

MAG'Impact® II

AGGREGATES



MORE THAN
500 MACHINES
IN EUROPE

*The high-performance impactor:
cubicity and simplicity*



MAGOTTEAUX

SHAPING A WORLD OF PERFORMANCE

GUARANTEED CUBICITY

A Operating principles

- 1- Material to be crushed is fed into the impactor through the feed hopper.
- 2- It falls onto a wear resistant distributor installed in the centre of the rotating table.
- 3- Each impeller accelerates a part of the particles and drives them toward anvils installed on a peripheral ring inside the crushing chamber. Impellers are high wear resistant pieces which provide the aggregates with the requested kinetic energy to break as they hit anvil faces.

- 4- Different shapes of anvils are available to suit with both the type of material and the process. So we keep longer flat perpendicular faces to the particles trajectories. The XWIN® anvil is high resistant both to abrasion and violent shocks.

The crushing ratio is mostly dependant on the speed of the table. It can be adjusted by changing pulleys or (for more frequent variations) by using a frequency converter.

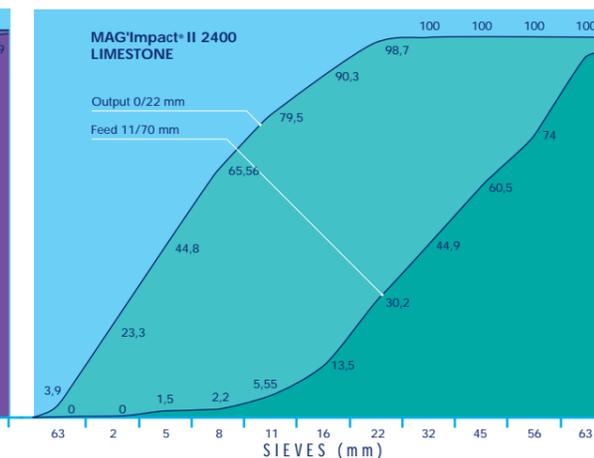
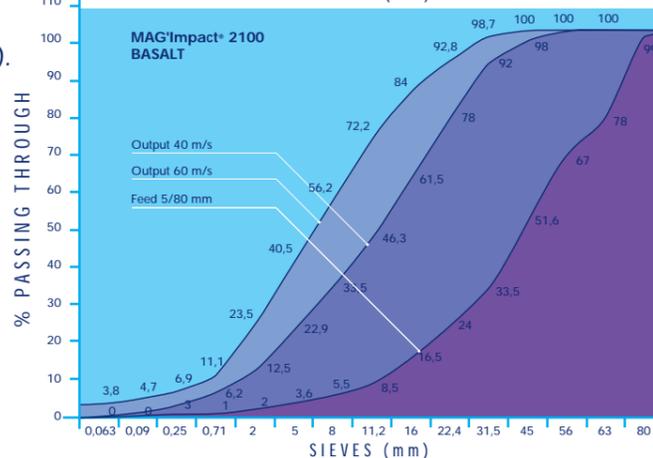
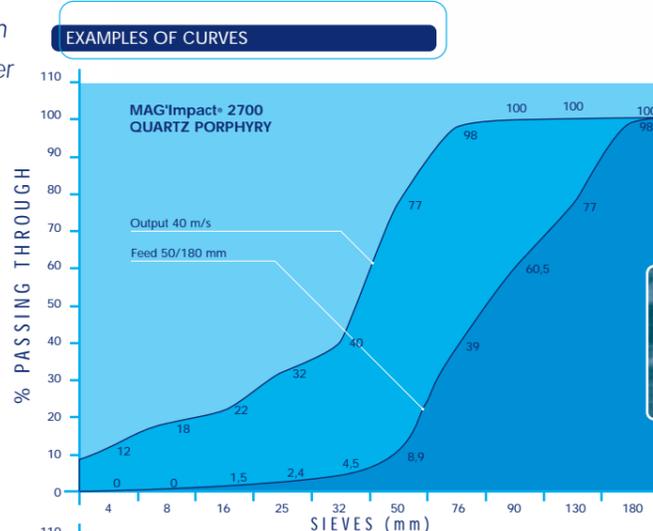
The anvil geometry has been designed to give optimum impact performance.

B Characteristics

MAG'Impact® is a true VSI (Vertical Shaft Impactor).

Its properties are as follows:

- ▶ Highest cubicity for aggregates produced.
- ▶ Crushing ratio easy adjustable, so the machine can be quickly tuned to face the needs of processes.
- ▶ Constant output product quality (size & shape), regardless of wear and tons performed.
- ▶ High capacity (up to 500 tph).
- ▶ Feed size up to 180mm.



- ▶ Reasonable wear costs, even when crushing abrasive materials.
- ▶ Minimum down time thanks to easy access to the main wear parts.
- ▶ Low power consumption.
- ▶ High-quality wear parts designed to suit working conditions.
- ▶ Xwin® alloy: composite metal matrix.

The MAG'Impact® can replace:

- ▶ One or more horizontal shaft impactors.
- ▶ Several levels of cone crushers.
- ▶ Combination of a cone crusher and a shape corrector.
- ▶ Hammer and bar-crushers.
- ▶ ...

The VSI has an anti-wear protection made from our finest chromium alloy cast iron (62 - 64 HRC) and martensitic steels, thereby providing protection for:

- ▶ The main crusher housing.
- ▶ The (hydraulic assisted) opening lid.
- ▶ Table and its accessories.
- ▶ Driving pedestal shaft.
- ▶ Tunnel housing for belts & pulleys.

SCOPE OF WORKING CONDITIONS

MAGOTTEAUX's know-how in the field ensures that the MAG'Impact®, is suitable for crushing the following materials amongst others:

- bauxite
- quartzite
- melted steel slag
- granite
- grauwacke
- loco-granite
- quartz porphyry
- sandstone
- rhyolite
- gabbro
- gneiss
- flint grit and basalt
- dolerite
- sand lime
- limestone
- hornfels shale
- shale
- blast furnace slag
- etc...

- One machine is almost what you need to produce high-quality materials
- Compact & easy installation
- Easy to insert into existing or mobile plant
- Easy tuning to suit your production needs
- High performance in return for a low investment

SIMPLICITY TO SERVE PRODUCTIVITY

A A very versatile machine

Many combinations are available in order to adapt the machine to process requirements:

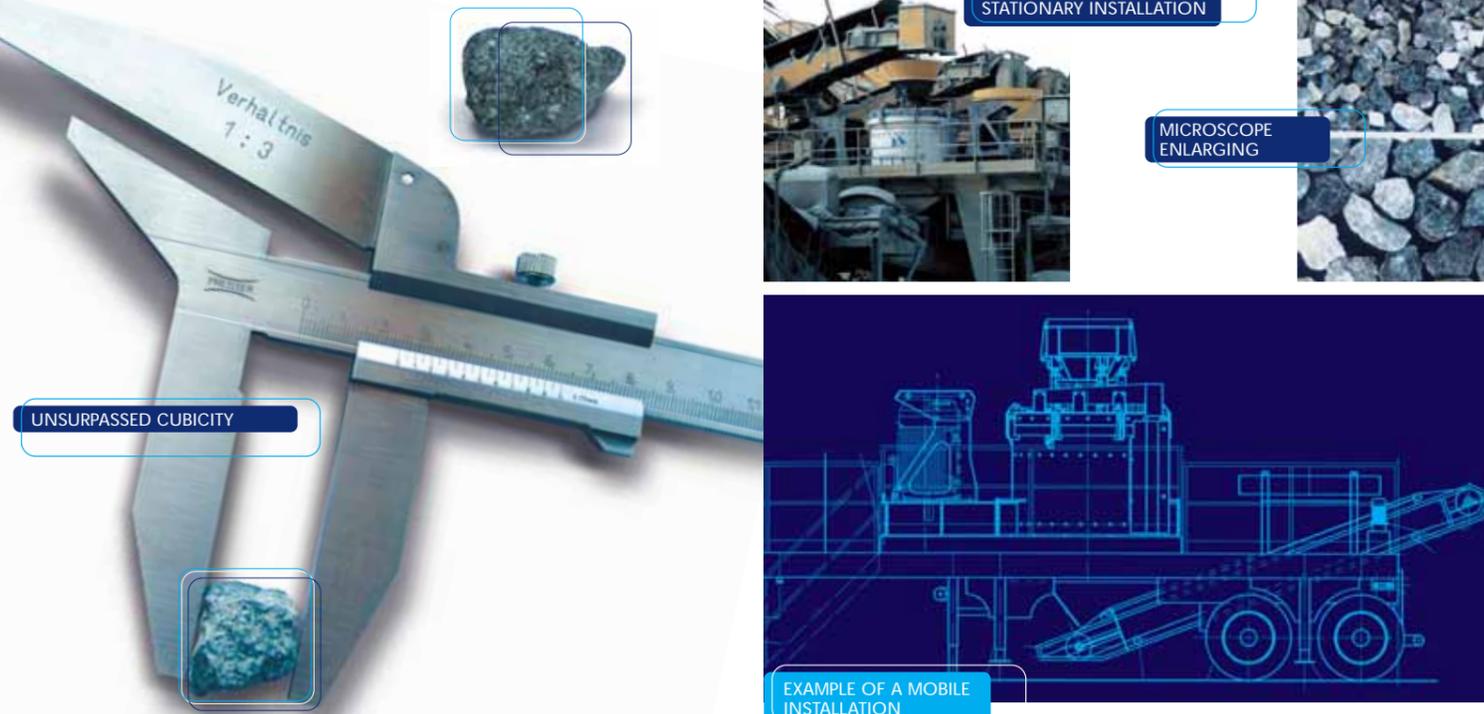
- ▶ Table: of different diameters with 3, 4 or 5 impellers.
- ▶ Impellers & anvils: several possible designs are available.
- ▶ Quantity of motors: 1 or 2 motors available with different power ratings.
- ▶ The machine can be modified over time by changing its power or adding a motor.

Further customisation is also possible for the feed tube, the selection of parts for the table, etc.



B Best Quality for "End Products"

- ▶ Impactors provide manufactured sand & gravel of good cubicity, no matter what the output rate and feed gradation may be.
- ▶ The crushing chamber is specially designed to throw the particles on the anvils with great force which leads to the production of a high percentage of crushed sides.
- ▶ The end product is strengthened (less internal cracks): sand, gravel and railway-ballast particularly suitable for projects with strict requirements.

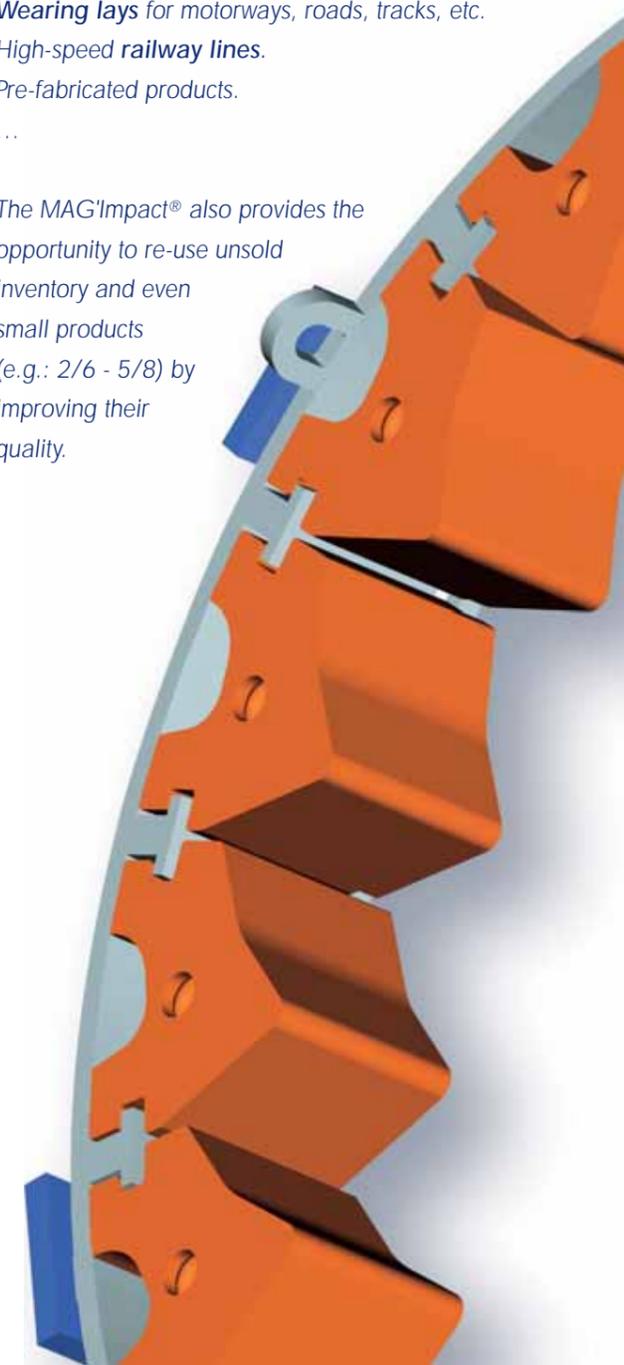


C Sand, gravel and railway-ballast for projects with strict requirements

The aggregates produced are particularly well suited for the production of:

- ▶ Concrete for tunnels and dams.
- ▶ Wearing lays for motorways, roads, tracks, etc.
- ▶ High-speed railway lines.
- ▶ Pre-fabricated products.

...
The MAG'Impact® also provides the opportunity to re-use unsold inventory and even small products (e.g.: 2/6 - 5/8) by improving their quality.



EASY MAINTENANCE

A Replacement of parts

- ▶ MAGOTTEAUX's impellers and anvils are fastened in a way to ensure their quick replacement. Each part of the machine is designed and manufactured to reduce down times.
- ▶ Impellers are fastened with a single pin and are extremely easy to replace. The biggest ones are bolted on the rear, so, they become an integral part of the table, and thus increase resistance for high-impact applications.
- ▶ A remote control box connected to the hydraulic power station, can be used to raise or lower the main lid, which can be fully rotated (over 360°) to give free access to the crushing chamber and its internal parts.
- ▶ Compact gib hoist (optional) for easy handling of the main wear parts.
- ▶ Sealed rotor housing that is constantly lubricated and cooled.

B Active and passive safety features

- ▶ Vibration sensor.
- ▶ Open cover safety limit switch detector.
- ▶ Low oil level detector and oil flow sensor and monitor.
- ▶ Automatic lubrication unit.
- ▶ Safety Rotation detector.
- ▶ Safety parachute valve for the lid when in upper position.

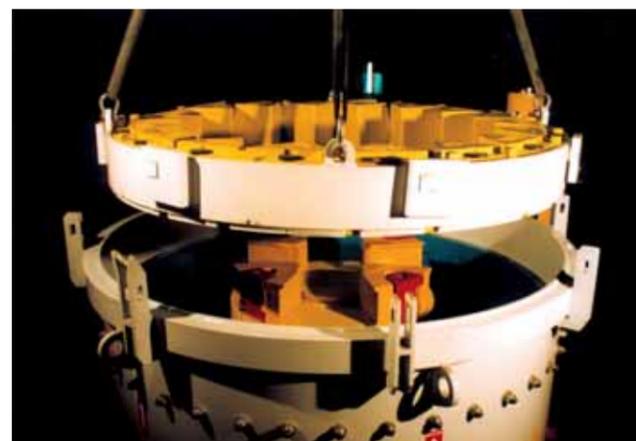
C Our engineers and technicians are ready to help

We will visit your plant, analyse your needs. We will provide assistance to:

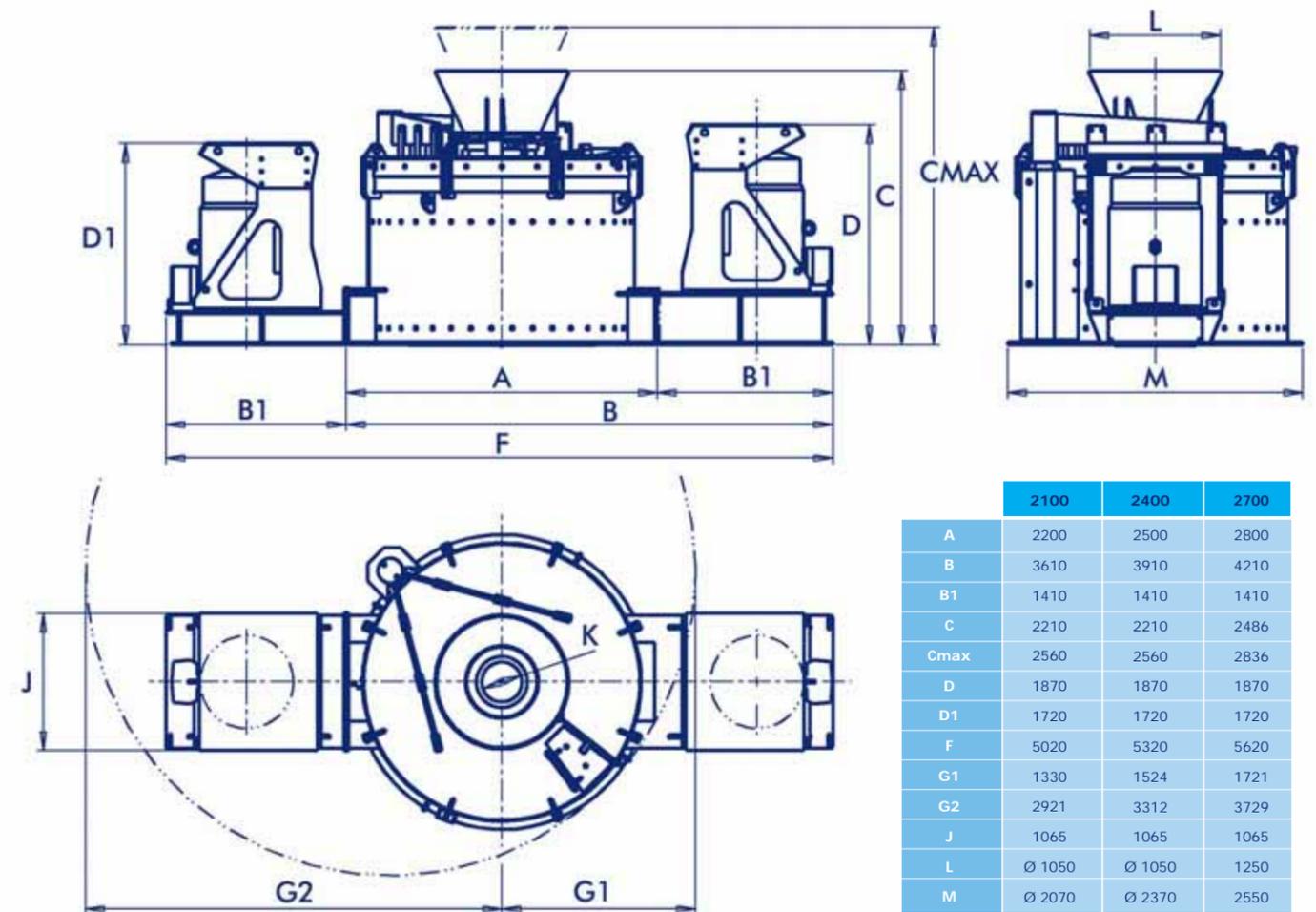
- ▶ Select the best type of equipment.
- ▶ Find the right setting for integrating MAG'Impact® into your production line.
- ▶ Start up all equipment.
- ▶ Monitor and analyse parameters which can affect capacity or quality of production throughout the MAG'Impact® life.
- ▶ Propose and monitor action plans to increase the machine's performances.



EASY MAINTENANCE



TECHNICAL CHARACTERISTICS



MODEL

MAXIMUM FEED SIZE (mm)
(biggest size of stone)

MAXIMUM RPM

MAXIMUM THROUGHPUT

INSTALLED POWER (kW)
*for maximum throughput

DIAMETER OF THE TABLE (mm)

WEIGHT WITHOUT MOTOR (T)

QUANTITY OF ANVILS

QUANTITY OF IMPELLERS

2100

2400

2700

80

130

180

1480 (67m/sec)

1385 (70m/sec)

1050 (65m/sec)

80 - 150

100 - 350

200 - 500

110 - 200*

110 - 400*

200 - 500*

867

974

1180

11

15

18

18 - 16

18 - 19

20 - 12

4

3, 4 or 5

4 or 5

MAG'Impact® II

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Xwin® PRODUCTIVITY AND INNOVATION

XWIN®, a patented technology, used to cast a composite material made of highly wear resistant ceramic inserted into a shock-resistant metallic matrix, this combination considerably increases the lifetime parts.

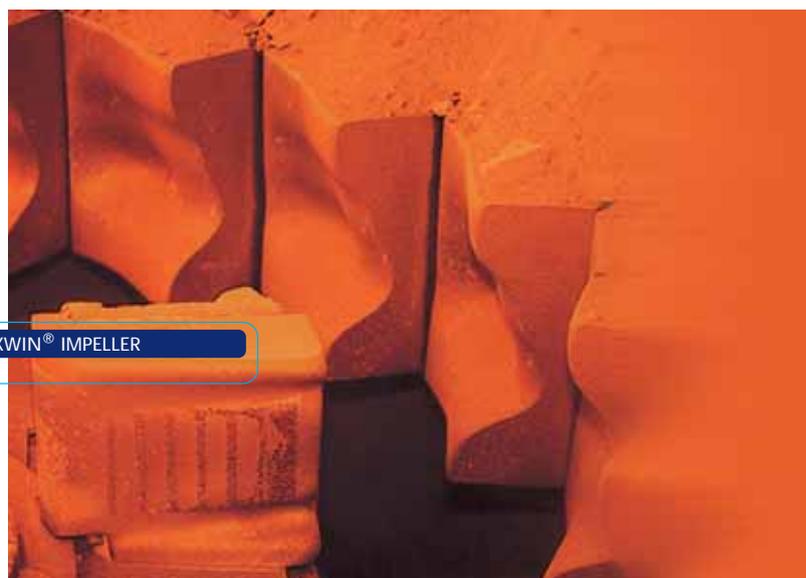
When combined with the MAG'Impact® ejectors and anvils, this technology offers the following advantages:

- ▶ 1. Low cost per ton.
- ▶ 2. Constant output gradation curve and cubicity.
- ▶ 3. Reduced maintenance and down times.



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