

BHA[®] PulsePleat[®] Filter Elements

US manufacturer of absorbent materials was able to reduce the size of a new baghouse for a bentonite air classifier while increasing operating efficiency.

Challenge:

During the design process, the customer's engineering and design team determined that a physically smaller baghouse with increased airflow offered distinct advantages: a smaller plant footprint, lower material cost, and decreased construction and installation time. Traditional bag filters could not meet the operating criteria, and the team considered pleated filter media. The filters used needed to be easily installed and provide a significant increase in operating efficiency to achieve the goals of the reduced-size baghouse.

Solution:

After consulting with CLARCOR Industrial Air solutions experts, the new baghouse was designed with BHA PulsePleat TA600 filter elements.

Results:

- Although the TA600 pleated elements were only 1 meter (39.37") in length, they each provided nearly 4 times the surface area of a filter bag of similar length.
- The differential pressure averaged 3" w.c. (76 mm) for the application, allowing for maximum operating efficiency and particulate collection.
- The top-loading pleated filter elements were installed faster than traditional bags and cages, reducing maintenance downtime.

The shorter BHA PulsePleat TA600 filter elements provided increased surface area compared to longer traditional bags of the same diameter.

The additional area allowed use of smaller collector while providing increased collection performance.

