

TURBOCOOLER

Advanced
Conditioners
and
Heat- Setting
Machines.
Made in
Germany.

PRE- COOLING IN WARM CLIMATES



The higher the temperature difference, the higher will be the conditioning result. Obviously, higher steam temperatures will deliver a higher condensation.

New WELKER TURBOCOOLER boosts moisture in warm ambients.

However, there is a limitation for the steam temperature, as the yarn has to cool down after the process and there will be too high water losses if the temperature is too high. Waxed yarns are conditioned at temperatures **between 52 - 60°C**, due to the wax melting points.

In countries with subtropical and tropical temperatures, the yarn temperature often is much higher than 25°C because there is no air conditioning in the spinning mills.

Often temperatures of 35°C or higher are reached. In such ambient the conditioning results drop dramatically reaching figures **of 1.2 - 1.5% moisture gain only.**

Recognising these customer problems, WELKER engineers developed (and patented) a climate compensation system that is based on the principle of cooling the yarn down before entering in the conditioner.



BOOST THE MOISTURE INCREASE

Cooling Batch by Batch

The TURBOCOOLER is a fully automatic, adjustable cooling chamber with air turbo units that cool the bobbins down, either on a pallet or on a pin truck.

The system is designed to use the existing air in the chamber and forcing an air stream through a high performance turbo unit array. The turbo is cooled by air from outside.

INLINE Automatic System:

The most efficient utilisation of the TURBOCOOLER is in an „inline“ fully automatic system, where pallets are transported from one station to the next.

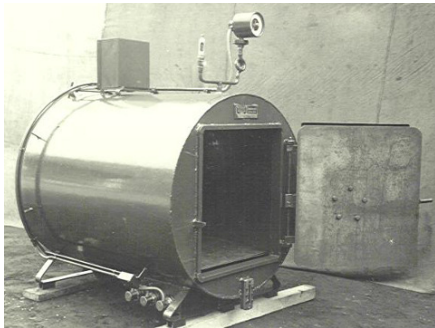
In combination with PACKTRACK automatic weighing, ticketing and wrapping of pallets, WELKER conditioning lines are the most advanced installations for export production at high moisture and therefore, quality levels.

OFFLINE Standard Versions:

Manual loading or automatic platform type of chamber, to feed all existing types of cylindrical machines, for pin trucks, pallets and boxes are possible as well. With these solutions, loading and unloading has to be done manually.



OUR PROFILE



1856: PIONEERS IN VACUUM

WELKER was founded in 1856 by Philip Welker, and is therefore, one of the most traditional suppliers for the Textile Industry. In the early 40's, WELKER started with the manufacturing of felt washing machines, paper processing machine lines with roller fulling and hammer die cutting machines.

In 1941 the first generation of vacuum steaming equipment was developed and successfully introduced to the market. WELKER systems are installed world wide and are applied in all areas of heat- setting, conditioning and drying.



WELKER IN THE WORLD

With more than 2.100 machines installed over the world and agents in all textile markets we provide project sales, installation and services to all textile customers in all markets.



AUTOMATED PLANTS

WELKER CONDITIONING PLANTS are the top of line in spinning manufacturing.

There is no limitation of possible layouts, pallet sizes, transport systems and treatment techniques.

Numerous customers in Europe, Asia and America have WELKER plants in daily use, in some countries and continents our market share is close to 100%.

The key factor for customer confidence is the manufacturing of all elements of the plant in our premises in Germany. The complete plant is assembled and 100% tested prior to delivery, so that responsibility is in one hand and plant assembly and start-up run smoothly and with punctuality.

One engineer 100% responsible for your plant.