

# **Pneumatic Transport, Triboelectric Carbon/Ash Separation - Full Scale Installation #1**

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KEYWORDS: Triboelectric, Separation, Beneficiation

## **ABSTRACT**

Much has been reported in recent years on the development of pneumatic transport, triboelectric separation technology for dry beneficiation of combustion fly ash. As an alternative to carbon burnout, floatation, or mechanical transport triboelectric methods, this approach holds the potential for combining low capital cost, low operating costs and high performance.

During 2002, Stock Equipment Company installed the first full scale, commercial beneficiation facility using pneumatic transport TEP technology in Colorado Springs, Colorado. Working with its customer, Ash Services Holding, Llc, Stock Equipment Company encountered and resolved the expected issues associated with a first generation commercial facility.

This paper will discuss the results of the first implementation of the TEP technology in a commercial power plant environment. Processing details, operating costs and performance results are described relative to the combustion ashes processed at this facility. The discussion will include general observations on processing fine particle ash and expected modifications to future designs based on actual experience.