

# Dry air dryer type EKO-N

## Drying quality at the highest level



The pros of the existing drying concepts CKT & EKO together in one drying unit: **The dry air dryer EKO-N**

The **heat exchanger concept** in the pipe system adopted from the EKO dryer has been further improved in the EKO-N series and is used here even more efficiently. The thermal energy return reduces the energy consumption by 20 to 30%, depending on the drying temperature of the material. This reduces the average energy consumption while maintaining the same quality.



*Nine different dryer sizes from EKO-N 110 to 2000 (m<sup>3</sup> / h) are available*

According to the **KOCH modular system**, different drying containers from 40 liters to 800 liters can be integrated into the EKO-N. Bigger drying container will keep being built in the proven CKT-Design.

Another advantage: Due to the modular structure of the drying system, Expansion of drying containers can be carried out without any problems. Nine different dryer sizes from EKO-N 110 to 2000 (m<sup>3</sup> / h) are available.

The drying process is continuously monitored by sensors. In order to absorb the moisture in the granulate and to achieve the required residual moisture in the material to be dried, it is possible to generate dry air with a dew point of -55 °C.

The EKO-N is **Industry 4.0 compatible** thanks to the OPC UA communication standard and can be fully integrated into the **KOCH visualization software**.

The EKO-N dryer includes **frequency-controlled drying fans** and the energy-saving dew point control as standard (both from EKO-N 300F). All EKO-N dryer come both with S7 control unit and a **10,4" Touch-Screen Display**.

The user can adjust all necessary operating functions such as: Drying time, drying temperature, dwell time.

In the **material database** there are 28 materials saved and up to 212 Materials can be added.

The patented **KOCH-ÖKO energy system control** is available for the EKO-N drying containers for the greatest possible energy savings, which adapts to the drying process in an energy-saving, material-friendly and intelligent manner. In the combination of dew point, eco-system control and frequency-controlled fans, **energy savings of up to 50% are possible** when drying granules.



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The EKO-N drying container are placed directly onto the drying platform and have the KOCH-ÖKO energy saving control units on the backside. The filling of the drying container is done by a conveying separator A8 and an intermediate hopper Z5.

The EKO-N 200F with two drying containers (300 liters each) and two conveying separator A8 with intermediate hopper Z5 on a moveable frame.



## EKO-N pros and features with a new design:

- Nine different dryer sizes from EKO-N 110 - 2000 m<sup>3</sup>/h are available  
110(F) / 150 (F) / 200 (F) / 300F / 500F / 800 F / 1100F / 1700F / 2000F
- Up to 50% energy saving with the same quality
  - Thermal energy return via heat exchanger (Air - Air)
  - Frequency controlled dry air dryer \*
  - Dew point controlled drying \*
  - ÖKO energy saving patented KOCH control for material care drying (optional)
- EKO-N drying containers from 40 - 800 liters (from 1000 liter in CKT-Design)
  - Drying container available on frame (stationary or mobile) or integrated in a dryer platform
- EKO-N concept with modular built up for easy expansion of the dry air dryer
- Fully integrated KOCH visualisation software
- Control unit (S7) incl. 10,4" Touch-Panel & material database for 212 recipes
- "Smart-Factory": Industrie 4.0-compatibel through OPC-UA communication standard

\* (also optional available for EKO-N 110, 150 & 200)