

P1606

Macawber Installation Case Study:

Ground Rice Hull ASH - Pichit Thailand

IN BRIEF

After the customer purchased four x 12/12 Denseveyor® systems to fuel supply of ground rice hulls to a biomass boiler, they followed-up by purchasing reliable Ashveyor® bottom ash systems from Macawber to handle ash collected from a dust collector and ESP, as well as bottom ash. Our customer was chiefly interested in eliminating dusty conditions and pipe blockages which necessitated a lot of hosing down and near constant labor. The customer's previous systems were large blow-pot types which suffered from bridging as well.

MATERIAL CHARACTERISTICS

Material Ground Rice Hull Ash

Bulk Density Average 300 kg/m3 (19 lb./ft3)

Size $100\% < 500\mu$, $80\% < 200\mu$, $50\% < 100\mu$

Temperature Dust Collector Ash: 200°C (390°F)

ESP Ash: 200°C (390°F) Bottom Ash: 350°C (660°F)

Moisture 0%

Condition Free flowing when aerated, highly abrasive

SYSTEM OBJECTIVES

- 1. Elimination of dusty conditions and pipe blockages
- 2. Reduce air consumption from existing systems
- 3. Reduce pipe and valve wear
- 4. Operate with 1 psig vacuum in baghouse
- 5. Prove concept at 20MW plant

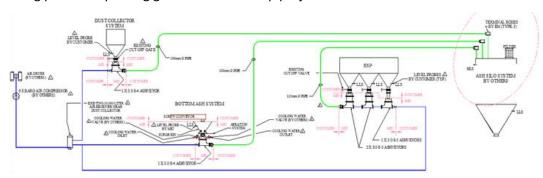
SYSTEM PERFORMANCE

Transfer Capacity 13.2Mt/h (14.5t/h) total, all systems

Conveying Distance Average 70m (230ft)
Reception Points One per system

IMPROVEMENTS ACHIEVED

- 1. System operation is stable, reliable and efficient
- 2. Purchased directly through end user, using local contacts; dealing with local culture
- 3. Systems consume 1/3 the air of their previous systems equating to valuable efficiency gains
- 4. Customer is using plant as a proving ground for follow up projects elsewhere in Asia





Phone: +1 (865) 984-5286

Fax: +1 (865) 977-4131