



MINING | MDS M515 PROCESSING COAL

An Anthracite Coal Mine in Pennsylvania faced challenges in efficiently feeding its coal plant with 0-3" (0-76mm) material. The customer aimed to minimize wear and reduce the number of machines required in the coal production process.

Challenge

The customer's primary goal was to decrease wear on equipment and streamline the coal production process. Prior to implementing the MDS M515 Heavy Duty Trommel, the customer had been using a crusher to break up the coal, leading to increased wear and a higher number of processing machines.

M515 Heavy Duty Trommel Solution

The MDS M515 Trommel was identified as the optimal solution for the customer's challenges. The trommel was equipped with lifters specifically designed for processing coal. This configuration allowed the separation of most rocks from the coal without the need for a separate crushing stage.



Job Requirements

- 0-3" (0-76mm) Fines product
- 3"-6" (76-152mm) product on mid conveyor
- 6"-10" (152-254mm) product on Oversize conveyor
- 10"+ (254mm +) oversize product from the tipping grid



The MDS M515 Heavy Duty Trommel can handle large feed loads of up to 20T in its massive 12.6m³ (16.5yd³) hopper, taking up to 800mm (32") size rocks in the feed. This unit offers a different screening mechanism to regular screens, allowing it to effectively clean rocks and screen materials. It has a rotating drum that tumbles and agitates the material inside, allowing it to break impurities from the rocks.

Location: USA

Machine: MDS M515

Application: PROCESSING COAL

Throughput: 250 TPH

Machine Specs:

3" (76mm) Heavy Duty Screens, 6" (152mm) Heavy Duty Screens, 10" (254mm) Tipping Grid, Lifters in the drum



Key Benefits:

1. Separation Without Crushing: The M515 Trommel with lifters effectively separated coal from rocks without the need for a separate crushing process, reducing the overall wear on equipment.

2. Clean Material Production: The trommel delivered high-quality, clean material, meeting the client's specifications and enhancing the efficiency of the coal processing plant.

3. Reduced Wear and Cost per Ton: The implementation of the M515 Trommel led to a significant reduction in overall wear on equipment and, consequently, a decrease in the cost per ton of processed coal.

Conclusion:

The MDS M515 Heavy Duty Trommel proved to be a success, the tailored solution not only lowered the customer's overall cost per ton but also streamlined the coal processing operation by eliminating the need for additional crushing equipment. Incorporating lifters in the drum facilitated the production of quality material with extended retention time, further optimizing the coal processing efficiency.