

Macawber Installation Case Study: Alumina Catalyst – Illinois, USA

IN BRIEF

A company relied on Macawber Engineering to pneumatically convey extremely friable alumina catalyst. The systems have operated trouble free with virtually no degradation to the very fragile catalyst product.

MATERIAL CHARACTERISTICS

Material	Alumina Catalyst
Bulk Density	34 lbs./cu.ft
Temperature	System #1 - 400 °F, System #2 - Ambient
Moisture Content	0%
Condition	Extremely Fragile, Free Flowing

SYSTEM OBJECTIVES

1. Transfer of catalyst with minimum degradation to the product
2. Reliable, low maintenance operation

SYSTEM PERFORMANCE

Transfer Capacity	3600 lb/hr per system
Conveying Distance	System #1 - 70 ft, System #2 - 100ft
Reception Points	One (1) for each system

IMPROVEMENTS ACHIEVED

1. Gentle, low velocity conveying results in virtually no degradation to the product.
2. Low wear to the schedule 40 pipe and lightweight bends

