

Palmer SDAM - Shakeout Deck Attrition Mill

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This unit not only acts as a shakeout deck, but also includes an integral attrition mill section. The output of this unit is grain size and ready for cooling and classification. The low level deck offers ease of loading with a forklift, roller conveyor, or vibratory feed conveyor. No pit is required which means less cleanup and failed springs from being buried.

The basic unit will provide shakeout of the casting, remove any larger than grain size material, and perform the Mechanical Sand Reclamation of the sand. The heavy-duty upper grid breaks up the mold to allow for removal of the casting and serves to break down the lumps into particles small enough to drop through the top grid. Once the lumps pass through the grid, the sand is vibrated through a perforated plate. A final easy-access screen is mounted at the discharge end of the unit to remove any larger than grain size material, ceramics, metal, and slag.

Mechanical Sand Reclamation comes from the sand grains abrading against each other. This action not only serves to de-husk the grain, but also to remove sharp edges (especially from sub-angular and angular grains) helping reduce the required resin addition when the sand is reused. The amount of resin removed varies due to binder type, percentage of binder in the sand, type of metal poured, and the sand to metal ratio.

Nominal throughput depends on resin content, resin type, sand/meter ratio, metal poured, pouring temperature, mold cooling time, etc.

This unit reduces sand fracturing and overall sand losses due to reclamation processing. This unit coupled with a high efficiency classifier or cooler / classifier will allow the end user to fine tune their reclaimed sand for maximum reuse with minimum sand losses.

Advantages

- No pit required (less clean-up)
- Low level loading for better ergonomics and productivity
- Balanced motor system for weight distribution
- Reduces sand from lumps to grain size in a single unit
- Easy access to vibrator motors
- Heavy tramp metal is removed through side access door
- Self cleaning screens
- 5 sizes with deckloads to 25,000 lbs



Features

- Compact design allows for easy installation
- Easy accessibility for cleaning
- Linear vibratory motion minimizes spill sand
- Low level shakeout height enables discharge of molds from roller conveyor or vibratory trough conveyor, feed belt, etc.
- Heavy-duty construction for long production life
- Modular design for easy maintenance

