



The M515 has become the main player in the rip rap sector for Powerscreen Crushing and Screening, helping them improve their competitiveness and better meet customer needs.

IMAGE SOURCE: MDS; Terex MP

MDS M515 Redefines Rip Rap Processing in North America

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MDS®, a global leader in specialized screening equipment, has seen a significant rise in demand for its **M515 Heavy Duty Trommel** across North America. Renowned for its ability to produce high-quality, precisely sized rip rap material, the M515 is playing a key role in helping customers meet the need for this material, driven by an increased focus on infrastructure development, flood protection, and environmental conservation.

In the quarrying industry, rip rap is produced by extracting and processing rocks of varying sizes, often as a byproduct of other mining operations. Rip rap is categorized into five classes, ranging in sizes from 12-inch to 34-inch rock. Each class is designed with a low percentage of fines, making it suitable for various erosion control and structural applications.

Smaller classes are ideal for foundational support in submerged structures such as piers, while mid-range sizes are commonly used for erosion control along rivers, lakes, and embankments. The largest classes offer protection in high-impact areas, including steep slopes, shorelines, and windmill bases.

Whether it's protecting shorelines, stabilising riverbanks, or reinforcing structures against erosion, the need for high-quality, precisely sized rip rap material means that it is becoming an increasingly attractive market.

Powerscreen Crushing and Screening, distributor of MDS equipment across Kentucky, Tennessee, Mississippi, and Alabama, has seen the M515 heavy duty trommel become a cornerstone in rip rap processing for their customers' quarry operations. Areas that have seen a particular growth include Chattanooga, Tennessee, where Class A rip rap is being used for the building of a pier, and Kentucky, where quarries have been processing rip rap for shoreline projects.

Being the flagship model in the MDS portfolio, the M515 is renowned for its ability to handle large, sticky materials thanks to its unique design and features. One of the most significant challenges in the rip rap market is the need to clean and process materials that are often contaminated with clay, dirt, or other sticky elements. Traditionally, this waste would either be discarded or require costly secondary processes. However, the M515 has an innovative rotating drum design that allows for the efficient cleaning of rocks, breaking down impurities and enabling quarries to make use of material that would otherwise be wasted.

With a large 16.5 yd³ (12.6m³) hopper that can handle up to 22 US tons (20 metric tonnes) of feed material, the M515 trommel can process rocks as large as 2 ft 8 in (800mm), making it the ideal solution for quarries producing irregular or oversized material. The trommel has a 13 ft 1 in (4m) fines section and 4 ft 11 in (1.5m) mid-product section equipped with interchangeable screens or fully welded drums that are tailored to meet the specific needs of each application. These versatile drum configurations enable customers to receive the optimal setup for their unique requirements.



The M515 can handle larger feed sizes, and offers higher stockpile clearance, improving both material handling and efficiency.

IMAGE SOURCE: MDS; Terex MP

In addition to its superior performance, the M515 has been designed for ease of use and reduced operational costs. The model features a swing-out engine for quick and hassle-free maintenance. The addition of a convenient access platform allows operators to perform service checks with minimal downtime. For transportation, the M515 engine side placement enables it to fit on smaller bed trailers, making it more cost-effective to transport.

Alan Coalter, President of Powerscreen Crushing and Screening emphasised the machine's ability to tackle some of the toughest challenges in the rip rap sector. "One of the biggest advantages of the M515 is its loader feeder, which works wonders for sticky materials. In our territories, we often deal with dirty shot rock, and the trommel makes it easy to clean and reuse material that would otherwise be wasted. It helps quarries keep their operations running longer and more efficiently, which ultimately benefits our customers."

Before adopting the M515, Powerscreen Crushing and Screening relied on scalpers, which were limited by the size of the materials they could process, as well as their stockpile clearance. Additionally, quarries were often relying on labour and machines to manually pick through shot rock, a time-consuming and inefficient process. The M515, however, can handle larger feed sizes, and offers higher stockpile clearance, improving both material handling and efficiency. "Customers are much happier with the results. The trommel allows us to process bigger rock more effectively, eliminate the need for manual sorting, and make better use of resources. It provides more options and significantly improves the quality of the rip rap," Alan Coalter added.



The M515 in action, processing rip rap, destined for use in a shoreline restoration project.

IMAGE SOURCE: MDS; Terex MP

The MDS M515 has not only improved operational efficiencies but also strengthened Powerscreen Crushing and Screening's position in the market. "By offering the M515, we've been able to differentiate ourselves from

competitors. It's the best option on the market for sticky applications and large rock processing," continued Alan Coalter. "Replacing the scalper with the M515 has proven to be more cost-effective in the long run, thanks to the reduced need for screen media and other maintenance costs. In our opinion, the M515 has become the main player in the rip rap sector, helping us improve our competitiveness and better meet customer needs."

The feedback from Powerscreen Crushing and Screening customers has been positive, with many appreciating the machine's ability to utilise previously wasted materials. Looking ahead, Powerscreen Crushing and Screening sees continued growth in the rip rap market, with the M515 playing a pivotal role in shaping that future.

"As demand for rip rap continues to rise, especially in infrastructure projects, the M515 will be crucial in helping quarries meet those demands," said Liam Óg Murray, Regional Sales Manager, MDS. "By enabling quarries to make better use of their raw materials, improve operational efficiency, and provide higher-quality products to customers, the M515 not only sets the standard for what's possible in rip rap processing; it is a catalyst for growth in the North American rip rap market."

Source: MDS; Terex MP