EVERDRY®

Drying

The heat-regenerated adsorption dryer

Custom-made system solution based on proven concepts

BEKO

The solution focuses on the application requirements

As a heat regenerated compressed air adsorption dryer, EVERDRY® series offers standardized system concepts with a wide range of configuration possibilities. Thereby, the complex problems special to compressed air drying at large volume flows are solved particularly economically, and customer-specific requirements are met with individual solutions. In this respect, it is not the available technology that determines the concept of a drying system, but the solution-oriented, optimal technology.

+ Application-oriented solution

- Added value thanks to comprehensive expertise
- Complete solution instead of components
- Informative and convenient touchscreen control
- Easy-to-service set-up

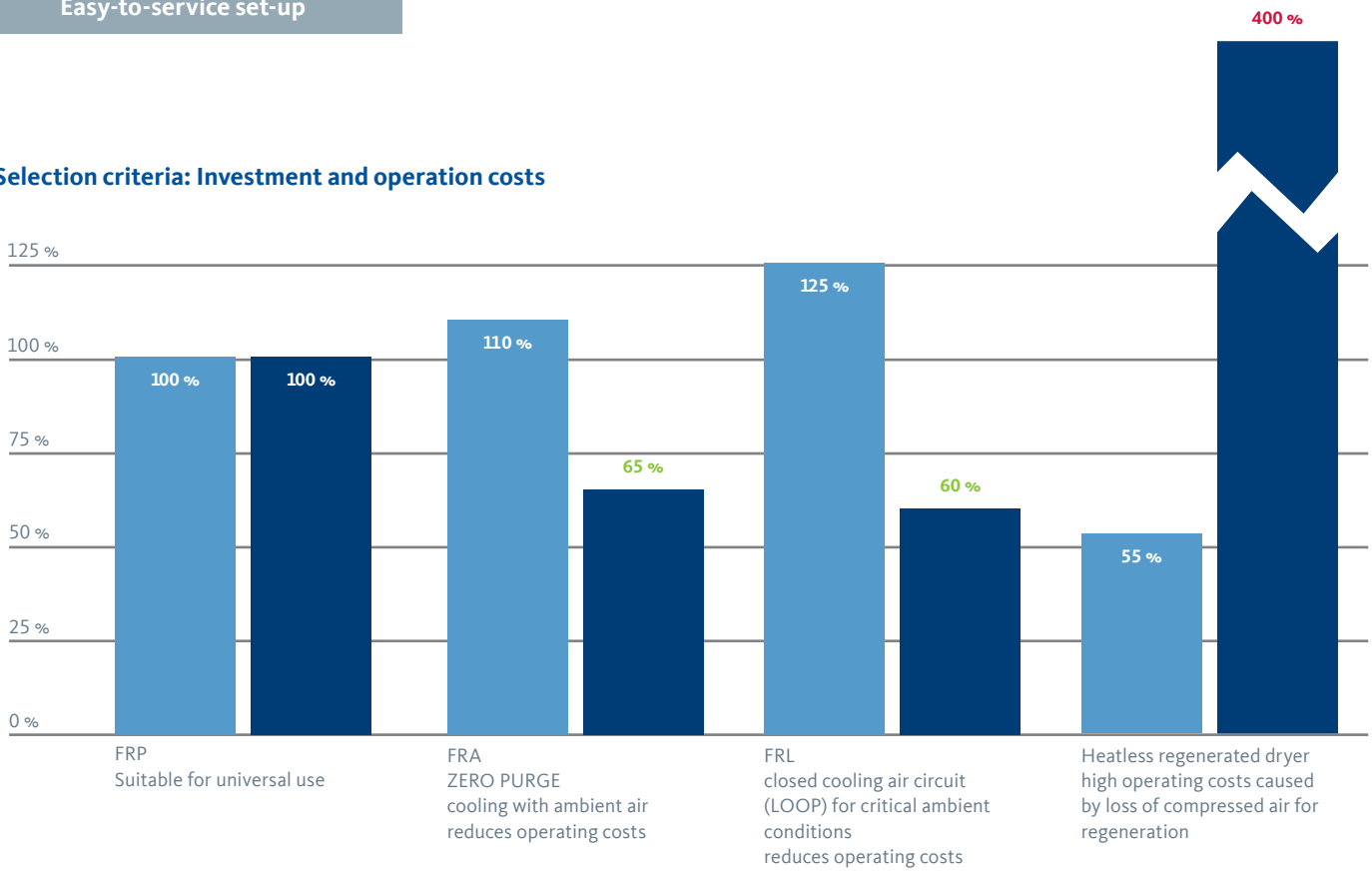
+ Reliable process management

- Safe sensor-based function monitoring
- Premium high-temperature galvanisation
- Proven and easy-to-service heat-exchanger design

+ Energy-optimised design

- Use of heat of compression (for HOC)
- Advantageous individual fittings
- Energy-efficient dew point control
- Combination dryer

Selection criteria: Investment and operation costs



When deciding which series to use, it is important to consider not only the type of application, but also the investment and operating costs as well as the particular payback period.

Investment costs Operating costs

EVERDRY® – The customised solution to satisfy all criteria

EVERDRY® adsorption dryer series offers the possibility to make use of proven concepts in order to find customized solutions by drawing on comprehensive expertise.
BEKO TECHNOLOGIES develops and plans complete concepts, tailored to customers' specific needs.

Our experienced specialist can explain the many different kinds of energy for heating regenerated air, such as compression heat, hot water, steam and natural gas – and all while ensuring compliance with international acceptance specifications. Customers' needs are handled individually on a project basis.

ISO 8573-1:2010

Quality class	Pressure dew point
1	≤ –70 °C
2	≤ –40 °C
3	≤ –20 °C
4	≤ +3 °C
5	≤ +7 °C
6	≤ +10 °C

FR

Model	FRP	FRA	FRL
Pressure dew point	- 40 °C	-40 °C	-40 °C -70 °C optional
Quality class	-.2.-.	-.2.-.	-.2.- -.1.-.

HOC

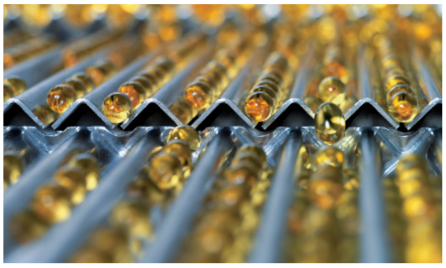
Model	HOC-F	HOC-P	HOC-R
Pressure dew point	down to -40 °C	down to -40 °C	down to -70 °C
Quality class	-.2.-.	-.2.-.	-.1.-.

EVERDRY® – When there is great need for dry compressed air

Food industry

Electronics industry

Pharmaceutical industry



Automotive industry

Chemical industry

Metal industry

EVERDRY® FRP | FRA | FRL
Fan Regenerated

FR

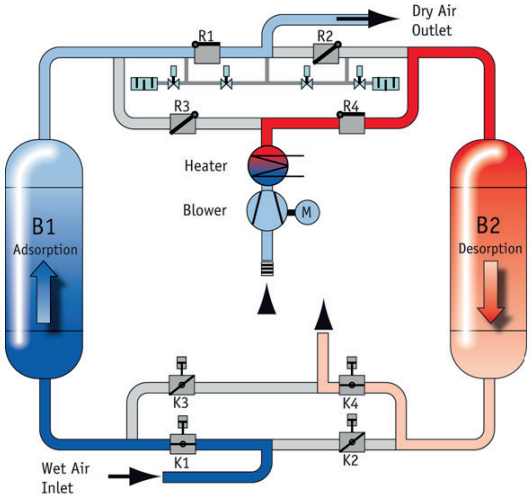
FRP = **P**urge Air (cooling with compressed air)
FRA = **A**mbient Air (cooling with ambient air)
FRL = **L**oop (closed routing of cooling air)
...- V = **V**acuum operation of the blower air during cooling

The classic concept:
innovative implementation by latest system technology
Proven process technology combined with cutting-edge system offers three basic and variable concepts which ensure optimum application in all climate zones throughout the world. The standard type series differentiate in 23 stages/levels from 580 to 20,000 m³/h. Local conditions and economic parameters ultimately determine the individual customer-specific project solution.
Higher volume flows are possible on request.

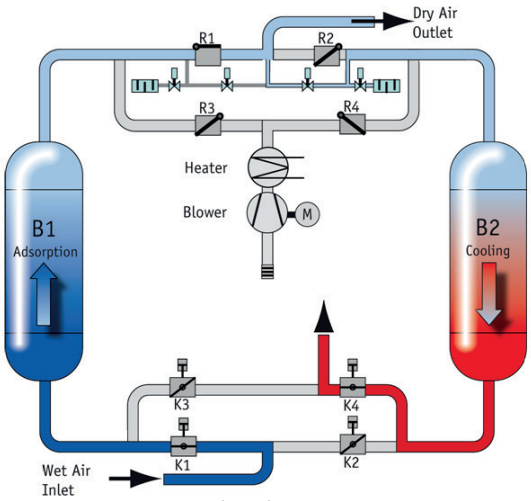
EVERDRY® FRP

› Desorption in counter flow direction to the adsorption process with heated blower air

› Cooling by pressure released partial stream of dried compressed air



Desorption phase



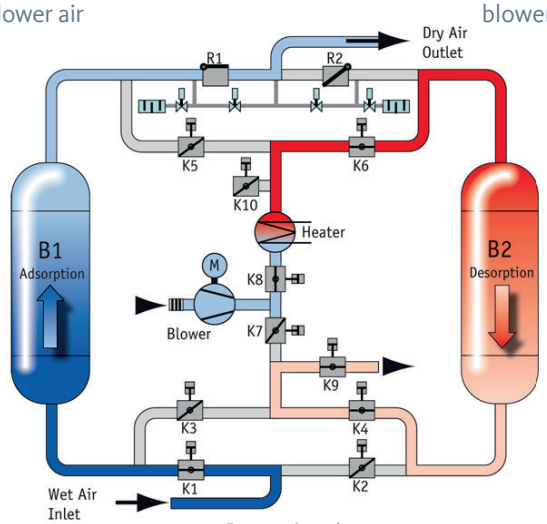
Cooling phase

EVERDRY® FRA

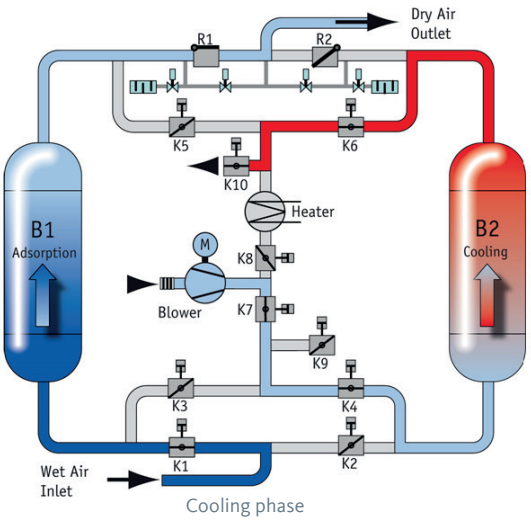
› Desorption in counter flow direction to the adsorption process with heated blower air

› Cooling in co-current flow direction to the adsorption process with blower air

› No compressed air loss for regeneration



Desorption phase

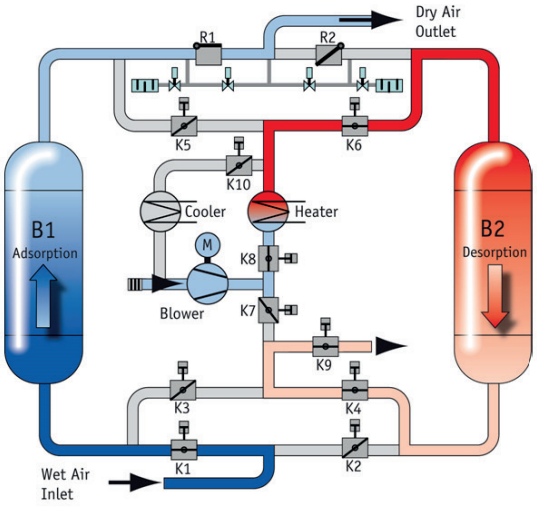


Cooling phase

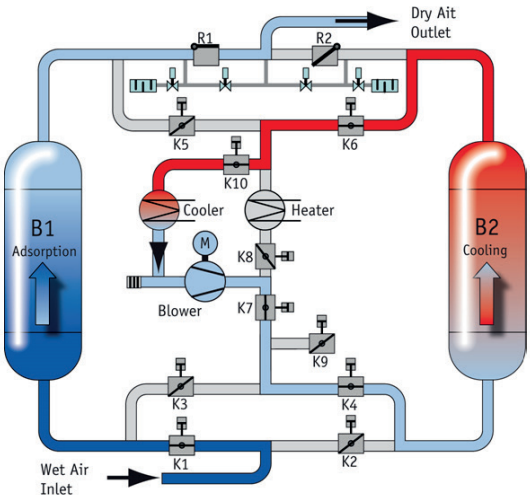
› Desorption in counter flow direction to the adsorption process with heated blower air

› Cooling in co-current flow direction to the adsorption process with blower in a closed circuit (loop)

› No compressed air loss for regeneration



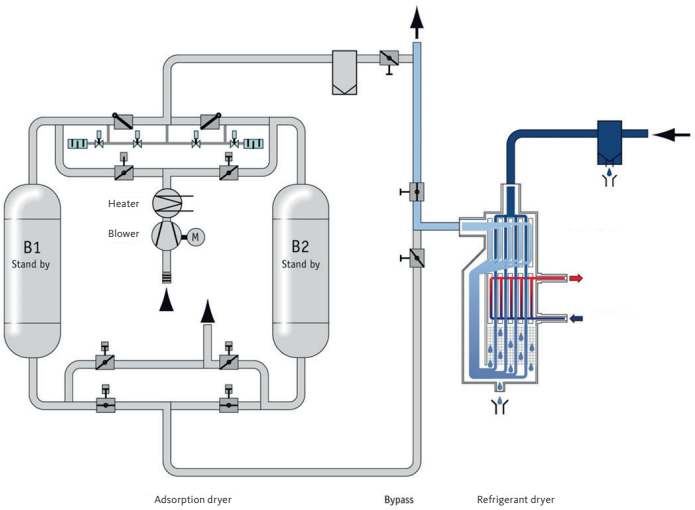
Desorption phase



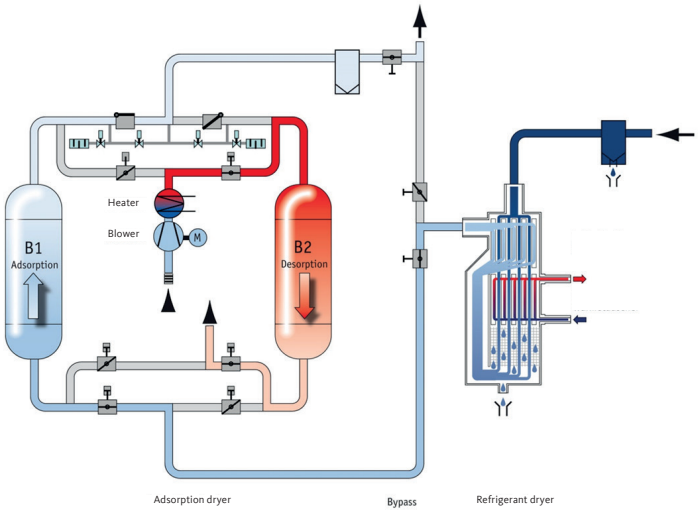
Cooling phase

EVERDRY® COMBITROC CT

The EVERDRY® COMBITROC CT ensures optimum processing by combining the best of refrigeration and adsorption dryers. The refrigeration dryer saves on energy by providing a pressure dew point of +3 °C. If this is not sufficient, then the system automatically switches to the heat-regenerated adsorption dryer, creating a pressure dew point of -40 °C.



Summer mode



Winter mode

EVERDRY® HOC
Heat of compression

HOC

HOC-F = **F**ull stream
Desorption in full stream
HOC-P = **P**artial stream
Desorption in partial stream
HOC-R = **R**eload
Desorption in full-stream
Reload cooling

The energy-saving concept:
Wherever oil-free compressed air is produced, the benefits of the EVERDRY® HOC series are beneficial. Their great advantage: the heat, generated during compression of the compressed air, is not discharged via the after-cooler of the compressor as is normally the case, but is used for desorption.
The energy saving is immense and is therefore the best argument for an adsorption dryer using the heat of compression.

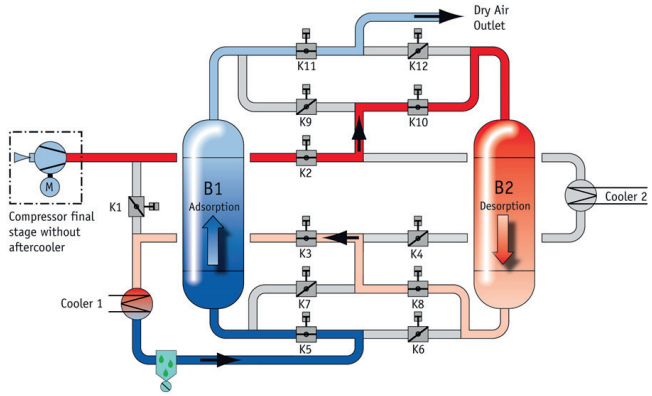
But this is not the only argument. Dryers of the EVERDRY® HOC series function at operating pressure in all stages of the process. Straining the components and the desiccant due to alternating pressure as with conventional systems does not occur. This ensures long service-life of the components.
On customer requirement systems with volume flows of up to 100,000 m³/h are possible.

EVERDRY® HOC-F

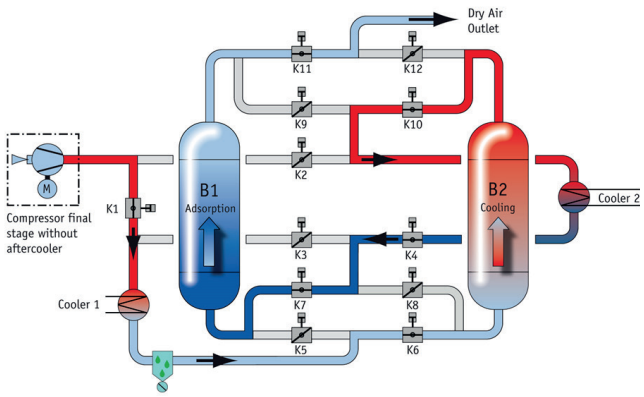
› Desorption by utilizing the heat of compression in full stream operation

› Cooling by means of the full stream of cold compressed air

› No compressed air loss for regeneration



Desorption phase



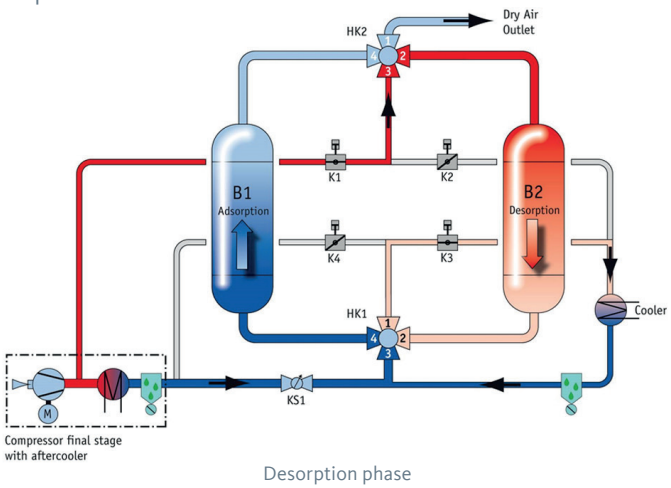
Cooling phase

EVERDRY® HOC-P

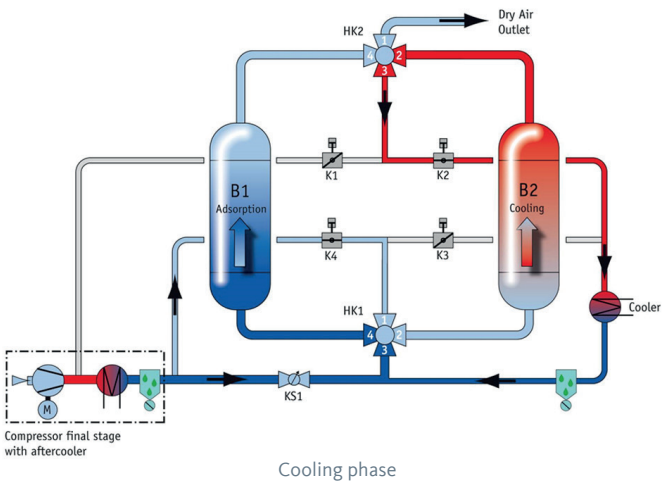
› Desorption by utilizing the heat of compression in partial stream operation

› Cooling by means of the partial stream of cold compressed air

› No compressed air loss for regeneration



Desorption phase

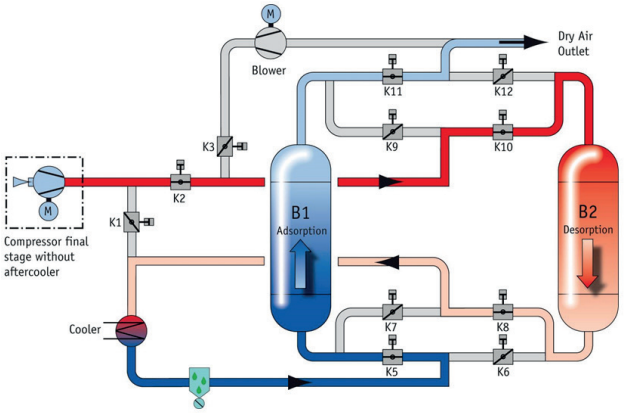


Cooling phase

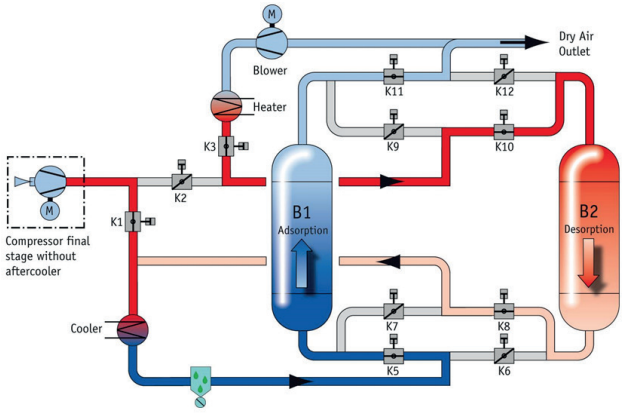
› Desorption by utilizing the heat of compression in full stream operation

› Reload –desorption (super heating) as an option for low dew points
› Reload – cooling with circulating dry compressed air

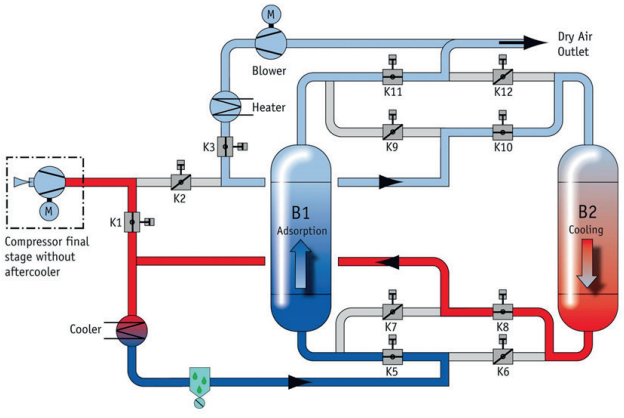
› No compressed air loss for regeneration



Desorption phase 1

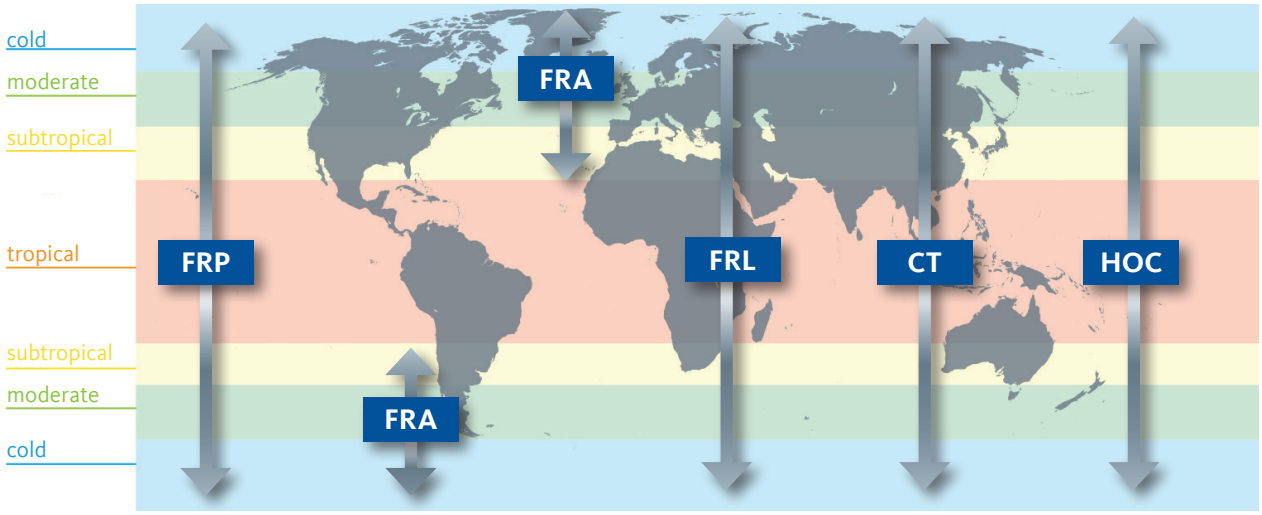


Desorption phase 2 (super heating)



Cooling phase

The heat-regenerated adsorption dryer: globaly at home



+ Application-oriented solution

+ Reliable process management

+ Energy-optimised design

Quality with a system. Worldwide.

Here at **BEKO** TECHNOLOGIES, we develop, manufacture and sell products and systems for optimised compressed-air and compressed-gas quality worldwide. From the generation of compressed air and gases through to filtration and drying, from proven condensate technology through to quality-control instruments and measurement, from simple compressed-air applications through to sophisticated process technology.

Since it was founded, **BEKO** TECHNOLOGIES has been a major driving force behind compressed-air technology. Our pioneering ideas have been instrumental in the development of this field. Thanks to our potential and our personal commitment, we at **BEKO** TECHNOLOGIES stand for trailblazing technologies, products and services.

Our fields of competence

Drying | EVERDRY® | DRYPOINT®

Significantly reduced operating costs with the application-optimized DRYPOINT® refrigerant, adsorption, and membrane dryers and the EVERDRY® heat-regenerated adsorption dryers.

Filtration | CLEARPOINT®

Measurement technology
METPOINT®

Condensate technology
BEKOMAT® | ÖWAMAT® | BEKOSPLIT®

Process technology
BEKOBLIZZ® | BEKOKAT®

Service

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