

## HAMMERMILL CRUSHER WITH MD VIBRATORY SCREENS

**Plant location - Mississippi.** Watco Companies, LLC, a Kansas-based transportation company providing transportation, terminal and port, supply chain, and mechanical solutions throughout North America and Australia, needed to crush and screen material received from a coke supplying company. They required a final product size of minus 8 mesh, but they did not want to make too fine of a product by crushing material that was already to the desired size. They also didn't want to produce dust, as it is both a waste material and difficult to transport.

Working with rail transfer specialist RBT Services, Inc., McLanahan supplied Watco with three MD Vibratory Screens to minimize fines ahead of crushing. MD Vibratory Screens are compact, high-capacity dry screening units capable of handling larger capacities than conventional screens. They remove the minus 8 mesh material ahead of the crusher so that it isn't reduced any further or unnecessarily.

McLanahan also supplied Watco with a Centerfeed Reversible Hammermill Crusher to reduce the coke to the desired final product size. The Centerfeed Reversible Hammermill is very versatile and can be modified in the field with alternate rotor speeds and grate combinations to fine-tune the crusher's performance to accommodate the phsyical characteristics of the feed.

All four units are operating daily as designed, and Watco is pleased with their performance.

## Application Details

- Material: Coke
- Density: 45-50 lbs/ft³
- Feed Size: Minus 1/4"
- Feed Capacity: 300 TPH
- Moisture: 0%
- Temperature: Ambient
- Required Final Product Size: Minus 8 mesh

## MD Screen Features

- Feed Size: 3/8" x 0
- Feed Rate: 350 STPH
- Number of Screen Decks:
  3 decks per machine, each with 2 product outlets
- Final Product Size:
  Separation at 8 mesh
- Power Consumption: Total of 6 vibratory motors at 8.3HP each
- Speed: 1200 PRM
- Stroke: 5 mm
- Formed dust covers made of fiberglass reinforced plastic provided for top and rear of screen

## Hammermill Features

- Material Feed: Accepts maximum 6" top size
- Feed Rate: 75 STPH
- Power Consumption: 200
  HP, 1800 RPM electric motor
- Rotor Speed: 1200 RPM
- Number of Hammers: 15
- Hammer Alloy: Manganese



