Concrete Domes for Flyash Storage

Mike Hunter

DOMTEC International, L.L.C. 4355 N. Haroldsen Dr., Idaho Falls, ID, 83401 USA 208-522-5520 208-522-5344 (fax) Mhunter@domtec.com

Storage serves as the buffer between supply and demand. The cycles of production and utilization are often out of sync with each other. As a result large volumes of ash can accumulate while awaiting a market for utilization.

Concrete domes have proven to be economically viable, environmentally friendly storage vessels, especially for large quantities of flyash. Concrete domes are efficient, compact containers, able to be filled completely (not merely pile covers). $DOMTEC_{\circ}$ domes are especially tight making it easy to avoid spillage and fugitive dust. As insulated structures $DOMTEC_{\circ}$ domes virtually eliminate condensation.

Continued developments by various equipment manufactures give flyash handlers several alternatives to choose from for clean, efficiently automated withdrawal systems. $DOMTEC_{\circ}$ International has a long track record constructing domes to store flyash, cement and many other bulk materials. Their domes have been fitted with almost all types of reclaim systems available.

This paper will discuss how concrete storage domes are constructed; how they compare to other types of storage structures; and the several factors which drive the design of a dome flyash storage and automated withdrawal system, including: storage capacity, length of time ash will be stored, rates of withdrawal, budget, etc.