MOBILE JAW CRUSHERS

MOBICAT
KLEEMANN is part of the WIRTGEN GROUP, a group of companies in the plant construction industry who operate on an international level. This Group includes the five well-known brands, WIRTGEN, VÖGELE, HAMM, KLEEMANN and BENNINGHOVEN, with their headquarters in Germany and local production sites in Brazil, India and China. Customer service is provided worldwide through its 55 independent sales and service outlets.
KLEEMANN: KNOW-HOW, INNOVATION, QUALITY

For the past 100 years, KLEEMANN GmbH has been developing and manufacturing machines and plants for the natural stone and recycling industry.
As an innovative manufacturer of mobile crushing and screening plants, KLEEMANN impresses with high quality, state-of-the-art technologies and superior application know-how.
THE KLEEMANN PRODUCT RANGE

MOBILE JAW CRUSHERS

MOBILE IMPACT CRUSHERS

MOBILE SCREENING PLANTS

MOBILE CONE CRUSHERS
**MOBICAT**
MOBILE JAW CRUSHERS

- For coarse and pre-crushing

USE IN:
- medium-hard to hard natural stone
- recycling
- mining applications

**MOBIREX**
MOBILE IMPACT CRUSHERS

- For high crushing rates and high-quality end product with cubic grain shape in the 1st and 2nd crushing stage

USE IN:
- soft to medium-hard natural stone
- recycling

**MOBISCREEN**
MOBILE SCREENING PLANTS

- Screens for process or coarse elements

USE IN:
- all natural stones
- residual construction materials
- iron

**MOBICONE**
MOBILE CONE CRUSHERS

- For recrushing in the 2nd and 3rd crushing stage

USE IN:
- medium-hard to hard, abrasive natural stone
- mining applications

**MOBIFOX**
MOBILE IMPACT CRUSHERS

- For recrushing in the 2nd and 3rd crushing stage

USE IN:
- moderate abrasive natural stone
MOBICAT - THE MOBILE JAW CRUSHERS FROM KLEEMANN

The crushing plants in the MOBICAT series are used for pre-crushing of almost all natural stone and for the reprocessing of residual construction materials. The output of the MOBICAT crushing plants, however, is not determined by the jaw crusher alone, but rather the optimized interaction of all components plays a decisive role. The focus is also increasingly on cost and environmental consciousness, availability of the plants, versatility and quality of the final product.
MOBICAT - THE SERIES

APPLICATION OF THE MOBICAT PLANTS

> Feed opening

- 63" x 49" (1600 mm x 1250 mm)
- 55" x 45" (1400 mm x 1130 mm)
- 49" x 40" (1250 mm x 1000 mm)
- 48" x 32" (1200 mm x 800 mm)
- 44" x 28" (1100 mm x 700 mm)
- 37" x 22" (950 mm x 550 mm)

> Max. feed capacity [US t/h]

- MC 110 R EVO / MC 110 Z EVO / max. 364 US tons (330 t)
- MC 120 Z / max. 496 US tons (450 t)
- MC 125 Z / max. 661 US tons (600 t)
- MC 140 Z / max. 827 US tons (750 t)
- MC 160 PRR / max. 1323 US tons (1200 t)
- MC 100 R EVO / max. 243 US tons (220 t)
MOBILE JAW CRUSHERS OF THE MOBICAT EVO LINE

THE COMPACT CLASS OF THE PRIMARY CRUSHERS

Continuous crusher feed by intelligent feed control CFS (Continuous Feed System)

High final product quality: effective prescreening thanks to independent double-deck prescreen ("Z" version)

Trouble-free material flow and reduction of blockages: crusher unit with an extra-long articulated crusher jaw

High productivity thanks to optimal utilization of the crusher: feeding unit with integrated hopper walls, which can be extended optionally for a higher hopper volume

Increased flexibility for simple transport: foldable side discharge conveyor, can be installed on both sides

Simple operability without setup times: convenient crushing gap setting via touch panel also during crusher operation

YOUR ADVANTAGES AT A GLANCE

Maximum flexibility. During transport and operation. Particularly compact dimensions and high efficiency.

The plants in the MOBICAT EVO line are designed for very flexible use with regard to the feed material.

They are light and thus easy to transport. They have robust drive concepts that can master changing application conditions without any problems - from natural stone to recycling

Use in natural stone
Minimized downtimes in the event of blockages in the crusher jaw: innovative **crusher unblocking system** with reversible crusher drive

Economical consumption: efficient and powerful **diesel-direct drive** with fluid coupling for protection of the plant

Effective lifting out of metallic objects: Short downtimes in event of steel/iron blockages through hydraulic raising and lowering of the **magnetic separator**

Simple, user-friendly operation and rapid diagnostics in the event of a fault: consistent **control concept** through menuguided touch panel

**Use in recycling**
MOBILE JAW CRUSHERS

MOBICAT MC 100 R EVO
THE COMPACT BUNDLE OF ENERGY

The smallest tracked jaw crusher of the EVO line impresses with its compactness and reliability. It can be used for the most varied of materials, it offers wide-ranging possibilities for both demolition companies and contract crushers. Economical consumption thanks to diesel-direct drive goes without saying with the MC 100 R EVO from KLEEMANN.

APPLICATION

- Processing of residual construction materials (e.g. rubble, concrete, reinforced concrete)
- Processing of natural stone (e.g. limestone, river gravel, granite, basalt)
- Application in narrow construction site conditions
- Feed capacity of up to 243 US tons (220 tons) per hour
- For smaller batch sizes

THE KLEEMANN APPLICATION RECOMMENDATION

A compact design and light weight are occasionally regarded more highly than the output. But if all are combined in a plant - so much the better.
Small dimensions and light weight for simple transport with flat bed trailer

Technical Information MC 100 R EVO

<table>
<thead>
<tr>
<th>Feed capacity up to approx.</th>
<th>243 US t/h (220 t/h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crusher inlet (W x D)</td>
<td>37” x 22” (950 mm x 550 mm)</td>
</tr>
<tr>
<td>Weight</td>
<td>71,300 lbs (32,340 kg)</td>
</tr>
<tr>
<td>Engine/motor output</td>
<td>221 hp (165 kW)</td>
</tr>
</tbody>
</table>
The advantages of the MOBICAT MC 100 R EVO are obvious.

- Feeding unit with integrated hopper walls
- Prescreening through the long vibrating feeder with integrated slotted grate
- Innovative feed control CFS for continuous crusher feed
- New crusher unit with extra-long articulated crusher jaw
- Compact transport unit and light weight

With a weight of 33 US tons (30 tons), the MC 100 R EVO is very easy to transport. The setup time is extremely short: with the feeding unit integrated in the chassis, there is no need to fold the hopper walls. The side discharge conveyor, which is available in two lengths, remains attached to the machine during transportation and is put into position in an instant.

**Simple to operate**

The menu-guided touch display means that the control system of the MC 100 R EVO is child’s play and can be operated intuitively, which also makes the plant quickly ready for use.
Compact and powerful

A typical task for a contract crushers would be to crush around 1308 yd³ (1000 m³) building rubble in two days incl. installation and disassembly of the plant. Then it is on to the next construction site. This would require a machine that is easy to transport and which can be relied on 100%. The MOBICAT MC 100 R EVO meets these requirements in all respects.

Daniel Speisser
Manager Customer Support Training
MOBILE JAW CRUSHERS

MOBICAT MC 110 EVO
THE EFFICIENT HIGH-PERFORMERS

Both versions of the MC 110 EVO impress with a superior performance in their equipment class. Thanks to their light weight of less than 47 US tons (43 tons) in the basic configuration, they are easy to transport and flexible in use. A large number of genuine highlights guarantee excellent economy and efficiency. Available in two basic configurations (R-version with vibrating feeder with integrated slotted grate, Z-version with double-deck prescreen that works independently of the chute), the use as a primary crusher of natural stone and in demolition and recycling companies is very lucrative.

- Processing of residual construction materials (e.g. rubble, concrete, reinforced concrete)
- Processing of natural stone (e.g. limestone, river gravel, granite, basalt)
- Feed capacity of up to 364 US tons (330 tons) per hour
- For medium batch sizes
- Ideally tuned complete solution in combination with the secondary cone crusher MOBICONE MCO 9 EVO and a MOBISCREEN screening plant

THE KLEEMANN APPLICATION RECOMMENDATION

APPLICATION

Application in natural stone, recycling, demolition and construction sector
Efficient and still easy to transport: both versions of the MC 110 EVO impress in primary crushing with a high hourly output and powerful crusher.

**TRANSPORT**

- Light weight for simple transport with flat bed trailer

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**Technical Information MC 110 R EVO / MC 110 Z EVO**

<table>
<thead>
<tr>
<th>Specification</th>
<th>MC 110 R EVO</th>
<th>MC 110 Z EVO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed capacity up to approx.</td>
<td>364 US t/h (330 t/h)</td>
<td>364 US t/h (330 t/h)</td>
</tr>
<tr>
<td>Crusher inlet (W x D)</td>
<td>44&quot; x 28&quot; (1,100 mm x 700 mm)</td>
<td>44&quot; x 28&quot; (1,100 mm x 700 mm)</td>
</tr>
<tr>
<td>Weight</td>
<td>90,400 lbs/94,350 lbs (41,000 kg/42,800 kg)</td>
<td>90,400 lbs/94,350 lbs (41,000 kg/42,800 kg)</td>
</tr>
<tr>
<td>Engine/motor output</td>
<td>333 hp (248 kW)</td>
<td>333 hp (248 kW)</td>
</tr>
</tbody>
</table>
MOBILE JAW CRUSHERS

ONE CONCEPT - TWO MACHINES

The mobile MOBICAT MC 110 EVO jaw crushers from KLEEMANN are available in two versions and are characterized by their versatility, high machine availability and ease of transport.

The MC 110 R EVO has a vibrating feeder with integrated slotted grate. Fine material can thus be screened coarsely out of the feed material.

The R-version is even more compact than the Z-version due to the shorter feeding unit with integrated slotted grate. Furthermore, the plant impresses with its light weight (one ton lighter). This makes flexible, brief applications also possible in this power class.
The MOBICAT MC 110 Z EVO has an independent doubledeck prescreen that allows the fines in the feed material to be effectively screened. Wear in the crusher is reduced by diverting the medium grain via the generously proportioned crusher bypass. This output of the crusher is also increased. The material stream is simply diverted via the integrated bypass flap – a dummy cover is no longer necessary. The prescreening unit also effectively levels the material in the crusher, which ensures that the crusher is constantly filled and really productive.
IN COMBINATION FOR **TOP PERFORMANCE**

**INTELLIGENT MATERIAL FLOW CONTROL THANKS TO LINE COUPLING**

- Via the line coupling, the material flow of both machines is tuned to one another.
- When the filling level at the MCO 9 EVO changes, the CFS regulates the belt speed and sends a signal to the upstream MC 110 Z EVO.
- MC 110 Z EVO controls the frequencies of the vibrating feeder and the prescreen in the same manner as the request from the MCO 9 EVO.
- MC 110 Z EVO adapts the material feed accordingly.
- Continuous utilization of the crusher and complete interlinked plant.

In combination with the secondary cone crusher MOBICONE MCO 9 EVO, the Z-version of the MOBICAT MC 110 EVO demonstrates all its advantages. After all, with this machine version fines in the feed material are effectively separated thanks to the independent double-deck prescreen. Wear in the crusher is also reduced by diverting the medium grain via the generously proportioned crusher bypass.

The material stream is simply diverted via the integrated bypass flap - a dummy cover is no longer necessary. The installed magnetic separator (optionally available) separates metallic objects from the material stream to increase product quality and prevent damage to any possible downstream cone crushers.
ADAPTATION OF CONVEYING SPEED
MOBILE JAW CRUSHERS

EVEN BETTER RESULTS THANKS TO INNOVATIVE DRIVE CONCEPT

- Highly efficient, powerful diesel engine
- Low efficiency losses due to crusher direct drive and full output at crusher
- Lowest consumption values in its class
- Fluid coupling guarantees high operational reliability

- On-board current generator for driving the prescreen and vibrating chutes and conveyor belts
- Excellent Service accessibility to all components

The plants of the MC EVO line are characterized by the innovative drive concept “diesel-direct-electric”. The crusher is driven via a fluid coupling direct from the diesel engine; belts and other components, on the other hand, by electric motors. The lowest possible consumption values are thus achieved.

The fluid coupling guarantees high operational reliability and protection for the machine. The current generator is used for driving the prescreen, vibrating chutes and conveyor belts. Speed setting is simple and fully automatic - adaptable to material and without setup times.

THE DRIVE COMPARISON

INNOVATIVE CONCEPT - COST-EFFECTIVE AND RELIABLE

DIESEL-DIRECT-ELECTRIC VS. HYDRAULIC DRIVES

>HIGH PERFORMANCE, LESS CONSUMPTION

Up to 30% more cost-effective compared to hydraulic drives: the drive concept “diesel-direct-electric”
**Low consumption**

The low fuel consumption of the plant is impressive. Even when operated at full power, the machine consumes up to 30% less fuel compared to others in its power class combined with a very high output.
MOBILE JAW CRUSHERS OF THE MOBICAT QUARRY-LINE
CRUSHERS FOR MEDIUM AND LARGE BATCH SIZES

Robust, low-maintenance, high operational reliability: **Crusher** with installed fill level monitoring crusher inlet for regulating continuous feeding.

Powerful with flexible deployment: **Diesel-electric drive concept** with an option of external power supply.

Simple and intuitive operation, rapid diagnostics in the event of a fault: **electrical system**.

YOUR ADVANTAGES AT A GLANCE


The plants in the Quarry-Line are designed to deal with the tough conditions encountered in day-to-day work in a quarry. Furthermore, thanks to the diesel-electric drive concept they work very efficiently and can also be run from an external power source - for continuous work in natural stone.
YOUR ADVANTAGES AT A GLANCE

High final product quality: effective prescreening of fines and contamination by an independent double-deck prescreen

Generously proportioned feeding unit: for convenient feeding with wheel loaders

Ease of physical and visual access to all components: for service work and cleaning

Can be adapted to conditions: different slotted grates and punched plates made from wear-resistant steel, steel wire mesh or steel punched plate

Use in mining
In spite of its size, the MC 120 Z can still be transported in one piece. This is flexibility.

**MOBILE JAW CRUSHERS**

**MOBICAT MC 120 Z**

**THE TOP CLASS MULTI-TALENT**

- Processing of natural stone (e.g. limestone, granite, basalt)
- Processing of residual construction materials (e.g. rubble, concrete, reinforced concrete)
- In mining applications
- Feed capacity of up to 496 US tons (450 tons) per hour
- For large batch sizes
- For a consistent process: in combination with the cone crusher MOBICONE MCO 11 and a MOBISCREEN screening plant

**THE KLEEMANN APPLICATION RECOMMENDATION**

**APPLICATION**

Use mainly in natural stone, but also recycling and mining applications
The MC 120 Z is the real classic among the mobile jaw crushers of the MOBICAT series. Developed for professional quarry operators, with its 77 US tons (70 tons) the MC 120 Z is at home in almost all natural stone areas. As the MC 120 is optionally available with magnetic separators, it is also a viable alternative for demolition or recycling companies who have suitable transportation possibilities.

**WELL EQUIPPED**

The basic configuration of the MC 120 Z includes a frequency-controlled feeding unit for continuous feeding of the crusher. An discharge chute below the crusher diverts the material directly onto the crusher discharge conveyor, which reduces wear on the conveyor belts.

**Technical Information MC 120 Z**

- **Feed capacity up to approx.** 496 US t/h (450 t/h)
- **Crusher inlet (W x D)** 48” x 32” (1,200 mm x 800 mm)
- **Weight** 154,300 lbs (70,000 kg)
- **Engine/motor output** 488 hp (364 kW)

Robust 27 US ton (24-ton) jaw crusher
MOBILE JAW CRUSHERS

MOBICAT MC 125 Z
THE POWER PACK WITH NO-HOLDS-BARRED

Made for large chunks: the MC 125 Z processes pieces with an edge length of up to 48” (1,200 mm)

Processing of natural stone
(e.g. limestone, granite, basalt)

In mining applications

Feed capacity of up to 661 US tons (600 tons) per hour

For large batch sizes

For even better results: in conjunction with the secondary cone crusher MOBICONE MCO 13 and a MOBISCREEN screening plant

THE KLEEMANN APPLICATION RECOMMENDATION

APPLICATION

Can be deployed in large quarries and mining plants
The MC 125 Z is designed for the tough conditions in quarries. The crusher unit of the jaw crusher – which alone has a weight of 47 US tons (43 tons) – has a particularly long impact toggle and a drive output of 268 hp (200 kW).

**UNCOMPROMISING DESIGN**

The MC 125 Z is equipped with even larger jaw crushers than the smaller MC 120 Z. The length of the articulated crusher jaws and their large stroke are distinctive characteristics of these plants and reflect the uncompromising design of the machinery. The possibility of connecting to a stationary power source makes the MC 125 Z an economic power pack.

**Technical Information MC 125 Z**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed capacity up to approx.</td>
<td>661 US t/h (600 t/h)</td>
</tr>
<tr>
<td>Crusher inlet (W x D)</td>
<td>49” x 40” (1,250 mm x 1,000 mm)</td>
</tr>
<tr>
<td>Weight</td>
<td>286,600 lbs (130,000 kg)</td>
</tr>
<tr>
<td>Engine/motor output</td>
<td>488 hp (364 kW)</td>
</tr>
</tbody>
</table>
MOBILE JAW CRUSHERS

MOBICAT MC 140 Z
THE ROBUST CRUSHING WONDER

Processing of natural stone
(e.g. limestone, granite, basalt)

In mining applications

Feed capacity of up to 827 US tons (750 tons) per hour

For very large batch sizes

Deployment as a single plant or as an ideally tuned complete solution with the MOBICONE cone crusher plant and the MOBISCREEN screening plant

APPLICATION

Large feed size, impressive feed capacity, robust 60 US ton (54-ton) crusher: achieve high annual production volumes with the MC 140 Z.

Can be combined for work in natural stone in large quarries or mining plants with flexible belt conveyor systems
The MOBICAT MC 140 Z is used to achieve high annual production volumes and to deal with large feed sizes. Depending on the conditions of the location and rock deposit, various prescreen modules and feeding units can be integrated in this plant. This makes it predestined for use with natural stone in quarries as well as various mining applications.

**HIGH PRODUCTIVITY – LOW-MAINTENANCE OPERATION**

The MC 140 Z is equipped with a very robust 60 US ton (54-ton) jaw crusher. It has a solid double-deck prescreen with a length of more than 9’ 10” (3 m), which is equipped with a step that allows additional recirculation of the feed material.

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**Technical Information MC 140 Z**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed capacity up to approx.</td>
<td>827 US t/h (750 t/h)</td>
</tr>
<tr>
<td>Crusher inlet (W x D)</td>
<td>55” x 45” (1,400 mm x 1,130 mm)</td>
</tr>
<tr>
<td>Weight</td>
<td>352,740 lbs (160,000 kg)</td>
</tr>
<tr>
<td>Engine/motor output</td>
<td>587 hp (438 kW)</td>
</tr>
</tbody>
</table>
With a feed capacity of up to 1,323 US tons (1,200 tons) an hour, the MC 160 PRR is a true workaholic.

MOBILE JAW CRUSHERS

MOBICAT MC 160 PRR
THE DYNAMIC HEAVYWEIGHT

Processing of natural stone (e.g. limestone, granite, basalt)
In mining applications
Feed capacity of up to 1,323 US tons (1,200 tons) per hour
For maximum batch sizes

THE KLEEMANN APPLICATION RECOMMENDATION

APPLICATION
For very high production volumes in natural stone and mining applications
The largest mobile jaw crusher plant from KLEEMANN, the MOBICAT MC 160 PRR, is designed for maximum production volumes. Feed sizes up to 59” x 44” (1,500 mm x 1,100 mm) are possible. In order to realise feed capacities like these, dump trucks are generally used for loading the MC 160. A hopper volume of 118 yd³ (90 m³) allows for two dump trucks each with loading capacities of 50 US tons (45 tons).

MAXIMUM PERFORMANCE IN ALL KINDS OF STONE

The MOBICAT MC 160 PRR has a total weight of 441 US tons (400 tons) and consists of a feeding unit with apron feeder, a main unit with prescreening and the extremely robust crusher unit. Each unit has a separate crawler chassis.

The 85 US ton (77-ton) heavy crusher unit is driven by a 436 hp (325 kW) powerful electric motor. With this equipment, the MC 160 PRR achieves a feed capacity of up to 1,323 US tons (1,200 tons) an hour.

### Technical Information MC 160 PRR

<table>
<thead>
<tr>
<th>Feed capacity up to approx.</th>
<th>1,323 US t/h (1,200 t/h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crusher inlet (W x D)</td>
<td>63” x 49” (1,600 mm x 1,250 mm)</td>
</tr>
<tr>
<td>Weight</td>
<td>881,800 lbs (400,000 kg)</td>
</tr>
<tr>
<td>Engine/motor output</td>
<td>778 hp (580 kW)</td>
</tr>
</tbody>
</table>

Robust 85 US ton (77-ton) jaw crusher
IDEALLY COMBINED - INTERLINKED PLANTS

Because quarrying approval is usually time-limited and due to the demands placed on plants during quarrying operations, mobile combinations of plants are now being used increasingly. Thanks to modern technology, such plants can achieve the same quality of final grain size. The reductions in transport costs that are possible also make them a very cost-effective solution.
KLEEMANN, due to its experience, has the expertise necessary for the design and manufacture of complex mobile processing plants. A complete portfolio is available for implementing the different processes and applications.
THE RECIPE FOR SUCCESS FOR OPTIMUM CRUSHING RESULTS

An ideal crushing result is always achieved by means of plant components perfectly tuned to one another combined with the settings made by the operator.

Feed material
- Feed size: where possible, the maximum feed size should not exceed 80% of the specified crusher opening
- Compressive strength: mineral materials can be used with a maximum compressive resistance of 280 MPa *
- Mineral type: all soft to hard natural stones, e.g. dolomite, granite, basalt, diabase, quartzite or gneiss as well as residual construction materials such as rubble, bricks and reinforced concrete

* Depending on the material and machine type, higher values are also possible.

Crushing ratio
The maximum crushing ratio (ratio of feed grain size / grain output) largely depends on the physical properties of the feed material. The following standard values result:

- Medium-hard to hard rock depending on crushing strength and robustness up to 5:1

Exceeding the crushing ratio leads to an undesirable decrease of the crushing capacity and to an increase in wear.

MOBICAT CRUSHING CURVES
THE KLEEMANN SERVICE PROGRAM:

CUSTOMER SERVICE AT KLEEMANN

Customer service at KLEEMANN means: reduced downtimes, minimum wear costs, maximum customer proximity.

A wide range of training courses as a basis for optimal use of our plants. A dense network with experienced service technicians. Quickly available original spare parts. All of this is guaranteed by our comprehensive support organization. Worldwide, day after day.

The KLEEMANN service program:
- Professional maintenance and repair of your machines and plants
- Preventive maintenance through service contracts
- Ordering of original parts - the correct wear part for your application, reduction in wear part and operating costs
- Application advice and training
Further information: service@kleemann.info

**TRAINING COURSES**

An essential element of the successful use of our plants is corresponding knowledge of their operation. In order to communicate the necessary technical knowledge to your employees, KLEEMANN offers a wide range of training courses, which can be carried out in the CTT (Center for Training and Technology) or on site.

**SERVICE NETWORK**

Our local contact partners provide you with comprehensive support for all tasks and questions related to our products. Quick technical support is our main priority. We ensure short response times and quick solutions through a close network of subsidiaries, their experienced service technicians and the additional support provided by our support organization in the parent plant.

**PARTS AND ACCESSORIES**

Original parts and accessories from KLEEMANN can assure the high reliability and availability of the machines in the long term. Rapid identification of the correct part is possible using WIDOS - the WIRTGEN GROUP documentation system. An overview of all spare parts with simple ordering information is available under www-partsandmore.net
The crushing principle
KLEEMANN offers a very wide range of parts and accessories. The selection of the correct crusher jaws, in particular, has a strong influence on the result: for abrasive rock, for example, different crusher jaws have to be used than for coarse rock.

The crushing material is crushed in the wedge-shaped pit between the fixed crusher jaw and the crusher jaw articulated on an eccentric shaft. The material is crushed by the elliptic course of movement and transported downwards. This occurs until the material is smaller than the set crushing gap.

Low-wear material
The crusher jaws installed in jaw crushers from KLEEMANN are made from a special manganese casting characterized by excellent durability of the basic body. Through the compressive load, during operation the manganese casting forms a highly wear-resistant surface for long service lives.

In ideal operation, the main wear occurs in the lower half of the crusher jaw. If the teeth are completely worn (smooth crusher jaw), the crusher jaw should be turned over or replaced. The crushing capacity (t/h) is reduced considerably when the crusher jaws are smooth because the material is mainly crushed and no longer broken.

Service life comparison - ratio of the service lives of the individual crushing tools
The draw-in movement of the articulated crusher jaw causes the material to generate a grinding movement at the fixed crusher jaw. This results in increased wear at the fixed crusher jaw.

Furthermore, the fixed crusher jaw is located on the inlet side. The fines tend to slide towards the fixed crusher jaw as they run into the crusher. The fines cause higher wear than coarser feed material.
### Articulated crusher jaw

**Crusher jaw turned**

### Fixed crusher jaw

**Crusher jaw turned**

### Lateral wedge

---

**Ratio of service life as a percentage**

<table>
<thead>
<tr>
<th>Tooth shape</th>
<th>Final product size</th>
<th>Feed Material</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hard stone</td>
<td>Soft and medium-hard rock</td>
</tr>
<tr>
<td><em><em>RT</em> (regular teeth)</em>*</td>
<td>&gt; 2.4&quot; (60 mm)</td>
<td>●</td>
</tr>
<tr>
<td><em><em>FT</em> (flat teeth)</em>*</td>
<td>&gt; 2.4&quot; (60 mm)</td>
<td>●●</td>
</tr>
<tr>
<td><em><em>ST</em> (sharp teeth)</em>*</td>
<td>&gt; 2.4&quot; (60 mm)</td>
<td>●</td>
</tr>
</tbody>
</table>

- ●● Highly recommended
- ● Recommended
- ● Not recommended

### Tooth shape

#### Illustration

<table>
<thead>
<tr>
<th>Tooth shape</th>
<th>Illustration</th>
<th>Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>*<em>RT</em> (regular teeth)**</td>
<td><img src="image" alt="Illustration" /></td>
<td>Well-balanced with regard to service life, energy requirements and crushing pressure, suitable for natural stone and gravel.</td>
</tr>
<tr>
<td><em><em>FT</em> (flat teeth)</em>*</td>
<td><img src="image" alt="Illustration" /></td>
<td>Due to the large wear dimensions, flat teeth are particularly efficient in abrasive material. A higher pressure load is created and thus a higher energy requirement.</td>
</tr>
<tr>
<td><em><em>ST</em> (sharp teeth)</em>*</td>
<td><img src="image" alt="Illustration" /></td>
<td>Sharp teeth reduce the laminated share in the crushed material. Recommended with small gap widths (&lt; 2.4&quot;/60 mm).</td>
</tr>
</tbody>
</table>

* Two quality levels available: > XPRT with 18% manganese > XTRA with 20% manganese

Further information: [www.partsandmore.net](http://www.partsandmore.net)
### Mobile Jaw Crushers

#### Evo-Line

<table>
<thead>
<tr>
<th>Model</th>
<th>Feed Size Width x Depth</th>
<th>Crusher Inlet Width x Depth</th>
<th>Feed Capacity up to Approx.</th>
<th>Weight Approx.</th>
<th>Drive Concept</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC 100 R EVO</td>
<td>36” x 20” (900 mm x 500 mm)</td>
<td>37” x 22” (950 mm x 550 mm)</td>
<td>243 US t/h (220 t/h)</td>
<td>71,300 lbs (32,340 kg)</td>
<td>Diesel-direct-electric</td>
<td>Foldable side discharge conveyors (optional)</td>
</tr>
<tr>
<td>MC 110 R EVO</td>
<td>41” x 26” (1,050 mm x 650 mm)</td>
<td>44” x 28” (1,100 mm x 700 mm)</td>
<td>364 US t/h (330 t/h)</td>
<td>90,400 lbs (41,000 kg)</td>
<td></td>
<td>Crusher unit with long articulated crusher jaw</td>
</tr>
<tr>
<td>MC 110 Z EVO</td>
<td>41” x 26” (1,050 mm x 650 mm)</td>
<td>44” x 28” (1,100 mm x 700 mm)</td>
<td>364 US t/h (330 t/h)</td>
<td>94,350 lbs (42,800 kg)</td>
<td>Diesel-electric, connection to external power supply (optional)</td>
<td>Easy-to-operate control system, menu-guided touch panel</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Feed control CFS Continuous Feed System (optional)</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Fully automatic crushing gap adjustment</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Innovative crusher unblocking system (optional)</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Magnetic separator (optional)</td>
</tr>
</tbody>
</table>

#### Application Spectrum

<table>
<thead>
<tr>
<th>Model</th>
<th>Application Spectrum</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC 100 R EVO</td>
<td>Recycling Natural stone</td>
</tr>
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</tr>
<tr>
<td>MC 110 Z EVO</td>
<td>Recycling Natural stone</td>
</tr>
</tbody>
</table>

#### Technical Specifications

- **Feed size up to max. (depending on material)**
- **Crusher inlet width x depth**
- **Feed capacity up to approx.**
- **Weight approx.**
- **Drive concept**
- **Features**
- **Application spectrum**
### QUARRY-LINE

<table>
<thead>
<tr>
<th>Model</th>
<th>Crush Size</th>
<th>Feed Capacity (US t/h)</th>
<th>Weight (lbs/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC 120 Z</td>
<td>44&quot; x 28&quot; (1,100 mm x 700 mm)</td>
<td>496 (450 t/h)</td>
<td>154,300 lbs (70,000 kg)</td>
</tr>
<tr>
<td>MC 125 Z</td>
<td>48&quot; x 36&quot; (1,200 mm x 900 mm)</td>
<td>661 (600 t/h)</td>
<td>286,600 lbs (130,000 kg)</td>
</tr>
<tr>
<td>MC 140 Z</td>
<td>52&quot; x 40&quot; (1,300 mm x 1,000 mm)</td>
<td>827 (750 t/h)</td>
<td>352,740 lbs (160,000 kg)</td>
</tr>
<tr>
<td>MC 160 PRR</td>
<td>59&quot; x 44&quot; (1,500 mm x 1,100 mm)</td>
<td>1,323 (1,200 t/h)</td>
<td>881,800 lbs (400,000 kg)</td>
</tr>
</tbody>
</table>

- **Diesel-electric, connection to external power supply (optional)**
- **Mountable side discharge conveyors (optional)**
- **Extra-robust crusher unit**
- **Electrical control with plain text displays**
- **Crusher fill level monitoring**
- **Hydraulically assisted crusher gap adjustment**
- **Magnetic separator (optional)**
- **Independent double-deck prescreen**
- **Natural stone Mining Recycling**
- **Natural stone Mining**
- **Natural stone Mining**
- **Wobbler feeder**

**Application Spectrum**

- Recycling
- Natural stone Mining