

Macawber Installation Case Study: EAF Dust

IN BRIEF

Steel production in the United States has remained an important source of economic growth for decades. In recent years, the industry has taken a turn to become more energy efficient by improving production technology. We play our part by producing efficient material handling systems, custom-built for the steel industry to convey various types of ash, dust, and more. For multi-pickup point ash handling from baghouse dust collectors, we created a solution with multiple Ashveyor® pneumatic conveying systems on one convey line. This solution has been utilized for generations and installed in plants across the United States and other countries around the world. Our most recent solution to a baghouse EAF dust application included designing and manufacturing 40 Ashveyors® and 2 Denseveyors®, equipped with Dome Valves®, hoppers, controls, pipe, elbows, and more. With our dense phase pneumatic conveying approach to ash handling, we eliminate dust spillage and generate continuous savings, making our systems the most efficient solution.

MATERIAL CHARACTERISTICS

Material	EAF Dust
Bulk Density	600 – 1200 kg/m3
Temperature	Operating 90 – 130°C (194 – 266°F)
Moisture Content	< 0.1%
Condition	Moderate with aeration

SYSTEM OBJECTIVES

1. Decrease operational costs
2. Minimize downtime
3. Create a dust free environment

SYSTEM PERFORMANCE

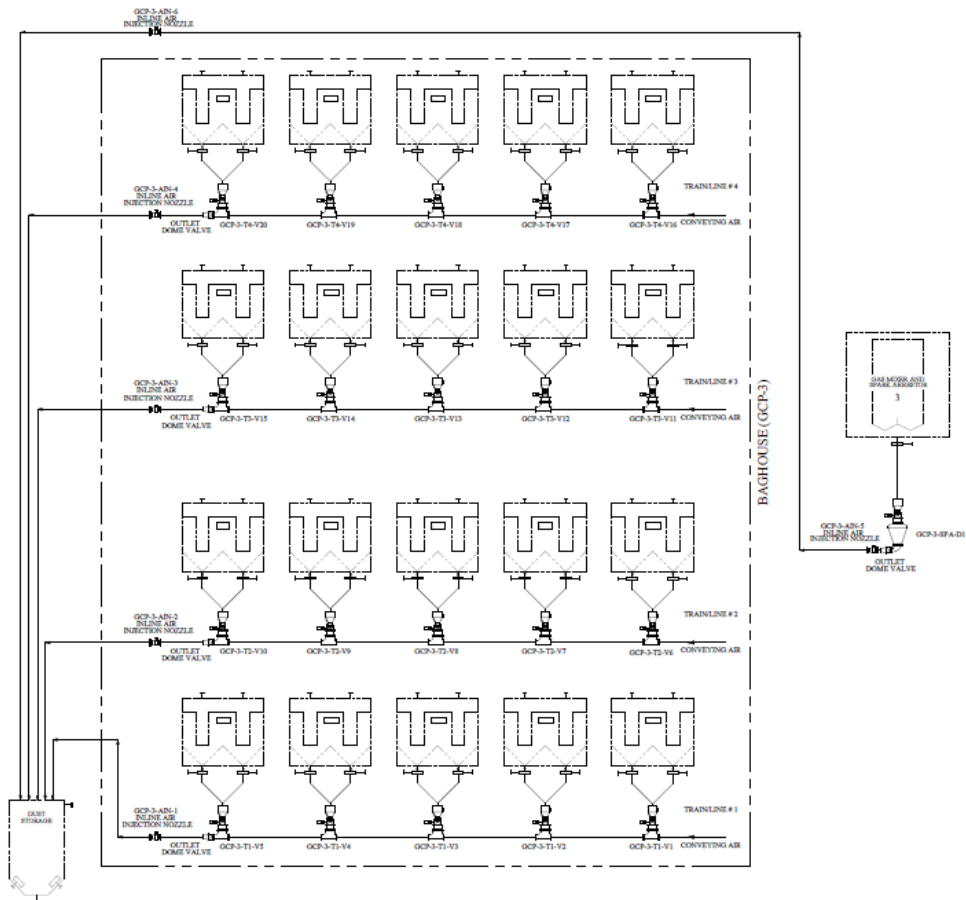
Transfer Capacity	1.37 – 2.75 T/hr
Conveying Distance	524.72 ft (159.94 m)
Reception Points	1

IMPROVEMENTS ACHIEVED

1. Savings generated
2. Downtime minimized
3. Dust free environment created



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