

# Product Overview 2007 Innovative Vacuum Components and Systems for Versatile Applications.

# Forevacuum

# TRIVAC B



# **Dual-stage rotary vane pumps**

#### Your Expectations:

- Rugged vacuum generator
- High reliability
- Innovative technology
- ATEX explosion protection

#### **Our Solution:**

- Pumping speed 2.5 to 65 m<sup>3</sup>/h
- Ultimate pressure 10<sup>-4</sup> mbar
- For medium and high vacuum applications
- Certified acc. to ATEX RL 94/9/EG

#### **Your Benefit:**

A well-proven vacuum pump for long-time operation lasting over years

#### SOGEVAC B/BI



# Single-stage rotary vane pumps

#### Your Expectations:

- Industrial-suited vacuum generator for the rough vacuum range
- Reasonable price-to-performance ratio
- High reliability
- ATEX explosion protection

#### **Our Solution:**

- Pumping speed 10 to 1,200 m<sup>3</sup>/h
- Ultimate pressure < 10<sup>-1</sup> mbar
- For rough operation
- Certified acc. to ATEX RL 94/9/EG

#### **Your Benefit:**

Low investment costs, long lifetime

#### **SCROLLVAC**



# Oil-free scroll pumps

## Your Expectations:

- Oil-free vacuum pump
- Quiet, low vibration operation
- Long maintenance intervals

#### **Our Solution:**

- Pumping speed 5 to 30 m<sup>3</sup>/h
- Ultimate pressure < 10<sup>-1</sup> mbar
- Robust, low-maintenance design

#### **Your Benefit:**

Dry, universal applicable solution at low operating costs

# Forevacuum

# **ECODRY M**



# Dry compressing piston pumps

#### Your Expectations:

- Oil-free vacuum generator
- Long maintenance intervals
- High water vapour tolerance

#### **Our Solution:**

- Pumping speed 14 bis 30 m<sup>3</sup>/h
- Ultimate pressure 10<sup>-1</sup> resp. 10<sup>-2</sup> mbar
- Variable installation orientation
- Multistage gas ballast

#### **Your Benefit:**

Dry, economic vacuum solution at low operating costs

#### **DIVAC**



# Diaphragm pumps

#### **Your Expectations:**

- Waste water-free vacuum generation
- Corrosion resistant vacuum pump for laboratories

#### **Our Solution:**

- Media contacting parts made of PTFE and PVDF
- Dry operation, oil-free
- Three different pumping speed classes available

#### **Your Benefit:**

Environmental-friendly at low operating costs

#### **SCREWLINE**



# Dry compressing screw pumps

## Your Expectations:

- Dry compressing vacuum pump
- High pumping speed
- High reliability
- Suitable for demanding process applications (dust, vapours, etc.)
- ATEX explosion protection

## **Our Solution:**

- Pumping speed 250 and 630 m<sup>3</sup>/h
- Ultimate pressure ≤ 1 x10<sup>-2</sup> mbar
- Expandable to pump systems by adding roots pumps
- Certified acc. to ATEX RL 94/9/EG
- Monitoring system optional

#### **Your Benefit:**

Extremely robust for harshest applications, simple on-site maintenance

# Forevacuum

## E/DK



# Rotary piston pumps

#### Your Expectations:

- Rugged vacuum generator
- High pumping speed, low ultimate pressure
- Insensitive to dirt

#### **Our Solution:**

- Pumping speed 200 and 250 m<sup>3</sup>/h
- Ultimate pressure < 10<sup>-3</sup> mbar
- Single and dual stage versions available
- Expandable to pump systems by adding roots pumps

#### **Your Benefit:**

The pump for harsh applications

# **RUVAC**



#### **Roots blowers**

#### **Your Expectations:**

- Pumping speed increase at low pressures
- Simple to use
- Almost oil-free
- ATEX explosion protection

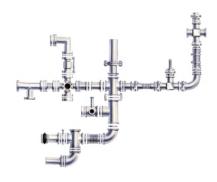
#### **Our Solution:**

- Pumping speed range from 250 to 13,000 m³/h
- Reliable and rugged
- Flange or canned motor versions available
- Certified acc. to ATEX RL 94/9/EG

#### **Your Benefit:**

Long-lasting and reliable; combinable with any forevacuum pumps resp. systems

# Flange systems



# **Connection Components**

## Your Expectations:

- Simple to fit and remove
- Reliable leak tightness
- High class materials, top quality
- Delivery from a single source

#### **Our Solution:**

- Small flanges in sizes DN 10 to DN 50
- Clamped flanges in sizes DN 63 to DN 630
- CF flanges in sizes DN 16 to DN 250

#### **Your Benefit:**

Well proven and widely used technology

# High vacuum

# **TURBOVAC**



New: MAG W 300 / 600 - range!

# COOLVAC



IZ



New: IZ 30 to 400 - range!

# Turbomolecular pumps

#### Your Expectations:

- Clean high and ultrahigh vacuum generation
- Easy to operate
- High forevacuum tolerance
- Long lifetime

#### **Our Solution:**

- Pumping speed up to 3,200 l/sec
- Mechanic and magnetic levitated bearing technology
- Compound stage versions available
- Integrated frequency converters

#### **Your Benefit:**

Hydrocarbon-free vacuum, installation in any orientation

# Refrigerator cryo pumps

#### Your Expectations:

- Hydrocarbon-free vacuum
- High and ultrahigh vacuum generation

#### **Our Solution:**

- Pumping speed up to 60,000 l/sec
- Clamp and CF flange versions
- Automatic regeneration cycle

#### **Your Benefit:**

High water vapour pumping speed, long lifetime, installation-independent

# Sputter ion pumps

#### Your Expectations:

- Low ultimate pressure
- Hydrocarbon-free vacuum

#### **Our Solution:**

- Pumping speed from 30 to 400 l/s
- Ultimate vacuum up to < 1 x 10<sup>-12</sup> mbar

#### **Your Benefit:**

A new range of absolutely vibration-free and maintenance free sputter ion pumps

#### DIP



# Oil diffusion pumps

## Your Expectations:

- Stable high vacuum
- High forevacuum tolerance
- High pumping speed

## **Our Solution:**

- Pumping speed 3,000 to 50,000 l/sec
- Operating range < 10<sup>-2</sup> to 10<sup>-8</sup> mbar
- Constant pumping speed at a wide operating range
- No wear due to revolving elements

#### **Your Benefit:**

Long maintenance intervals; no wear parts

# Gauges, Leak Detectors, Valves

# Measuring instruments



# Vacuum gauges and pressure gauges

#### Your Expectations:

- Precise pressure measurement of gases and vapours
- Reproducibility across a wide pressure range

#### **Our Solution:**

- Measurement range from 1,000 to 10<sup>-12</sup> mbar
- System compatible operation and data processing
- Pressure switches and pressure control instruments

#### **Your Benefit:**

Reliable monitoring of vacuum processes

#### **PHOENIXL**



# Helium leak detection systems and leak detectors

## Your Expectations:

- Reproducible results within the scope of your quality assurance
- Simple to operate
- Rapid operational readiness

#### **Our Solution:**

- Lowest detectable leak rate 5 x 10<sup>-12</sup> mbar l/s
- Suited for vacuum and sniffer operation
- Simple menu navigation via display
- Maximum inlet pressure 15 mbar

#### **Your Benefit:**

Reliable in the detection of leaks; reduction of rejection rates due to early production control

#### Vacuum Valves



# Valves in different design types and driving modes

## Your Expectations:

- Reliable leak tightness
- High number of actuations
- Simple to fit and remove
- Delivery from a single source

#### **Our Solution:**

- Manually actuated valves
- Valves with electromagnetic / electropneumatic drive
- Gate valves
- All-metal valves for UHV systems

#### Your Benefit:

Reliable valve technology in wide use on a broad basis

# Tailor-made Vacuum Solutions

## **Solutions**



# **Engineering / Vacuum systems**

#### Your Expectations:

- Professional consulting
- Design and delivery of demandoriented and optimized vacuum systems
- Reliable technical solution

#### **Our Solution:**

- Tailor-made solution for customer specific requirements
- Individually designed forevacuum and high vacuum pump systems

#### **Your Benefit:**

Reliable process engineering solutions due to long-term experience in drawing up customized vacuum systems. Individual control and monitoring devices.

#### **UNIVEX**



# **Experimentation systems**

#### Your Expectations:

- Universal experimentation chamber for vacuum coating
- Results transferable to large scale systems

#### **Our Solution:**

- Highly flexible systems, especially designed for laboratory needs
- Manual or automatic process control
- Chamber sizes (in mm): from Ø 300 x 300 to 500 x 500 x 800
- Ultimate pressure: up to 10<sup>-7</sup> mbar

#### **Your Benefit:**

Easy operation due to free accessible vacuum chamber. Fully automatic system control possible.

# Vacuum Academy



# Vacuum technology seminars / Training centre

# Your Expectations:

- Comprehending vacuum technology
- Practical training

#### **Our Solution:**

Systematic training covering the entire spectrum of vacuum technology. The program comprises:

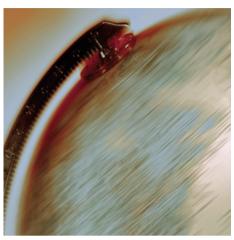
- Fundamentals of vacuum technology
- Leak detection and leak testing
- Maintenance work on vacuum pumps
- Customer-specific workshops

#### **Your Benefit:**

Qualified training of your staff by practical know-how transfer

# **Your Partner for Vacuum Engineering**







# Oerlikon Leybold Vacuum - worldwide

#### Your Expectations:

- First-class consulting
- Excellent quality
- Optimal price-to-performance ratio

#### **Our Solution:**

- Wordwide sales and service network
- High qualified and committed staff
- Certified in accordance with DIN ISO 9001/9002
- Top quality
- Clear pricing

#### **Your Benefit:**

- Safe applications
- Reliable operation
- Fast response
- Custom solutions for your specific service requirements

# **Services**

## Your Expectations:

- Global service
- Short downtimes
- Fair repairing charges

#### **Our Solution:**

- Service network with worldwide coverage
- Inhouse service and factory refurbishing with original spare parts
- Mobile service
- Tailor-made maintenance contracts
- Exchange and backup pool
- DKD calibration service 02701
- Repairs based on certified standards
- Decontamination

# **Headquarter Germany**

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