

The New Kaeser 'Hybritec' Compressed Air Dryer

A Cool Combination

Only Kaeser Compressors provides cost-effective, tailored solutions that ensure a dependable supply of clean compressed air in all operating conditions. Kaeser's new energy-efficient 'Hybritec' dryers are no exception and are perfect for applications requiring mid-range volumes of high quality, dry compressed air.

The concept of combining the energy-saving functionality of modern refrigeration dryers with the exceptionally low pressure dew points of desiccant dryers is attractive to say the least. Users would not only benefit from the advantages of both technologies, but would also be able to make significant energy savings. Up until now however, this solution was only cost-effective for applications requiring large to very large volumes of treated compressed air. Nevertheless, as the days of low cost energy now seem to be nothing more than a distant memory, this cool combination once again seems to be drawing interest – especially from the experts at Kaeser, who have created a particularly user-friendly system that integrates both compressed air drying methods into a single unit.

The new 'Hybritec' compressed air dryer range is now available for free air deliveries from 20 m³/min, which makes this versatile energy-saving alternative an attractive proposition for an even wider range of users. A refrigeration dryer at the input side of the combination dryer first ensures a consistent pressure dew point of +3 °C with minimal energy consumption. After passing through the refrigeration dryer, the compressed air then flows into the desiccant dryer, which of course has a much easier task to perform than if the air had come directly from the compressor air end. Less energy is therefore required in this second treatment stage in order to dry the compressed air to a pressure dew point of -40 °C, which is necessary, for example, to keep compressed air networks that are installed outdoors free from condensate even in winter.

With 'Hybritec' dryers, it is also possible to completely bypass the desiccant dryer section when ambient temperatures are higher, so that only the refrigeration dryer – which is equipped with an energy-saving control system - carries out compressed air treatment. The subsequent reduction in energy consumption therefore significantly reduces the amortisation period for 'Hybritec' systems compared with equivalent conventional systems.

A further advantage of this advanced compressed air dryer is its incredibly wide power spectrum. 'Hybritec' dryers can be precisely tailored to meet the needs of the specific application, yet provide all the advantages that serial-production has to offer. That's because Kaeser Compressors is the only compressed air systems provider to offer such a wide range of standardised components, meaning that the appropriate 'Cool Combo' can be individually configured for any given application. This approach is consequently far more cost-effective than having to invest in a system that has been designed and constructed on a one-off basis. Everyone therefore benefits from Kaeser's systematic and integrated approach to compressed air technology and engineering.

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Image:



"Cool Combination" – The 'Hybritec' compressed air dryer from Kaeser Compressors for free air deliveries from 20 m³/min and pressure dew points to -40 °C