

Forced Convection Chamber Furnaces/Dryers with Safety Technology for Solvent-Containing Charges according to EN 1539 or NFPA 86



Ship-lock type furnace N 560/ 6HACLS with safety technology, front charging and rear unloading



Electrically heated chamber dryer KTR 1500 for drying of foundry cores with an alcohol-based binder



Exhaust port and powerful exhaust fan mounted on the furnace



Guide-in tracks for chamber dryers with bottom insulation

Safety Technology for Forced Convection Chamber Furnaces

Certain processes release and vaporize solvents or other flammable vapors. The concentration of these vapors must be kept below a certain limit to prevent ignition. European Norm EN 1539 and NFPA 86 in the USA prescribe the required safety equipment for these processes.

For these applications and processes, all forced convection furnaces of the KTR and forced convection chamber furnaces < 450 °C product lines are suited with safety technology for protection of a potential ignition in the furnace chamber.

To avoid an ignition in the furnace, flammable vapors must be diluted with air. Special care must be taken so high concentrations of flammable materials do not accumulate in "dead" areas within the furnace. For this purpose, the furnaces are equipped with an exhaust gas fan providing for a defined underpressure. A measurement system monitors this flow, while fresh air is simultaneously resupplied. In parallel, the furnace atmosphere is diluted by the inflow of fresh air. The air circulation is also monitored by the measurement system.

- Furnace sizes between 120 and 10,000 liters
- Powerful exhaust fan capable of maintaining underpressure in the furnace
- Defined and monitored air circulation flow and exhaust air
- Visual and audible emergency signals
- Over-temperature limiter with adjustable cutout temperature for thermal protection class 2 in accordance with EN 60519-2 as temperature limiter to protect the furnace and load