

Macawber Installation Case Study: **Chromite Foundry Sand - Granite City, IL**

IN BRIEF

This project is interesting because it demonstrates some of the extraordinary service Macawber can perform in addition to plant/capital equipment in a project. The customer came to us having been a previous customer in the mid 80s. The customer performs foundry sand reclaiming for resale use in more foundry molds. A few years ago, they switched to chromite sand and were interested in updating our equipment they purchased 20 years before. So, they requested a refurbishment service from us at the time of an additional equipment order of 5 systems. After putting a game plan together, we tackled the refurbishment on-site at their factory. The results have been 2 like-new systems plus the additional 5 brand new. Our field service team spent one week on-site ensuring the quality standard we require was met in this unconventional service offering we delivered. It goes to show that we sport the flexibility of a small company, with the flare of a larger international organization that sees our field-tech personnel travel world-wide.

MATERIAL CHARACTERISTICS

| | |
|------------------|-----------------------------------------|
| Material | Chromite Sand |
| Bulk Density | 100-160 lbs./cu.ft. |
| Size | 70% silica / 30% chromite, 100%<0.25in. |
| Temperature | Up to 400°F |
| Moisture Content | Dry |
| Condition | Free Flowing |

SYSTEM OBJECTIVES

1. Refurbish mothballed systems to like-new with updated controls
2. Outfit additional processes with similar systems
3. Ensure system performance with new untested material

SYSTEM PERFORMANCE

| | |
|--------------------|-------------|
| Transfer Capacity | Max 12 t/h |
| Conveying Distance | 124 ft. |
| Reception Points | 1 each |
| Air Consumption | Max 120 cfm |

IMPROVEMENTS ACHIEVED

1. Ability to adapt to new material seamlessly
2. On-site service to perform extensive system re-build

