

TECH BRIEF

Coal Material Handling

Effective Coal Material Handling from Distribution to Receiving

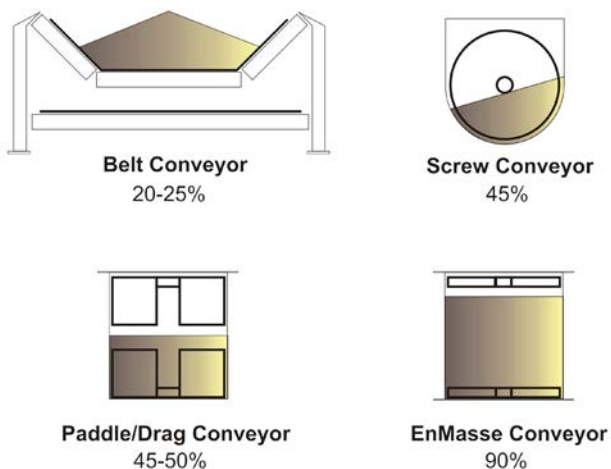
En-Masse Drag Chain Conveying technology offers advantages to other conveying types for coal handling due to the effective utilization of space, totally enclosed housing, and ability to operate effectively horizontally or vertically.

Move More with Less Space

Coal suppliers understand the importance of effectively moving material off ship and rail to distribution and in-plant processing. The En-Masse conveying technology is designed to handle high volumes of aggressive materials, such as coal, in a relatively small footprint due to the effective utilization of space. The figure below represents the use of conveying space in common conveyor types.

- The En-Masse Drag Chain conveyor has the capability to move in excess of 1,000 TPH in a single conveyor with a much smaller drive and overall footprint compared to other conveyor types because the drag chain is moving material using the En-Masse principle, harnessing 90% of available conveying space.

FIGURE 1



Comparison of effective utilization of space versus physical size of conveying media.

Convey Horizontally or Vertically

The En-Masse Drag Chain conveyor can effectively move material vertically as well as horizontally. In a vertical

application the conveyor is engineered to be a mobile ship unloader. The technology is superior to bucket elevators because the effective utilization of space and unique flight selection on the chain virtually eliminates slippage and carryover.

- The mobile ship unloader minimized vessel shifting when compared to tower stationary units
- Capacities ranging from 150-700 TPH, and
- Provides even draw-down of the vessel which means better hourly unloading averages than larger single stationary units.



CDM Marine Leg Unloaders are used throughout the world for safe, effective, and reliable port, river bulk and railcar unloading.

Engineered Conveyor Design for Coal Handling

CDM Systems, Inc. engineers each conveyor to order, selecting the chain and flight assembly, the layout that best suits the application and capacity requirements, and



The En-Masse Conveyor can effectively move material vertically as well as horizontally. Above is a high-temp ash handling conveyor (drive not shown).

the necessary corrosion resistance and accessories for 24/7 operation and ease of maintenance. No matter the coal type or bulk material the en-masse technology can be engineered to optimize commodity bulk distribution and processing.

- Bituminous Coal
- Anthracite Coal
- Lignite
- Culm (gob)
- Sub-Bituminous Coal
- Bagasse
- Wood
- Oil
- RDP
- Tires
- Mixed Fuels
- Coke

ABOUT CDM SYSTEMS

For the last 45 years, CDM Systems has provided the best in En-Masse conveyors and conveying systems that set the industry benchmark for quality, dependability, and operational efficiency. We use our material handling experience and industry knowledge to solve the most difficult bulk transportation challenges. Our conveying systems are specifically designed for reliable 24/7 operation in aggressive and high-temperature applications. Whether unloading trucks, railcars, or vessels, or moving commodities within a process facility, we provide the technical support and the right equipment designed specifically for your needs.



763-428-9700 (Toll-Free) | cdmsys.com