

Project: Drying of 1 litre PET bottles after filling



Task:

At a beverage bottling plant, PET bottles must be dried in the area where the expiration date is printed and at the bottle top. After the bottles have been filled, the fill quantity is checked with a laser between two reference points. Water droplets in the area of the reference points lead to measurement errors, whereupon filled bottles are sorted out. Up to now, a 6 bar compressed air nozzle has been used.

In the trial, the process has been optimized in terms of energy and functional aspects.



Results with the Air Knife:

By using the Air Knife, complete drying in the measuring area could be achieved compared to the compressed air nozzle.

Fewer bottles are rejected as faulty. The reject rate was thus reduced.

Compared to compressed air, drying can be achieved completely with our solution while at the same time using significantly less energy. The operating costs are lower by a factor of 20 compared to compressed air. The investment pays for itself within six months with three-shift operation. (Compressed air 174.000€/a; Our solution 8.100€/a)



Result:

The customer is highly satisfied and will continue to delegate fluidic challenges to HTK-Vent.