

# New Generation Mobile Crushing and Screening Plant Closed Circuit Type **DM 20**

Model	Max. Feeding Size (mm)	Capacity (t/h)	Final Size mm (Adjustment Type)	Motor Power (kW)
DM 20	1300 mm	250 – 375 t/h	0 - 20 mm	345 Kw
The soil is taken from by-pass Conveyor. If requested connected to the main conveyor.				
The stock conveyors produces 3 different sizes of products with the addition of by pass conveyor stok, it is 4 types of products in a single chasis.Whit bypass conveyor , can be taken three different sizes buy stock conveyor.				
Can also be taken on size depending to customer's demand.				

**DM 20 - Mobile Closed Circuit Crusher and Screening Plant - New Technology Limestone , River Stone , Mining Crusher .**

**DM 20 - Closed circuit crushing system is all collected in one single platform and can be transported with a truck. The R-D group has designed this series for short term installation . DM Series refers to a crushing /screening closed-circuit plant on one chassis. Offers unsurpassed production of cubical spec products for small, medium, or large jobs. Produces multiple, cubical spec products with three-deck inclined screen. Returns material retained on the top deck to the impactor for further processing. This crushers can easily do the work of classical plants . This machines are the most preferred in Turkish market and the World market .**

Existing machinery and equipment in the system ;

#### \*Vibrating Feeder and Hopper

The feeder system is operating with 2 vibromotors ( Italian Brand Oli ) which leads to low maintenance and trouble-free operations.

The feeder is suitable for feeding with Excavator and Loader and can be feed as well with truck with an additional hopper.

All wear points in the feeder and in the hopper are protected by replaceable wear shields. At the points where wear may occur, wear arms are bolted and can be easily replaced.

The additional hopper can be opened and closed by the hydraulic system. This allows easy assembly and disassembly.

The feeding tray has a screening system. In this screening system there is a zig zag type grill system which can eliminate the large materials easily .

By-pass conveyor allows sifted and thin materials to be stocked in the stock area , or it can send this materials directly to the main band by a clapper groove. Thanks to this clapper groove, the mine can be transported to the stock area without entering the stone crusher, or the main band can be feed. This is a factor that increases the capacity.

#### **DM 20 NEW GENERATION TURBO CRUSHING SYSTEM**

Rotor Size: 1500 X 1400 mm

Crusher type: Primary ,Secondary and Tertiary .

Feeding size: 1500 X 1300 mm

There is setting mechanism which leads to easy configuration.

The wearing armor is 16-18% manganese and chromium alloy.

The rotors are specially manufactured and have replaceable wear shields in their wear exposed parts.

Motor power: 250-315 kw

Rotor pallets are 16-18% manganese and chrome alloy. It is also suitable for two-sided use. Longer wear times can be caught on this count.

The setting blocks are 16-18% manganese and chrome alloy. The adjustment blocks have a hydraulic adjustment mechanism for easy adjustment.

The crusher has 2 long type adjustment blocks for thinning. Thanks to these blocks, the thinning curve is very high.

Hardox 500 wear armor is used in the crusher side wall armor.

There are also two lifting pistons for opening and closing the crusher.

The powerful body is unique thanks to its powerful rotor and powerful adjustment blocks.

It is unprecedented with high reduction rates of up to 50 times.

When a material that can not break into the crusher enters, the hydraulic overload prevention device enters the circuit and the crusher elements are protected.

When a material that can not break enters into the crusher , the hydraulic overload prevention system blocks the circuit and the crusher elements are protected.

#### \* Main Conveyor Belt System

It is 1200 mm wide and is of palette type. Drive drums are rubber coated and threaded. The gear units are 3 transmission type and the new generation is with torque connection system. Side scraper system is available to prevent outflow.

#### \* Vibrating Screen System

Screen Size: 2200 X 5500 mm

Vibrating Screen Type : High Capacity

Motor Power : 30 KW

Three different sizes of screening.

Special type bearing suitable for vibration.

#### \* Under-Sieve Stock Conveyor Belt System

It is 1200 mm wide and foldable type. Drive drums are rubber coated and threaded. The gear units are 3 transmission type and the new generation is with torque connection system. A side scraper system is available to prevent spillage of the final product into the stock area during crushing. Foldable with hydraulic piston for easy assembly and disassembly of the system.

#### \* Stock Conveyor Belt System

There are 2 units, 650 mm wide folding type.

Drive drums are rubber coated and threaded.

The gear units are 3 transmission type and the new generation is with torque connection system.

A side scraper system is available to prevent spillage of the final product into the stock area during crushing.

Foldable with hydraulic piston for easy assembly and disassembly of the system.

#### \* Feedback Conveyor Belt System 1

It is 600 mm wide.

Drive drums are rubber coated and threaded.

The gear units are 3 transmission type and the new generation is with torque connection system.

Side scraper system is available to prevent outflow.

#### \* Feedback Conveyor Belt System 2

It is 600 mm wide and is of palette type.

Drive drums are rubber coated and threaded.

The gear units are 3 transmission type and the new generation is with torque connection system.

Side scraper system available to prevent outflow.

#### \* By-Pass Conveyor Belt System

It is 500 mm wide.

Drive drums are rubber coated and threaded.

The gear units are 3 transmission type and the new generation is with torque connection system.

Foldable with hydraulic piston for easy installation and disassembly of the system

Side scraper system is available to prevent outflow.

#### \* Mobile Chassis System

It is equipped with 3 axle, air-operated brake system and signaling system. Special heavy duty construction chassis. There are 6 hydraulic feet mechanisms in the hydraulic system. These feet are strengthened by the fixed feet after they are locked.

Hydraulic Power System thanks to 125 litre, all pistons are controlled by special control system.

#### \* Panel and Control System

The material is Siemens branded. The panel system has a remote control system that operates with radio control frequency. In addition, the panel system is specially insulated against dust and water. Although the used panel is insulated against dust and water, DM Machine contains a system that can remove our panel systems from the main scale by about 8 metres.

#### \* All functions can be controlled with Remote Control (Radio Control System).

- The dust suppression control system prevents dusting by conveying high pressure water to the conveyor to spray the dust.
- Electric Motors IE2 is a highly efficient type.
- Conveyor belt systems EP 125 and EP 160 are suitable for long use with 10 and 14 mm thick cortex.
- Bearings are SKF or equivalent.

Total Motor Power: 345 kw

Maximum Feeding Size: 1300 mm

Ideal Feeding Size: 0-1100 mm

Final Size: Can be set to give a final product of 0 - 20 mm or larger. (0 - 5 mm, 5 - 12 mm, 12 - 20 mm, or any other three types of material and also by-pass output)  
Capacity is variable according to the material feed and final product dimensions to be broken and it is 250-375 ton capacity.

#### Additional Standard Features in the System

- Extra hopper for truck feeding.
- By-pass system and By-pass conveyor.
- Dust Suppression Control System.

#### Optional Features

- Magnetic Magnet Conveyor Belt (Optional)
- The Generator System is optional and is powered by diesel engines from Cummins, Perkins, Doosan, Deutz and Marelli or Stanford alternators. (Optional)

\*\* Weight: 64 tons

All of our products are CE certified.

## DM CRUSHER

- DM Crushers Inc.'s line of DM 9-10-15-20-25, Turbo 600,900 portable plants are designed for a wide variety of applications. Though each plant is different, each is the same in fundamental ways: Portability, dependability, durability, competitive capital costs, low cost maintenance and designed to meet customer's needs.

- Portability has been a major concern for customers along with quick setup time. We have accommodated our customers' concerns by making most of our plants portable in one single unit. Since our plants are portable in one piece they use minimal time in set-up and tear-down. To further reduce set-up and tear-down time, all plants come standard with telescoping screw jack legs or optional hydraulic lifting legs for fast set-up and to eliminate the time consuming task of cribbing. We have designed our plants to be able to be placed and running in minimal time providing our customers with reduced set-up costs and increased productivity.

- We have proven the dependability and durability of our plants with years of service in the field. These plants have crushed everything there is to crush and run day-in and day-out and they're still going strong. We constantly look for ways to improve our designs, make our plants better and continue to out last the competition.

- Our plants are designed with the idea that a plant should be easily maintained. We understand the time spent maintaining a plant is time that could be spent producing material. We strive to design our plants to minimize the time needed to do the necessary maintenance.

- DM Crushers specializes in design and application - the right product and the right flow plan to accomplish your particular job. Many of our plants are designed around our customer's specifications but we always keep an eye on flexibility. Since our plants are designed with our customer's needs in mind we are able to build a more efficient plant and/or eliminate the need for additional equipment to accomplish the same task.

Rotor pallets 16-18 % manganese, chromium

Setting block Liners 16-18 % manganese, chromium

## Why New Generation DM Mobile Crushing and Screening Plants?

Classical mobile plants need to combine some mobile platforms to become a plant. This means long assembly time for installation which causes to time and labour loss. With our new generation mobile plants, all plant equipments are at only one platform. It can be ready to use in short time. The established plant can be transferred in couple hours. The other benefits are:

- It can be established at small areas with the help of its compact structure.
- Transferring by just one track provides ease of transport.
- It can be started immediately and saves cost of basement thanks to run without fixed with concrete.
- Controlling by only one person provides ease of use.
- New generation crushing plants need minimum maintenance thanks to its latest technology.
- It saves cost of basement and provides low initial investment cost.
- It can operate high gradation ratio process by itself that needs more than one machine to be completed. There are 2 or 3 different types of crushers such as primer, seconder and tertiary. In our system, we have latest technology crusher which is capable of doing alone what the other crushers can be made. Gradation ratio is very high thanks to tough and big tune blocks. There are up to 50 times dilution curve.

(This option is available for DM 7, 9, 10, 15, 20)

- It can work with both electricity system and generator depends on your request.
- Production cost per ton is %50 more lower.
- New generation mobile systems' energy consume is about 50 to 60 % according to the classical plants.
- One of the biggest advantage ,it has ivariety of aggregates for concrete asphalt plants.(It can produce three types of products).