SD/G/GV/CP/SR ¹⁾ | Advantages | Benefits |
|---|---|--|
|  | ■ Dry, air cooled pumping solution | ■ Improvement of process quality through oil free and particle free vacuum |
| | ■ Long maintenance intervals | ■ Low operating costs |
| | ■ Pump system runs contact-free | ■ Consistent long-term performance |
| | ■ Gas ballast and purge line available upon request | ■ Large volume pumping of condensable vapors |

| A 100 L / A 200 L | Advantages | Benefits |
|---|--|--|
|  | ■ High performance and heavy cycling compatible | ■ High throughput |
| | ■ Compact, stackable, optimized installation | ■ Simple, flexible system integration |
| | ■ High energy efficiency | ■ Low operating costs |
| | ■ On-tool assembly due to quiet operation and low vibration; oil and particle-free | ■ Improves process quality in clean room, compact system integration |

| ADH series | Advantages | Benefits |
|--|---|--|
|  | ■ Pumping speed from 600 to 4500 m ³ /h | ■ Large choice of dry pumping solution |
| | ■ Optimized internal design and clearances | ■ Similar pumping performance in H ₂ and N ₂ |
| | ■ Optimized transfer channels, lobes shapes and double temperature controlled | ■ By-product management and condensation avoided |
| | ■ Excellent resistance to static and dynamic internal stresses | ■ Enhanced safety for applications running explosive gases such as hydrogen and silane |

| ACP 120G, ACG 600G | Advantages | Benefits |
|---|---|-------------------------------------|
|  | ■ Long maintenance intervals (up to four years) | ■ Low service costs |
| | ■ Oil and particle-free vacuum thanks to wear-free pump block | ■ Increased process quality |
| | ■ High tightness of motor and pump block | ■ No contamination of your products |
| | ■ Compact design | ■ Compact system integration |

Harsh duty applications

| A4 H / X / XN series ²⁾ | Advantages | Benefits |
|---|--|---|
|  | ■ High energy efficiency | ■ Reduced total cost of ownership |
| | ■ Wide operating temperature range and corrosion resistant materials | ■ Increased lifetime and wider range of application |
| | ■ High particle tolerance | ■ Increased uptime |
| | ■ Extended monitoring functionalities | ■ Better control of pump conditions |

¹⁾ Various versions available:

- **SD version** designed for dust-free inert gases
- **G version** designed for low quantities of corrosive gases
- **CV version** compatible with condensable gases
- **CP version** for gas recirculation
- **SR version** with remote electronic and fluorine free

²⁾ Various versions available:


- **XN version** for extremely corrosive applications
- **X version** for corrosive applications
- **H version** for applications without corrosive gases


Vacuum generation

Roots pumps




Universal boosters


| HiLobe | Advantages | Benefits |
|--|--|--|
|  | <ul style="list-style-type: none"> ■ Usable up to 200 Hz with frequency converter | <ul style="list-style-type: none"> ■ Shorter pump down times and higher pumping speed |
| | <ul style="list-style-type: none"> ■ Equipped with energy-efficient motor | <ul style="list-style-type: none"> ■ Lowest operational costs |
| | <ul style="list-style-type: none"> ■ Compact design | <ul style="list-style-type: none"> ■ Small footprint and less weight |
| | <ul style="list-style-type: none"> ■ Integrated condition monitoring | <ul style="list-style-type: none"> ■ Highest operational safety |

| OktaLine® | Advantages | Benefits |
|--|--|--|
|  | <ul style="list-style-type: none"> ■ No cooling water due to air cooling | <ul style="list-style-type: none"> ■ Reduced operating costs |
| | <ul style="list-style-type: none"> ■ Robust structure thanks to field-tested design | <ul style="list-style-type: none"> ■ Long lifetime |
| | <ul style="list-style-type: none"> ■ Usable up to 75 Hz with frequency converter | <ul style="list-style-type: none"> ■ Shorter pump down times and higher pumping speed |
| | <ul style="list-style-type: none"> ■ Protected against thermal overload | <ul style="list-style-type: none"> ■ High reliability |

Explosion protection

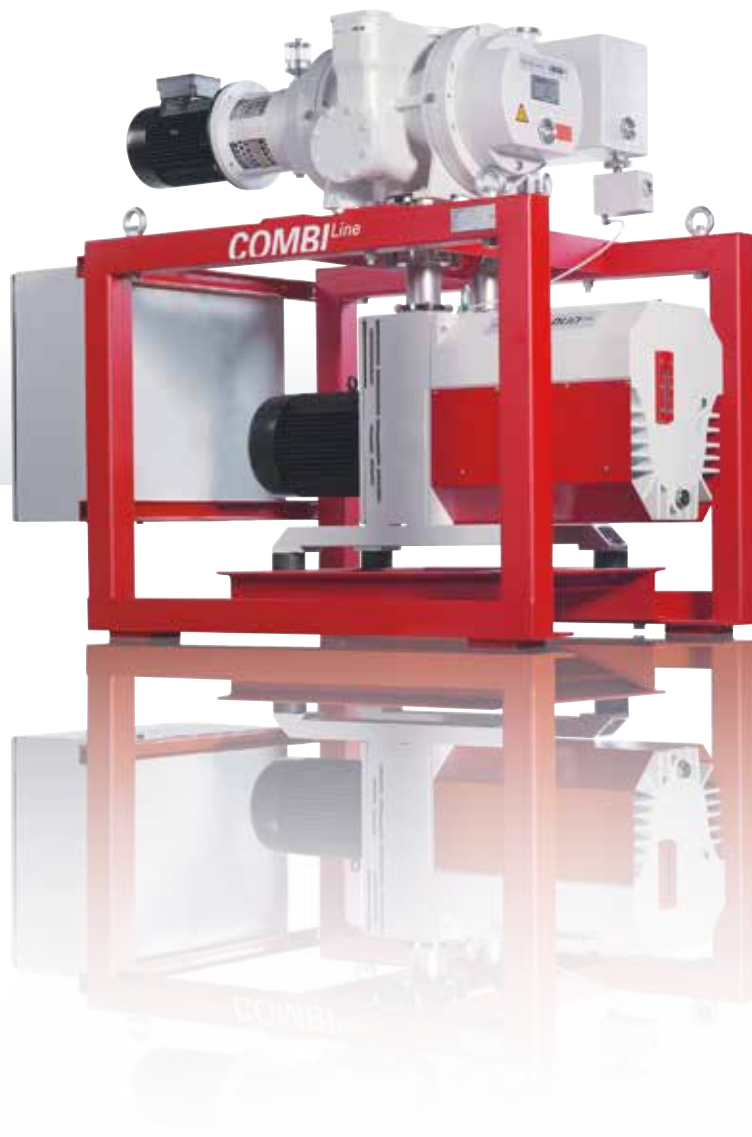
| OktaLine® ATEX | Advantages | Benefits |
|---|--|--|
|  | <ul style="list-style-type: none"> ■ Equipment category 2 and 3, T3 | <ul style="list-style-type: none"> ■ Qualified for zone 1 and 2 |
| | <ul style="list-style-type: none"> ■ Overflow valve available for every version | <ul style="list-style-type: none"> ■ Optimized process adaption |
| | <ul style="list-style-type: none"> ■ Pressure surge resistant up to 16 bar | <ul style="list-style-type: none"> ■ Highest operation flow |
| | <ul style="list-style-type: none"> ■ No thermal overload due to redundant temperature sensors | <ul style="list-style-type: none"> ■ Optimized process monitoring |

Highes pressure difference




| OktaLine® G | Advantages | Benefits |
|---|---|--|
|  | <ul style="list-style-type: none"> ■ High differential pressures up to 900 hPa possible | <ul style="list-style-type: none"> ■ Cost savings as backing pump is not needed |
| | <ul style="list-style-type: none"> ■ Used as booster pump in pumping stations | <ul style="list-style-type: none"> ■ Small number of pumps and high reliability |
| | <ul style="list-style-type: none"> ■ Process temperature regulation eliminates residue in the pump | <ul style="list-style-type: none"> ■ High stability for your processes |
| | <ul style="list-style-type: none"> ■ Controlled gas-circulation-cooling | <ul style="list-style-type: none"> ■ Highest operating safety due to automatic process adaption |

Vacuum generation


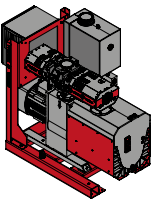

Roots pumping stations



Pumping station with OktaLine Roots pump

| CombiLine WH | Advantages | Benefits |
|--|--|--|
|  | <ul style="list-style-type: none"> ■ Various pump and accessory combinations possible | <ul style="list-style-type: none"> ■ Optimal adaptation to your processes |
| | <ul style="list-style-type: none"> ■ Energy-saving operation (IE3 motors) | <ul style="list-style-type: none"> ■ Low operating costs |
| | <ul style="list-style-type: none"> ■ No contact between operating fluid and process gas | <ul style="list-style-type: none"> ■ No disposal costs for operating fluids in this process |
| | <ul style="list-style-type: none"> ■ High pumping speed at atmospheric pressure | <ul style="list-style-type: none"> ■ Short cycle times due to quick pump down |
| CombiLine WU | Advantages | Benefits |
|  | <ul style="list-style-type: none"> ■ Various pump and accessory combinations possible | <ul style="list-style-type: none"> ■ Optimal adaptation to your processes |
| | <ul style="list-style-type: none"> ■ Optimized design | <ul style="list-style-type: none"> ■ Simple service |
| | <ul style="list-style-type: none"> ■ High pumping speed of the backing pump at atmospheric pressure | <ul style="list-style-type: none"> ■ Short cycle times due to quick pump down |
| | <ul style="list-style-type: none"> ■ High water vapor tolerance | <ul style="list-style-type: none"> ■ Reliable even in complicated processes |
| CombiLine WD | Advantages | Benefits |
|  | <ul style="list-style-type: none"> ■ Various pump and accessory combinations possible | <ul style="list-style-type: none"> ■ Optimal adaptation to your processes |
| | <ul style="list-style-type: none"> ■ Compact design and small footprint | <ul style="list-style-type: none"> ■ Simple, space-saving integration in your system |
| | <ul style="list-style-type: none"> ■ Clean exhaust through integrated oil mist eliminator | <ul style="list-style-type: none"> ■ No damage to the environment |
| | <ul style="list-style-type: none"> ■ Low-wearing and low leakage rate with magnetic coupling | <ul style="list-style-type: none"> ■ Low service costs, no leaks and pumping of critical gases possible |

Pumping station with HiLobe Roots pump


| CombiLine RH | Advantages | Benefits |
|---|---|---|
|  | <ul style="list-style-type: none"> ■ Various pump and accessory combinations possible | <ul style="list-style-type: none"> ■ Optimal adaptation to your processes |
| | <ul style="list-style-type: none"> ■ Equipped with energy-efficient motor | <ul style="list-style-type: none"> ■ Low operating costs |
| | <ul style="list-style-type: none"> ■ Compact design | <ul style="list-style-type: none"> ■ Small footprint and less weight |
| | <ul style="list-style-type: none"> ■ No contact between operating fluid and process gas | <ul style="list-style-type: none"> ■ No disposal costs for operating materials in this process |
| CombiLine RU | Advantages | Benefits |
|  | <ul style="list-style-type: none"> ■ Various pump and accessory combinations possible | <ul style="list-style-type: none"> ■ Optimal adaptation to your processes |
| | <ul style="list-style-type: none"> ■ Equipped with energy-efficient motor | <ul style="list-style-type: none"> ■ Low operating costs |
| | <ul style="list-style-type: none"> ■ Compact design | <ul style="list-style-type: none"> ■ Small footprint and less weight |
| | <ul style="list-style-type: none"> ■ High water vapor tolerance | <ul style="list-style-type: none"> ■ Reliable even in complicated processes |
| CombiLine RD | Advantages | Benefits |
|  | <ul style="list-style-type: none"> ■ Various pump and accessory combinations possible | <ul style="list-style-type: none"> ■ Optimal adaptation to your processes |
| | <ul style="list-style-type: none"> ■ Equipped with energy-efficient motor | <ul style="list-style-type: none"> ■ Low operating costs |
| | <ul style="list-style-type: none"> ■ Compact design | <ul style="list-style-type: none"> ■ Small footprint and less weight |
| | <ul style="list-style-type: none"> ■ Clean exhaust air through integrated oil mist separator | <ul style="list-style-type: none"> ■ No environmental pollution |


Vacuum generation


Turbopumps




With hybrid bearings


| HiPace® 10 – 800 | Advantages | Benefits |
|---|--|--|
|  | <ul style="list-style-type: none"> ■ Compact design along with numerous mounting positions¹⁾ | <ul style="list-style-type: none"> ■ Minimal space requirements and simple system integration |
| | <ul style="list-style-type: none"> ■ Bearing replacement on site | <ul style="list-style-type: none"> ■ Cost savings through reduced service intervals |
| | <ul style="list-style-type: none"> ■ Highest reliability thanks to robust design and proven bearing system | <ul style="list-style-type: none"> ■ Long maintenance intervals |
| | <ul style="list-style-type: none"> ■ Quick start-up due to high performance, integrated electronic drive unit | <ul style="list-style-type: none"> ■ Reduced process times |

| HiPace® 1200 – 2300 | Advantages | Benefits |
|---|--|--|
|  | <ul style="list-style-type: none"> ■ Robustness against particle problems | <ul style="list-style-type: none"> ■ Long maintenance cycles |
| | <ul style="list-style-type: none"> ■ Bearing replacement on site | <ul style="list-style-type: none"> ■ Cost savings through reduced service intervals |
| | <ul style="list-style-type: none"> ■ Various interface options available | <ul style="list-style-type: none"> ■ Easy system integration |
| | <ul style="list-style-type: none"> ■ Intelligent sensors through the implementation of appropriate parameters in the integrated electronics | <ul style="list-style-type: none"> ■ Highest safety level |

| SplitFlow™ | Advantages | Benefits |
|--|--|---|
|  | <ul style="list-style-type: none"> ■ Replaces several discrete turbopumps | <ul style="list-style-type: none"> ■ Huge cost savings ■ Significant improvement in reliability and faster service through reduced number of components |
| | <ul style="list-style-type: none"> ■ Ball bearing replacement possible in installed pumps | <ul style="list-style-type: none"> ■ System does not need to be taken apart |
| | <ul style="list-style-type: none"> ■ Individual mechanical and vacuum design | <ul style="list-style-type: none"> ■ Pump system optimally adapted to customer needs |

With magnetically levitated bearings

| HiPace® 300 – 800 M, ATH 500 M | Advantages | Benefits |
|---|---|--|
|  | <ul style="list-style-type: none"> ■ Lower energy consumption through efficient magnetically levitating system | <ul style="list-style-type: none"> ■ Low operating costs |
| | <ul style="list-style-type: none"> ■ Magnetic levitation | <ul style="list-style-type: none"> ■ Maintenance free operation, lower lifetime costs |
| | <ul style="list-style-type: none"> ■ Low vibrations and low magnetic stray field | <ul style="list-style-type: none"> ■ High reliability for your processes |
| | <ul style="list-style-type: none"> ■ Additional speeds thanks to intelligent electronic drive unit | <ul style="list-style-type: none"> ■ Cost savings as control valve is not needed |

| ATH 1600 – 3204 M, ATP 2300 M | Advantages | Benefits |
|---|---|--|
|  | <ul style="list-style-type: none"> ■ Magnetic levitation | <ul style="list-style-type: none"> ■ Maintenance free operation, lower lifetime costs |
| | <ul style="list-style-type: none"> ■ Intelligent sensors and electronics | <ul style="list-style-type: none"> ■ High operating safety |
| | <ul style="list-style-type: none"> ■ Freely selectable rotation speed in a broad RPM range | <ul style="list-style-type: none"> ■ Optimized process adaptation |
| | <ul style="list-style-type: none"> ■ Any mounting orientation | <ul style="list-style-type: none"> ■ Easy system integration |

¹⁾ HiPace Plus: 0°

Vacuum generation

Turbo pumping stations



Compact

HiCube® Eco



Advantages

- Pumping station ready for operation
- Compact dimensions with low weight (17 kg)
- No oil contamination thanks to dry sealed backing pump
- Perfectly coordinated individual components

Benefits

- Plug and play – no installation or wiring needed
- Small, handy and portable
- No process impairments
- Long life, high safety level and best reliability

Standard

HiCube® Classic



Advantages

- Pumping station ready for operation
- Field-tested, robust construction
- Wide selection of pump combinations and options
- Perfectly coordinated individual components

Benefits

- Plug and play – no installation or wiring needed
- Reliable and safe
- Individual adaptation to your processes
- Long life, high safety level and best reliability

High performance

HiCube® Pro



Advantages

- Particularly fast pumpdown times due to the high pumping speed of the backing pump
- Easy access to the individual components
- Pumping station ready for operation
- Wide selection of pump combinations and options

Benefits


- Cost savings through time reductions
- Extremely service friendly
- Plug and play – no installation or wiring needed
- Individual adaptation to your processes

Measurement & Analysis


Measurement equipment




Digital

| DigiLine | Advantages | Benefits |
|---|--|--|
|  | <ul style="list-style-type: none"> Standard serial interfaces | <ul style="list-style-type: none"> Low installation costs |
| | <ul style="list-style-type: none"> Data directly readable in PC or PLC | <ul style="list-style-type: none"> Secure data transmission thanks to digital signals |
| | <ul style="list-style-type: none"> Industrial Ethernet- and Fieldbus interfaces and analog output with two setpoints available upon request | <ul style="list-style-type: none"> Flexible use |


Analog

| ActiveLine | Advantages | Benefits |
|---|--|---|
|  | <ul style="list-style-type: none"> Compact design | <ul style="list-style-type: none"> Easy integration |
| | <ul style="list-style-type: none"> Large selection of vacuum gauges | <ul style="list-style-type: none"> Flexible use |
| | <ul style="list-style-type: none"> Controllers with automatic gauge recognition | <ul style="list-style-type: none"> Simple installation (plug and play) |


CenterLine

| CenterLine | Advantages | Benefits |
|--|--|--|
|  | <ul style="list-style-type: none"> Compact design | <ul style="list-style-type: none"> Easy integration |
| | <ul style="list-style-type: none"> Easy replacement of competitor's gauges | <ul style="list-style-type: none"> Little effort when replacing your gauges |
| | <ul style="list-style-type: none"> Controllers with automatic gauge recognition | <ul style="list-style-type: none"> Simple installation (plug and play) |

Modular

| ModulLine | Advantages | Benefits |
|---|--|--|
|  | <ul style="list-style-type: none"> Rugged and well-proven design | <ul style="list-style-type: none"> Field-tested long life |
| | <ul style="list-style-type: none"> Resistant against ionizing radiation as sensor and electronics are separated | <ul style="list-style-type: none"> Used in applications that place great demands on the vacuum technology |

Hand held gauges + Manometer


| TPG 201, 202 / Manometer | Advantages | Benefits |
|---|---|--|
|  | <ul style="list-style-type: none"> Compact handheld gauges and robust manometers | <ul style="list-style-type: none"> Pressure display at the process chamber itself |
| | <ul style="list-style-type: none"> Manometer do not need a power supply | <ul style="list-style-type: none"> Pressure display even after power failure |


Measurement & Analysis

Analytical equipment



Residual gas analysis and gas analysis

| PrismaPro® | Advantages | Benefits |
|--|---|--|
|  | <ul style="list-style-type: none"> ■ Modular design ■ Ion sources with two filaments ■ Intuitive operation of the PV MassSpec software | <ul style="list-style-type: none"> ■ Optimal adaptation to numerous measurement tasks ■ High up-times ■ Saving of time during the creation of the measurement recipes |


| OmniStar®/ThermoStar® | Advantages | Benefits |
|---|--|---|
|  | <ul style="list-style-type: none"> ■ Compact complete system ¹⁾ Especially designed for coupling with thermobalances ■ Sophisticated software ■ Multi-stage heatable gas inlet system <p>¹⁾ ThermoStar only</p> | <ul style="list-style-type: none"> ■ Low space requirements ■ Easy to use even for quantitative gas analysis ■ Reliable analysis |


Measurement & Analysis

Analytical equipment



Gas analysis

| HPA | Advantages | Benefits |
|---|--|---|
|  | <ul style="list-style-type: none"> ■ Numerous gas inlet options | <ul style="list-style-type: none"> ■ Individual adaptation to your measurement tasks |
| | <ul style="list-style-type: none"> ■ Compact dimensions | <ul style="list-style-type: none"> ■ Easy, flexible system integration |
| | <ul style="list-style-type: none"> ■ Multiplex operation possible | <ul style="list-style-type: none"> ■ Simultaneous analysis of several systems |


| HiQuad® | Advantages | Benefits |
|---|--|--|
|  | <ul style="list-style-type: none"> ■ Extremely high measurement speed thanks to modern electronics | <ul style="list-style-type: none"> ■ Highly sensitive measurements in the lowest amount of time |
| | <ul style="list-style-type: none"> ■ High sensitivity along with large dynamic range thanks to precision mechanics and elaborated amplifier | <ul style="list-style-type: none"> ■ Excellent long-term stability |
| | <ul style="list-style-type: none"> ■ Fieldaxis technology and biased ionization chamber | <ul style="list-style-type: none"> ■ Low background and highest sensitivity |

Leak detection


Tracer gas leak detectors
(Helium/Hydrogen)




Portable

| ASM 310 | Advantages | Benefits |
|---|--|---|
|  | <ul style="list-style-type: none"> ■ Small, light (21 kg), compact | <ul style="list-style-type: none"> ■ Ideal for servicing work |
| | <ul style="list-style-type: none"> ■ Saving of measurements and configurations on SD card | <ul style="list-style-type: none"> ■ Easy data documentation |
| | <ul style="list-style-type: none"> ■ 9 languages available on control panel | <ul style="list-style-type: none"> ■ Simple use and easy operation in international environments |


Multipurpose

| ASM 340, ASM 340 D | Advantages | Benefits |
|---|---|---|
|  | <ul style="list-style-type: none"> ■ Detection of large leaks up to 100 hPa | <ul style="list-style-type: none"> ■ Large range of applications |
| | <ul style="list-style-type: none"> ■ Performs helium and hydrogen leak detection in vacuum and sniffer modes | <ul style="list-style-type: none"> ■ Flexible operation |
| | <ul style="list-style-type: none"> ■ Excellent connection compatibility to previous models | <ul style="list-style-type: none"> ■ Existing accessories can be used |
| | <ul style="list-style-type: none"> ■ High performance vacuum system | <ul style="list-style-type: none"> ■ Fastest time to test in its class |
| | <ul style="list-style-type: none"> ■ Oil-free in version 340 D | <ul style="list-style-type: none"> ■ Use in clean applications |


High performance

| ASM 390 / 392 | Advantages | Benefits |
|---|---|--|
|  | <ul style="list-style-type: none"> ■ High maneuverability and compact design | <ul style="list-style-type: none"> ■ Easy access to test area even in tight spaces |
| | <ul style="list-style-type: none"> ■ Highest pumping speed of backing pump in its class (35 m³/h) as well as high helium pumping speed (10 or 25 l/s) | <ul style="list-style-type: none"> ■ Fast, accurate and reliable leak detection |
| | <ul style="list-style-type: none"> ■ Integrated storage space for tools, vacuum bellows and accessories | <ul style="list-style-type: none"> ■ Practical access and quick availability of tools |

Modular

| ASI 35 | Advantages | Benefits |
|--|--|--|
|  | <ul style="list-style-type: none"> ■ Compact, robust, modular system | <ul style="list-style-type: none"> ■ Simple and compact integration in any mounting position |
| | <ul style="list-style-type: none"> ■ Operation via PC or PLC possible | <ul style="list-style-type: none"> ■ Cost savings as control panel is not mandatory |
| | <ul style="list-style-type: none"> ■ Broad selection of interfaces and configurations | <ul style="list-style-type: none"> ■ Best possible compatibility to your individual control concept |

Sniffing


| ASM 306 S | Advantages | Benefits |
|---|--|--|
|  | <ul style="list-style-type: none"> ■ Sniffer for Helium and Hydrogen test gases | <ul style="list-style-type: none"> ■ Give versatility to your production line |
| | <ul style="list-style-type: none"> ■ Intelligent sniffer probe with high flow | <ul style="list-style-type: none"> ■ Fast testing and easy reading of test status |
| | <ul style="list-style-type: none"> ■ Robust design and rugged construction | <ul style="list-style-type: none"> ■ Low cost of ownership |


Leak detection

Leak testers




Micro-Flow (Air)


| E-PDQ | Advantages | Benefits |
|---|---|--|
|  | <ul style="list-style-type: none"> ■ Faster test time compared to alternative technologies | <ul style="list-style-type: none"> ■ Shortest cycle times and high efficiency |
| | <ul style="list-style-type: none"> ■ High accuracy and repeatability | <ul style="list-style-type: none"> ■ Optimum quality and process control |
| | <ul style="list-style-type: none"> ■ Compact design with integrated pressure reservoir | <ul style="list-style-type: none"> ■ Small footprint and easy integration |


| E2 | Advantages | Benefits |
|---|---|--|
|  | <ul style="list-style-type: none"> ■ Fast and reliable leak testing using air | <ul style="list-style-type: none"> ■ Short cycle times and low operating costs |
| | <ul style="list-style-type: none"> ■ Integrated touch screen graphical display | <ul style="list-style-type: none"> ■ User-friendly operation also for stand-alone use |
| | <ul style="list-style-type: none"> ■ For small and medium sized test parts | <ul style="list-style-type: none"> ■ Flexibly usable for variable test parts |

Mass Extraction

| ME2 | Advantages | Benefits |
|---|--|---|
|  | <ul style="list-style-type: none"> ■ Allows for detection of smallest leaks (< 1 µm) using air | <ul style="list-style-type: none"> ■ Clearly lower operating costs compared to test methods with comparable detection limits |
| | <ul style="list-style-type: none"> ■ Faster test times for leak testing using air | <ul style="list-style-type: none"> ■ Shortest cycle times and high efficiency |
| | <ul style="list-style-type: none"> ■ Recognized by USP 1207 and ASTM (F3287-17) | <ul style="list-style-type: none"> ■ Easy and safe certification of test process |

Optical Emission Spectrometry (Air/Nitrogen – Multi gas detector)

| AMI 1000 | Advantages | Benefits |
|---|--|--|
|  | <ul style="list-style-type: none"> ■ Large detection range for gross and fine leak test | <ul style="list-style-type: none"> ■ Only one device to cover the complete test range |
| | <ul style="list-style-type: none"> ■ Highest accuracy | <ul style="list-style-type: none"> ■ Optimum quality and process controlling |
| | <ul style="list-style-type: none"> ■ Quantitative and user-independent go/no-go result | <ul style="list-style-type: none"> ■ Without risk of operating errors |

| ASM 2000 | Advantages | Benefits |
|---|--|--|
|  | <ul style="list-style-type: none"> ■ Large detection range for gross and fine leak test | <ul style="list-style-type: none"> ■ Only one device to cover the complete test range |
| | <ul style="list-style-type: none"> ■ Highest accuracy | <ul style="list-style-type: none"> ■ Optimum quality and process controlling |
| | <ul style="list-style-type: none"> ■ Quantitative and user-independent go/no-go result | <ul style="list-style-type: none"> ■ Without risk of operating errors |

System technology

Contamination management solutions



Contamination management solutions


| APA | Advantages | Benefits |
|---|--|---|
|  | <ul style="list-style-type: none"> ■ Real time AMC monitoring in FOUP ■ Upgradable Tool ■ High Throughput 12 FOUPS/hours | <ul style="list-style-type: none"> ■ Immediate recognition of contaminations ■ Possible to add analyzers, option for off line analysis ■ Large numbers of FOUPS can be processed for statistical production purposes |
| APR | Advantages | Benefits |
|  | <ul style="list-style-type: none"> ■ Remove HR and AMC from FOUP and wafer ■ Best possible quality assurance with compact dimensions ■ Customized design | <ul style="list-style-type: none"> ■ Yield enhancement ■ Low footprint in Semi Fabs ■ Individual adaptation to the customer processes |
| ADPC | Advantages | Benefits |
|  | <ul style="list-style-type: none"> ■ Real time particles measurement and location in FOUPS ■ Can measure down to 10 nanometer particle ■ High throughput (8-14 FOUPS/h) | <ul style="list-style-type: none"> ■ Immediate information about FOUP contamination ■ Ideal for advanced semi Fabs ■ Large numbers of FOUPS can be processed for statistical production purposes |
| AMPC | Advantages | Benefits |
|  | <ul style="list-style-type: none"> ■ Up to 128 sampling lines for AMC tracking ■ Upgradable Tool ■ Low sampling time, innovative software | <ul style="list-style-type: none"> ■ All semi Fab area can be connected onto one single tool ■ Possible to add analyzers, options. ■ Immediate results to be pushed to Fabs data center |

System technology


Vacuum systems



Multi-stage vacuum process

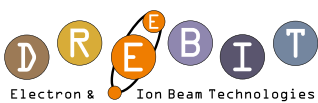
| Vacu ² | Advantages | Benefits |
|---|---|---|
|  | <ul style="list-style-type: none"> ■ Mold cavity and shot chamber in high pressure die cast systems are quickly evacuated ■ Complete production monitoring ■ Very low vacuum ■ High process stability in high pressure die cast systems | <ul style="list-style-type: none"> ■ Avoidance of air bubbles in cast parts improves their quality ■ High process availability in high pressure die cast systems ■ Quality improvements to the cast products ■ Cost savings through fewer rejects |

Individual systems


| e.g. Calibration systems | Advantages | Benefits |
|---|--|--|
|  | <ul style="list-style-type: none"> ■ Customized design possible ■ Bundled competences and products from a single source ■ 24-hour system service world-wide | <ul style="list-style-type: none"> ■ Optimal adaption to your application ■ Smooth workflow and uncomplicated communication ■ Minimal downtimes thanks to the immediate reaction in case of any failure |

Ion Beam Technology


Ion sources, ion beam optic and
ion beam diagnostics




Ion sources

| Dresden EBIS | Advantages | Benefits |
|---|--|---|
|  | <ul style="list-style-type: none"> ■ Production of highly charged ions of almost all chemical elements at nearly all charge states as pulsed as well as DC ion beam | <ul style="list-style-type: none"> ■ Broad range of ion projectiles, efficient acceleration of highly charged ions in particle accelerators, usable for materials analytics among others |
| | <ul style="list-style-type: none"> ■ Maintenance-free room temperature permanent magnet electron beam ion source (cryogenic high performance system on request) | <ul style="list-style-type: none"> ■ Low power consumption, no need for cryogenic equipment, low maintenance costs |
| | <ul style="list-style-type: none"> ■ Production of characteristic X-rays of various elements of almost all charge states | <ul style="list-style-type: none"> ■ High accuracy calibration of radiation detectors (for X-rays, EUV, visible light) is possible |


Ion beam diagnostics

| Wien filter | Advantages | Benefits |
|---|--|---|
|  | <ul style="list-style-type: none"> ■ Compact design | <ul style="list-style-type: none"> ■ Less expensive and more compact than a comparable dipole magnet |
| | <ul style="list-style-type: none"> ■ Low power consumption | <ul style="list-style-type: none"> ■ Low running costs, maintainance-free |
| | <ul style="list-style-type: none"> ■ Charge state and mass separation without changing the direction of particle motion | <ul style="list-style-type: none"> ■ Straight beamline design (no L-shape) |


Faraday cup

| Faraday cup | Advantages | Benefits |
|---|--|---|
|  | <ul style="list-style-type: none"> ■ Broad product range of various Faraday cup designs | <ul style="list-style-type: none"> ■ Different Faraday cup models for various applications measuring ion currents from fA up to mA |
| | <ul style="list-style-type: none"> ■ Manual or automated control possible | <ul style="list-style-type: none"> ■ Low cost models up to high automated Faraday cup systems |
| | <ul style="list-style-type: none"> ■ High sensitive low power Faraday cups up to water cooled high power Faraday cups of up to several 100 W power load | <ul style="list-style-type: none"> ■ A broad range of ion energy (eV up to MeV) and ion current (fA up to mA) can be covered |

Ion beam optics

| Beam deflection optics | Advantages | Benefits |
|---|--|---|
|  | <ul style="list-style-type: none"> ■ Compact design | <ul style="list-style-type: none"> ■ Low space consumption in beamline |
| | <ul style="list-style-type: none"> ■ Low aberration | <ul style="list-style-type: none"> ■ Small impact on beam quality |
| | <ul style="list-style-type: none"> ■ Broad product portfolio – numerous lens models and beam deflection systems | <ul style="list-style-type: none"> ■ Broad variety of beam formation and deflection possible |

Complete facilities

| Ion irradiation facility | Advantages | Benefits |
|---|--|---|
|  | <ul style="list-style-type: none"> ■ Complete beamline with vacuum system and computer control system including target handling | <ul style="list-style-type: none"> ■ Semi-automated control system with simple user interface |
| | <ul style="list-style-type: none"> ■ Production of charge state separated ion beams with variable projectile energy | <ul style="list-style-type: none"> ■ Continuous and pulsed irradiation of targets with various ion projectiles in the energy range of eV up to MeV |
| | <ul style="list-style-type: none"> ■ Production of stable ion beams of almost all elements including metal ions | <ul style="list-style-type: none"> ■ Long-term irradiation with a broad range of ion species and projectile energies with one facility |

Chambers & Components

Chambers



High vacuum chambers



Advantages

- Pre-configured design
- Proven, tough format
- Selectable doors

Benefits

- Cost savings through lower design expenses
- Reliable and safe
- Individual adaptation to your processes

Medium vacuum chambers



Advantages

- Pre-configured design
- Proven, tough design
- Selectable doors

Benefits

- Cost savings through lower design efforts
- Reliable and safe
- Individual adaptation to your processes

Modular vacuum chambers



Advantages

- Pre-configured design
- Expansion and module replacement possible
- Selectable doors

Benefits

- Cost savings through lower design expenses
- Maximum flexibility at all times
- Individual adaptation to your application

Custom vacuum chambers



Advantages

- Individual design
- High quality materials
- Proven, tough design

Benefits

- Optimally adjustable to your process
- Best quality and long life-time
- Reliable and safe

Chambers & Components

Components



ISO-KF, ISO-K/ISO-F



Advantages

- Helium-leak tested components
- Large number of flange diameters
- Extensive, standardized system components

Benefits

- Fulfills high quality requirements
- Optimally suited for your vacuum system
- Perfect compatibility

CF, COF



Advantages

- UHV suitable due to low desorption rates
- Helium-leak tested components
- Extensive, standardized system components

Benefits

- Creates uniquely clean vacuum
- Fulfills high quality requirements
- Perfect compatibility

Viewports



Advantages

- Large selection of glass types
- Extensive, standardized system components

Benefits

- Suitable for a wide variety of applications
- Perfect compatibility

Custom components



Advantages

- Development of specific components
- High quality materials

Benefits

- Customized components for your requirements
- Best quality and life

Chambers & Components

Feedthroughs and manipulators



Feedthroughs

**Electrical/thermocouple/fluid/
pipe feedthroughs, isolators**



Advantages

- High reliability
- Large selection of various feedthroughs

Benefits

- Very long service life
- Customized applications also possible

**Rotary-/linear-/
rotary/linear feedthroughs**



Advantages

- Field-tested design
- Large selection of various feedthroughs

Benefits

- High reliability
- Customized applications also possible

Manipulators

**Z-/XY-/XYZ-axis manipulators,
rotary/adjustment manipulators**



Advantages

- Extremely precise thanks to high degree of inherent rigidity and precise movements
- Use of mechanical components with low wear
- Field-tested design

Benefits

- Highest precision and excellent reproducibility
- Very long lifetime
- High reliability

Custom manipulators



Advantages

- Individual design
- Proven, tough design
- Easy to combine with other Pfeiffer Vacuum products

Benefits

- Optimal process adjustment
- Reliable and safe
- Excellent adaptation to your process components

Valves

Isolation valves – high vacuum
($1 \cdot 10^{-9}$ hPa)



Manual angle valves



Advantages

- Quick turn option
- Multi-turn handwheel option
- Field tested, robust construction
- Bellows retract fully from the side port when the valve is completely open

Benefits

- Easy, visual position indication
- Can be used for full or partial opening and closing
- Reliable and safe
- Eliminate buildup of by-products on bellows

Pneumatic, electropneumatic, & electromagnetic angle valves



Advantages

- Quick reaction due to short opening and closing times
- Easy, cost effective maintenance and service
- High cycle life
- Field tested, robust construction

Benefits

- Can be used in complicated processes
- Removable bellow/actuator assemblies
- Ideal for automation processes
- Reliable and safe

HV gate valves



Advantages

- High conductance value for molecular flows through viscous flow
- Smaller volume results in lower outgassing
- Removable carriage assembly and actuator
- High cycle life
- Field tested, robust construction

Benefits

- Guarantees optimal pump performance
- Faster pump down
- Easy and cost effective maintenance and service
- Ideal for automation processes
- Reliable and safe

Pendulum valves



Advantages

- Smooth actuation
- Removable body cover for in-situ serviceability
- Compact design

Benefits

- Low particle generation
- Easy and cost effective maintenance and service
- Space saving

Ball valves



Advantages

- PTFE ball seats
- Manual and pneumatic operations available
- Simple design
- 3-way option with a through hole

Benefits

- Ideal for corrosive environments
- Ideal for large installations
- Easy and cost effective maintenance and service
- Metal ball rotates 90° for full cross-sectional clearance

Butterfly valves



Advantages

- Quarter turn actuation
- Small footprint
- Field tested, robust construction

Benefits

- Easy open/close and visual position indication
- Shortest possible gas path
- Reliable and safe

Valves

Isolation valves – ultra high vacuum
($1 \cdot 10^{-11}$ hPa)



Manual angle valves



Advantages

- Multi-turn handwheel option
- Field tested, robust construction
- Bellows retract fully from the side port when the valve is completely open

Benefits

- Can be used for full or partial opening and closing
- Reliable and safe
- Eliminate buildup of by-products on bellows

UHV pneumatic and electropneumatic angle valves



Advantages

- Quick reaction due to short open and close times
- Easy, cost effective maintenance and service
- High cycle life
- Field tested, robust construction

Benefits

- Can be used in complicated processes
- Removable bellow/actuator assemblies
- Ideal for automation processes
- Reliable and safe

UHV gate valves



Advantages

- High conductance value for molecular flows through viscous flow
- Smaller volume results in lower outgassing
- Removable carriage assembly and actuator
- High cycle life
- Field tested, robust construction

Benefits

- Guarantees optimal pump performance
- Faster pump down
- Easy and cost effective maintenance and service
- Ideal for automation processes
- Reliable and safe

All metal valves



Advantages

- All metal seal
- Simple design

Benefits

- Use in UHV or cryogenic applications
- Easy and cost effective maintenance

Valves

Pressure control valves



Throttling pendulum valves



Advantages

- Smooth actuation
- In-situ serviceability through removable body cover
- Compact design

Benefits

- Low particle generation
- Easy and cost effective maintenance and service
- Space saving

Throttling butterfly valves



Advantages

- High conductance value for molecular flows through viscous flow
- Adaptive algorithm
- High cycle life
- Battery backup
- Field tested, robust construction

Benefits

- Low particle generation and optimal pump performance
- Improved stability and faster pressure transitions
- Ideal for automation processes
- Fail-safe positioning
- Reliable and safe

Throttling butterfly valves - nearly sealing



Advantages

- High conductance value for molecular flows through viscous flow
- Nearly sealing capability
- Adaptive algorithm
- High cycle life
- Battery backup
- Field tested, robust construction

Benefits

- Low particle generation and optimal pump performance
- Improved isolation
- Improved stability and faster pressure transitions
- Ideal for automation processes
- Fail-safe positioning
- Reliable and safe

Gas dosing and gas regulating valves



Advantages

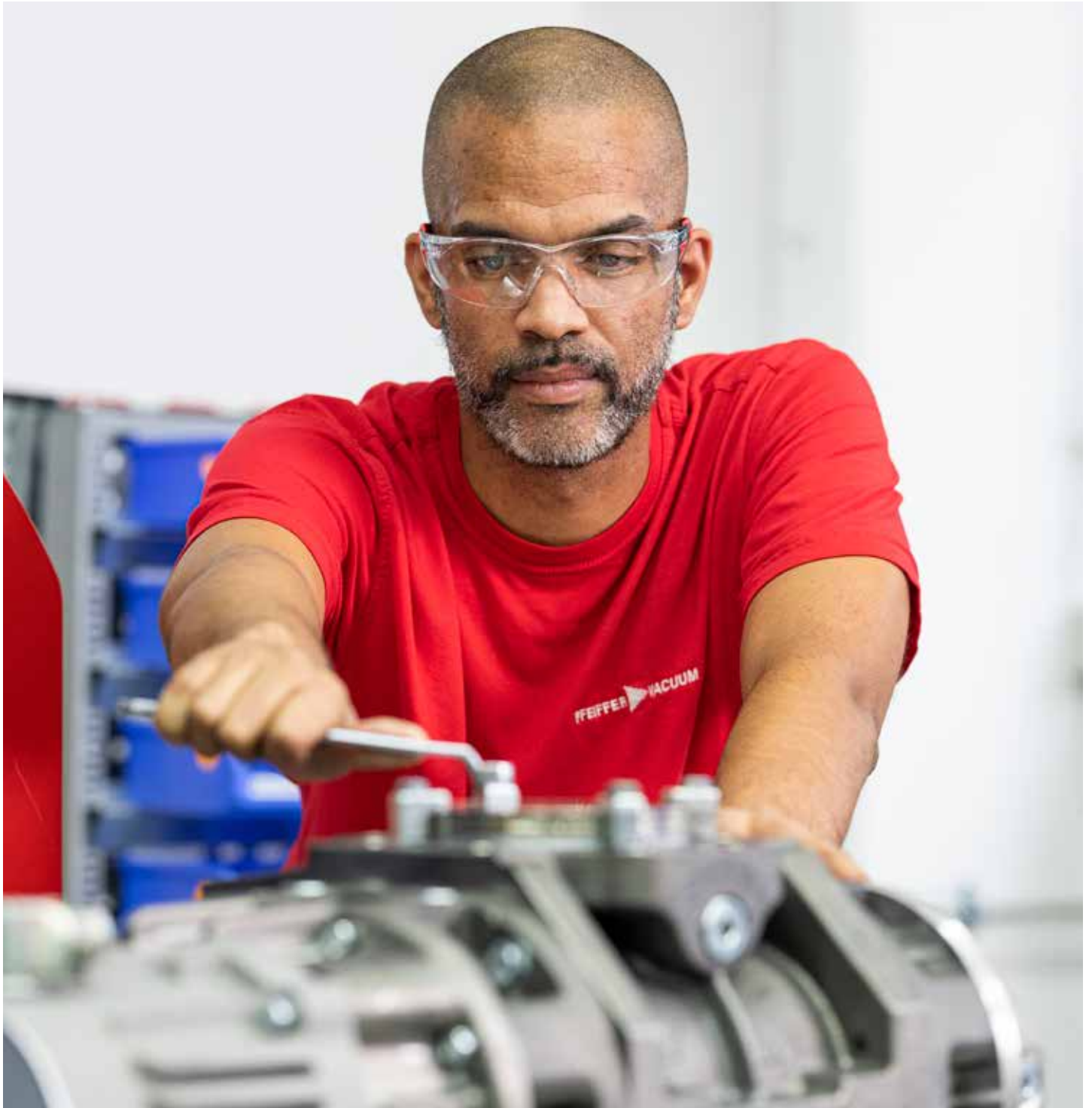
- Variable gas throughput
- Large control range
- Field-tested, robust construction

Benefits

- Numerous applications
- Variable control options
- Reliable and safe

Service solutions

First-class service for high-quality products.



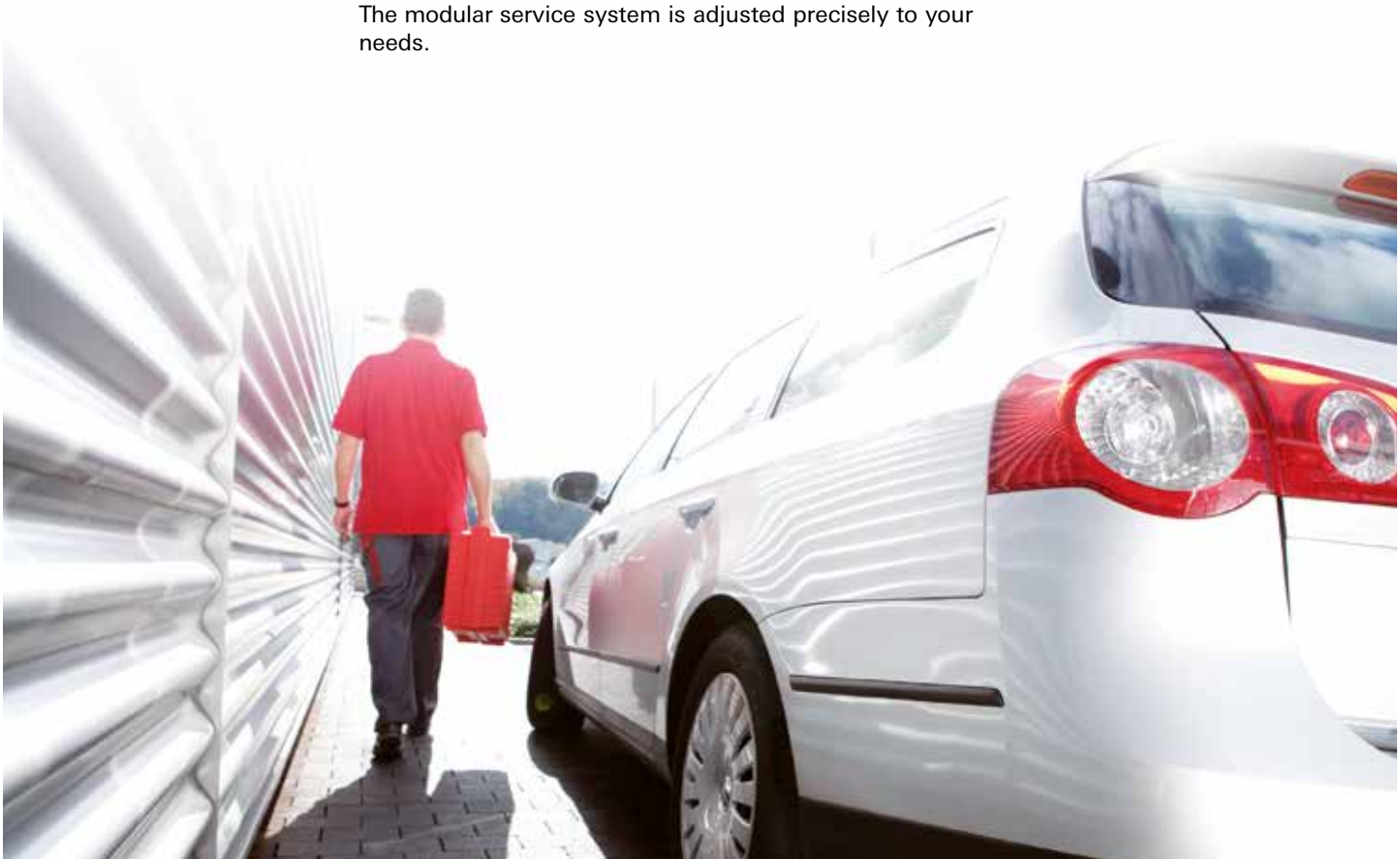
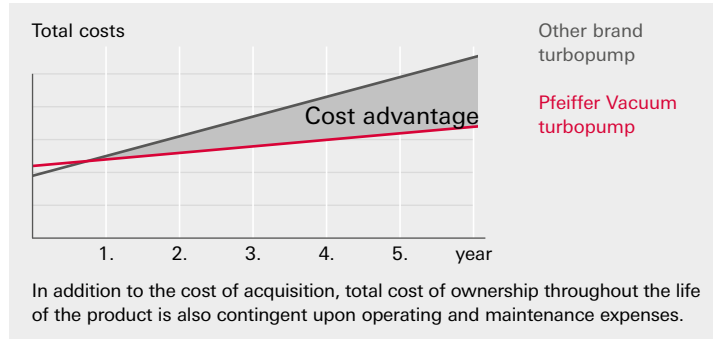


Extended vacuum component service life, coupled with minimal downtimes, is what you can expect from us. We satisfy your requirements with high-performance products and excellent service.

Our extensive range of training courses provides you with the best possible expertise for safeguarding against the dreaded "worst-case scenario" and to perfect the way you handle vacuum components.

Our professional sales engineers and service technicians provide you with hands-on support world-wide.

Pfeiffer Vacuum offers a complete service portfolio ranging from genuine spare parts right through to service agreements: The modular service system is adjusted precisely to your needs.



Service solutions

Fast, competent service
around the globe

Training

Qualified staff is vital to guarantee the smooth operation of our vacuum solutions in your company. We offer you training courses for every need, covering a wide variety of topics: spanning from theoretical basic courses up to application training courses that provide you with the skills to maintain your systems. Make sure your staff has the vacuum expertise you need!

In addition to the regular training courses, arrangements for individual courses can be made. Necessary for all courses: Practice based focus is vital. All courses can take place either in our company headquarters in Asslar, Germany, or on site at your company. More information about our training courses can be found in our customer training course program on our website.

Genuine replacement parts and tools

For carrying out some common maintenance items yourself, we recommend that you only use genuine replacement parts and tools. These are available from Pfeiffer Vacuum and will ensure the quality and long life of our products. All of our experience that we have gathered in the development and production of our components is used in putting together replacement part packages and the development of our tools. Our promise: All genuine replacement parts and tools are state-of-the-art.





Preventative service

Optimal maintenance is important to guarantee the best possible functionality of our products. To reduce downtimes as much as possible, Pfeiffer Vacuum can maintain many of our products directly on-site at your company. For preventative maintenance, we offer a lower-priced service replacement; you receive an exchange product tested to the latest specifications. We can also create your own individual service schedule within the frame of a service agreement and support you in monitoring maintenance intervals.



Corrective service

If maintenance is no longer sufficient, we will do everything to make sure your product is up and running once again. With more than 80 service locations worldwide, we are ready to provide a quick solution nearby using uniform standards. If a quick turnaround time is needed, we will be happy to provide you with a replacement product in mint condition.

Refurbished products

Another choice is our refurbished products that also meet the highest quality standards. These products are in perfect technical condition and are tested according to new product criteria. Our customer service department will be happy to issue you a quote and check for immediate availability.

Additional services

Additional on-site services include the commissioning of components and systems, gas analysis and leak detection on site as well as the calibration of vacuum gauges and test leaks. Any short-term requirements can be accommodated through the rental of your required product.

On-site worldwide for you

Production, sales and service



Germany**Pfeiffer Vacuum GmbH**

Berliner Straße 43
35614 Asslar
Germany
www.pfeiffer-vacuum.com

Pfeiffer Vacuum**Components & Solutions GmbH**

Anna-Vandenhoeck-Ring 44
37081 Göttingen
info@vacuum-shop.com

DREEBIT

Zur Wetterwarte 50, Haus 301
01109 Dresden
info@dreebit.com

Benelux**Pfeiffer Vacuum Benelux B. V.**

Newtonweg 11
4104 BK Culemborg
The Netherlands
office.benelux@pfeiffer-vacuum.com

China**Pfeiffer Vacuum (Shanghai) Co.,Ltd.**

Unit B, 5th Floor,
Building 3# Youyou Century Plaza
428 South Yanggao Road
200127 Shanghai, China
Info.cn@pfeiffer-vacuum.com

France**Pfeiffer Vacuum SAS**

98, avenue de Brogny
74009 Annecy CEDEX
France
info.fr@pfeiffer-vacuum.com

Great Britain**Pfeiffer Vacuum Ltd.**

16 Plover Close, Interchange Park
Newport Pagnell, MK16 9PS
United Kingdom
sales.uk@pfeiffer-vacuum.com

India**Pfeiffer Vacuum (India)**

Private Ltd.
25/5 Nicholson Road, Tarbund
Secunderabad 500 009
India
pvin@pfeiffer-vacuum.com

Italy**Pfeiffer Vacuum Italia S. p. A.**

Via Luigi Einaudi 21
20037 Paderno Dugnano (MI)
Italy
contact.it@pfeiffer-vacuum.com

Austria**Pfeiffer Vacuum Austria GmbH**

Diefenbachgasse 35
1150 Vienna
Austria
office.at@pfeiffer-vacuum.com

Romania**Pfeiffer Vacuum Romania S. r. l.**

str. Luncii nr. 5A
400633 Cluj-Napoca
Romania

Switzerland**Pfeiffer Vacuum (Schweiz) AG**

Förrlibuckstrasse 30
8005 Zurich
Switzerland
info.ch@pfeiffer-vacuum.com

Singapore**Pfeiffer Vacuum Singapore Pte. Ltd.**

49 Jalan Pemimpin
#01-01/04 APS Industrial Building
Singapore 577203, Singapore
service.sg@pfeiffer-vacuum.com

Scandinavia**Pfeiffer Vacuum Scandinavia AB**

Johanneslundsvägen 3
19461 Upplands Väsby
Sweden
Sales.se@pfeiffer-vacuum.com

South Korea**Pfeiffer Vacuum Korea Ltd.**

7F, Hyundai Green Food,
30, Munin-ro, Suji-gu, Yongin-si,
Gyeonggi-Do, 16827
Republic of Korea
sales.uk@pfeiffer-vacuum.com

Pfeiffer Vacuum Semi Korea, Ltd.

12F Starplaza, 53 Metapolis-Ro,
Hwasung-Si, Gyeonggi-Do, 18454,
Republic of Korea
KR-Sales@pfeiffer-vacuum.com

Taiwan**Pfeiffer Vacuum Taiwan Corporation Ltd.**

No. 169-9, Sec. 1, Kang-Leh Road
Song-Lin Village, Hsin-Feng 30444
Hsin-Chu County – Taiwan, R.O.C.
info.tw@pfeiffer-vacuum.com

USA**Pfeiffer Vacuum Inc.**

24 Trafalgar Square
Nashua, NH 03063-1988
USA
contact@pfeiffer-vacuum.com

Pfeiffer Vacuum Inc.

4037 Guion Lane
Indianapolis, IN 46268
USA
contact@pfeiffer-vacuum.com
www.atcinc.net

Pfeiffer Vacuum Valves & Engineering

1967 South Oregon Street
Yreka CA 960978
USA
pvvessales.us@pfeiffer-vacuum.com
www.n-c.com

Your Success. Our Passion.

We give our best for you every day –
worldwide!

Are you looking for an
optimal vacuum solution?
Please contact us:

Pfeiffer Vacuum GmbH
Germany
Phone +49 6441 802-0



Errors excepted. All data subject to change without prior notice. PI 0384 PEN (January 2024/Prod)

Follow us on social media
#pfeiffervacuum



www.pfeiffer-vacuum.com

PFEIFFER  **VACUUM**