

Optimum purge air and process air

A major market leader in the ceramics industry adapts its compressed air treatment to the high process requirements.

Challenge:

At the user's site, the compressed air flows in two separate tube systems, divided into purge air and process air. The process air is used to transport the ceramic mass through pipes, while the purge air is used to regularly clean these pipes. In both systems, it must be ensured that the ceramic mass never comes into contact with water or compressed air condensate. Absolutely dry compressed air was indispensable for both compressed air tube systems.

The user had noticed that the existing compressed air treatment system could no longer handle the maximum volume flow. The compressed air dryer was undersized and no longer had a TÜV certificate. The compressed air condensate discharged from the compressed air system was emulsified. Here, a reliable condensate treatment was required.

Solution:

In order to meet the high demands on compressed air quality, a new heat regenerated adsorption dryer EVERDRY® FRA - 4200 C with a pressure dew point of -40°C was installed on site. The dryer was specially configured for the application. A Siemens S-7 control system as well as a FESTO switch-over monitoring system was used on this EVERDRY dryer. Both systems are also used on other machines at the user's site, thus a uniform user-operation was achieved.

A BEKOSPLIT® 14 emulsion splitting unit including a 1000 litre pre-separation tank was installed for an independent treatment of the emulsified condensate.

Conclusion:

The implementation of our products into an existing compressed air system was possible without any problems. In order not to disrupt operation, the old system was dismantled and the EVERDRY®FRA - 4200 C in one weekend. The new compressed airdrying system started up without any problems, and process reliability and the customer's requirements for compressed air quality are once again assured. The condensate treatment works without problems, the treated condensate water can be discharged into the wastewater.

products:

Heat regenerated adsorption dryer EVERDRY®FRA - 4200 C

Emulsion splitting unit BEKOSPLIT® 14 incl. 1000 litre supply tank

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