



COMPRESSED AIR TECHNOLOGY

Product Group Overview



Delivering system solutions, experience, competence and value out of one hand

Under the roof of "SPX Flow Technology", several market leading companies of the compressed air treatment business come together to ensure that our brand names

>Hankison[®] >Deltech[®] >Delair[®]

deliver system solutions, experience, competence and value to their customers and partners all out of one hand.

SPX FLOW TECHNOLOGY

With more than 18,000 employees, working in about 40 countries, SPX belongs to the group of market leaders in all of its business segments (Flow Technology, Thermal Technology, Industrial Technology). For many years, SPX is part of Fortune's top 500 list of world's best performing companies (www.spx.com).

OUR PRODUCT RANGE:

- Refrigeration dryers
- Desiccant dryers
- Hybridryer (dryer combination)

- Membrane dryers
- Filters
- Condensate management

COMPRESSED AIR FOR HIGH DEMANDS:

SPX compressed air treatment systems meet all quality and technical standards:





Compressed air as a source of energy

Compressed air has been used for the past 2000 years. Today, it is one of the most important sources of energy for manufacturing and industrial processes, and a large number of production processes are made possible only through the use of compressed air.

An efficient and cost-effective production, treatment and use of compressed air is therefore of crucial importance in your processes.



COMPELLING REASONS FOR COMPRESSED AIR TREATMENT

In a compressor, atmospheric air is brought to a higher pressure potential through the application of mechanical energy, which results in the air molecules being compressed. In addition to the air itself, oil, water vapour and a number of other substances are also compressed.

The temperature of the compressed air is reduced to the dew point in a dryer in order to separate out the water.

Compressed air at 7 bar (g) has eight times more impurities than normal ambient air.

PRINCIPAL IMPURITIES IN COMPRESSED AIR

- Vapour: Water and oil in gas form
- Aerosols: Small, nebulised drops of liquid formed from water and oil
- Solids: Dust, sand and particles resulting from corrosion and wear
- · Liquid: Water, oil

WATER CONTENT OF AIR



The capacity of the air to hold water depends on temperature. The higher the dew point (the point at which the air is saturated with water and at which the relative humidity is 100%), the higher the amount of water that the air can hold. When the air cools down, the water is released from the air and the compressed air becomes contaminated.

CONDENSATE

Condensate comprises around 99% water and around 1% impurities (containing oil, in the case of oil-lubricated compressors, and dirt from corroded particles in the piping, with additional contaminants from the ambient air that has been drawn in).

THE CONSEQUENCES

Untreated compressed air damages compressed air lines, resulting in expensive maintenance costs and production downtime. Insufficient compressed air treatment also results in a fall in quality during the production process. This doesn't need to be the case; our products provide optimal compressed air treatment that is perfectly aligned with your requirements.

COMPRESSED AIR PREPARATION -A QUESTION OF EFFICIENCY

The situation:

- Shortcomings in compressed air quality affect your entire production process – moisture laden and contaminated compressed air costs money
- Important system energy is wasted

Benefits of consistent treatment:

- Your operating costs are reduced
- Maintenance and repair work is kept to a minimum
- Your production quality is significantly improved

Optimise your processes and produce the flawless products demanded by your customers.

The complete range for optimized compressed air dehydration and filtration:

REFRIGERATION DRYERS



ADSORPTION DRYERS

- 20 12,000 m³/h
- 2.5 45 bar
- Dew point up to +3°C
- Energy-saving (optional)
- Water-cooled
- Available as combination with adsorption dryer
- Corrosion-resistant air circuit
- Well-proven branded components
- Service-friendly design
- 9 13,550 m³/h
- 4 16 bar
- Dew point up to -70°C
- Heatless regeneration
- Heat regeneration (internal & external)
- Energy management control (optional)
- Low pressure drop
- Operation reliability & performance
- Mechanically stable, low-dusting desiccant



HYBRID DRYERS



- 1,200 9,000 m³/h
- 4 10 bar (16 bar optional)
- Dew point up to -40°C
- Frequency-controlled/Digital Scroll
- Hybrid technology
- Energy-saving
- Well-proven branded components
- Long service life
- Summer/winter operation
- Short payback time



MEMBRANE DRYERS



FILTERS

- 2.4 242 m³/h
- 4 14 bar
- Dew point up to -40°C
- Vertical & horizontal variants
- Suitable as point-of-use dryer
- No electrical connection needed
- Optimized membrane package
- Purge-stop valve (optional)



- 34 17,550 m³/h
- 3 45 bar
- Thread- & flange filters
- 5 different filtration grades, defined by coloured end caps
- Reduced pressure drop
- Optimized flow of compressed air
- High reliability
- Long service life
- Silicon-free



- 288-87,000 m³/h flow rate
- 3-45 bar

Timer Controlled Drains:

- Simple installation
- · Compatible with all major compressor lubricants

Electronic Level Controlled Drains X-Drain:

- Resistance against all standard compressor oil types
- Automatic drain function

Oil-Water Separators:

 For flow rates from 90 to 720 m³/h and 72 to 3.600 m³/h

Dryers for special applications

REFRIGERATION DRYERS FOR HIGH PRESSURE, HIGH TEMPERATURE OR MARINE APPLICATIONS



ADSORPTION DRYERS FOR BREATHING AIR TREATMENT | ACTIVATED CARBON TOWERS, TAILOR-MADE SOLUTIONS



- Operating pressure of up to 50 bar for PET application
- Inlet temperature of up to +82° C: directly from the compressor
- Halogen-free cables and other options for marine application

- Breathing air treatment according to European Pharmacopoeia
- Activated Carbon Tower
- Heatless regeneration Adsorption dryers with integrated Activated Carbon Tower
- Gas treatment plants, nitrogen membrane systems and many tailor-made solutions for various applications of diverse industries

Reliable service: Keeping your production running.

ACCESSORIES, SPARE PARTS & SERVICE KITS



- Selection of suitable equipment by our expert team
- Full-service
- Accessories, spare parts & service-kits







Energy-saving technologies for future demands











SPX Flow Technology Moers GmbH | Konrad-Zuse-Straße 25 | D-47445 Moers Tel.: +49 (0) 28 41 / 8 19-0 | Fax: +49 (0) 28 41 / 8 19 83 | E-Mail: csc@dehydration.spx.com www.spxft.com

SPX reserves the right to incorporate our latest design and material changes without notice or obligation. Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing. Please contact your local sales representative for product availability in your region. For more information visit www.spx.com. The green ">" is a trademark of SPX Corporation, Inc.

ISSUED 03/2013 COPYRIGHT © 2013 SPX Corporation

