

## PROJECT REPORT



## CLIENT

Tönsmeier Group

## PROJECT

High-speed plastic sorting

## BOGE PRODUCTS USED

4 BOGE screw compressors,  
1 master controller



## BURSTS OF INSPIRATION! BOGE Air sorts plastics for the Tönsmeier Group

At the Tönsmeier Group factory in Oppin, Sachsen-Anhalt, you can see how recycled lightweight plastic packaging is sorted by ultra-modern means. The plant, which was commissioned in 2008, sorts around 100,000 tons of recyclable material into different categories each year.

Compressed air plays a big part: bursts of it from pneumatic nozzles at just the right millisecond sort the items out. When they were designing the plant, Tönsmeier turned to the expertise of plant engineer AirFactory and the reliability of BOGE components.

In the confined space of a 40" twin container the team accommodated a plant which sets standards:



**The conveying speed – three metres per second – is almost impossible for the eye to follow.**

three screw compressors are assisted by a frequency controlled machine, while a master controller turns the systems on and off as required. There are also components for processing the



compressed air (cyclone separator, cold dryer, microfilter) and for heat recovery.

The results were remarkable: the plant is extremely efficient (idle times of under 2 percent) and requires very little maintenance. It can cover the existing demand with extra to spare in case demand peaks. Remote monitoring provides the operator with the peace of mind of knowing that the plant will remain operative at all times.

## PROJECT INFO

## &gt; THE CHALLENGE

Around 100,000 tons of lightweight plastic packaging are recycled each year in the Tönsmeier plant. With conveying speeds of three metres per second, the only way of classifying materials is using compressed air bursts. What is needed is high availability, under changing demands and under extreme ambient conditions.

## &gt; THE BOGE SOLUTION

A 40" twin container plant: two 55 kW machines of the S series and one 75 kW machine with a fixed speed provide the basic air supply. A speed-controlled 90 kW compressor from the SLF series covers peak demands. A master controller switches the compressors on and off as required.

## &gt; THE RESULT

**A plant which can cope with every demand situation economically and with an exceedingly low idle time of less than 2 percent.**

More information about the Tönsmeier Group:  
[www.toensmeier.com](http://www.toensmeier.com)