

Macawber Installation Case Study:

Desiccant

IN BRIEF

Macawber Engineering provided a single reception, dense phase pneumatic conveying system, utilizing a Denseveyor® model 4/8-4, to a military base in Tennessee. The system included Allen Bradley controls, HMI, and a 62-cubic foot feed hopper. This system was unique in the fact that it included a flexible hose convey pipe and was mounted on a skid for forklift mobility.

MATERIAL CHARACTERISTICS

Material	Desiccant
Bulk Density	57 lbs./cu.ft.
Temperature	≤ 212°F (≤ 100°C)
Moisture Content	≤ 3%
Condition	Free Flowing

SYSTEM OBJECTIVES

1. Reduce material degradation
2. Reduce loading time of drier
3. Automate material handling process

SYSTEM PERFORMANCE

Transfer Capacity	8,000 lbs./hr.
Conveying Distance	120 ft.
Reception Points	1

IMPROVEMENTS ACHIEVED

1. Material degradation eliminated
2. Process efficiency improved
3. Cost savings generated from changing a manual system to a fully automated system
4. Safer operating practices

