BOGE COMPRESSED AIR SYSTEMS

PROJECT REPORT

CLIENT
PD energy

PROJECT
Compressed air for a range of waste recycling processes

BOGE PRODUCTS USED
3 type BOGE S 125 A compressors,
1 BOGE Trinity master controller,
2 DACZ 101 dryers,
2 DX 380 A dryers

FIRE AWAY WITH BOGE AIR! Innovative compressed air solution for combustion plants

At the Bitterfeld-Wolfen Chemical Park, PD energy GmbH operates an ultra-modern thermal waste processing plant in which fractions produced in the processing of municipal solid waste are thermally recycled under strict environmental conditions. The electricity generated is fed into the network run by the local power supply company, while the heat generated is routed into the Chemical Park's steam network and utilised by companies there.

Compressed air is needed for a range of processes in this plant. Firstly there is operative air used for things like cooling combustion chamber cameras, atomising heating oil and other chemical substances, and in the flue gas cleaning system, from which waste products have to be removed regularly. Secondly, compressed air is used as control air for applications such as a range of pneumatic control devices, and for conveying ash pneumatically from beneath the boilers.

Three type S 125 compressors, controlled by a BOGE Trinity, and a total of four dryers, are used to this end. The type DACZ 101 dryers feature upstream and downstream filters; fitted in the control air network they ensure that sensitive measuring equipment belonging to control systems (sensors, camera) only comes into contact with dry, particle-free compressed air containing a very low level of residual oil. High quality standards are also met in the operative air network by means of specialised components: two type DX 380 A dryers with microfilters.

With the help of these various BOGE compressed air system solutions, the plant has recycled more than 100,000 tons of commercial and residential waste since 2007, and it has done so under the tough ecological conditions imposed by the 17th German Emissions Act. The compressed air components are serviced regularly by BOGE service technicians.

Three type S compressors are synchronised by a Trinity control.

PROJECT INFO

> THE CHALLENGE
In PD energy's ultra-modern thermal waste processing plant, compressed air is used for control and operative purposes. This requires a reliable, efficient supply of compressed air, which has to meet high quality standards in both areas.

> THE BOGE SOLUTION
BOGE developed and installed a customised compressed air system in which three screw compressors are synchronised by one master control. Dryers and filter components had to be installed in various places to meet stringent quality demands.

> THE RESULT
The plant is supplied reliably and efficiently with compressed air whose high quality prevents sensitive parts of the plant from being compromised.

More information about PD energy:
www.pd-group.com