

**exactcut**  
high performance circular saws

# *M-Serie*

*High performance circular saws*



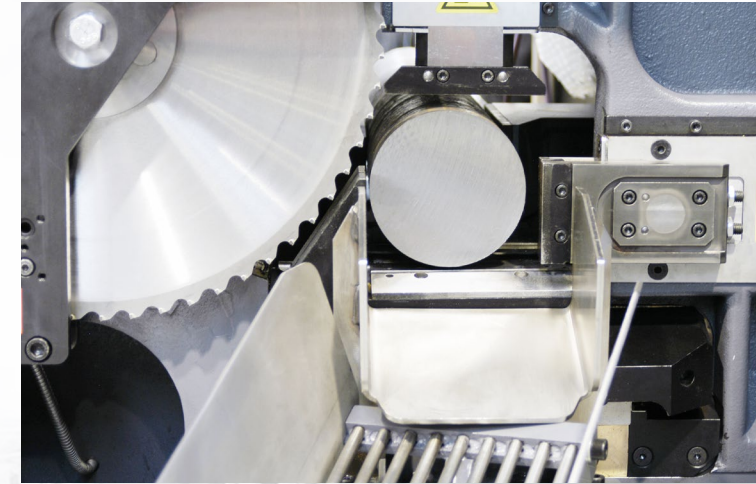


## High performance circular saws

The M-SERIES of circular saws is particularly characterized by an individual approach to every customer's requirements and wide selection of various peripheral devices (input and output sorting conveyers, machining, material handling, etc.). Machines of this series enable cutting of not only round bars, but also various sections from steel and other non-ferrous metals. High performance is obvious.

### Our circular saws are designed to meet the most demanding criteria ensuring precision cutting

- maximum damping capacity of the saw base, which is filled with polymeric concrete
- precision cut quality ensured by steadily guided tool
- robust and compact design of the saw gearbox, ensuring smooth cuts, high cutting power
- easy access to all service points of the machine, simple and quick change of the saw blade
- cutting speed range optimized for every customer according to the spectrum of materials cut
- modular and flexible design of all input and output peripherals



### ExactCut MAC/MAM 75 TWIN

#### TECHNICAL DATA

for cutting of	steel/non-ferrous metals
saw blade type	HSS / carbide
saw blade gripping	Ø32, 4×9×50
saw blade diameter (Ø mm)	250/275

#### CUTTING RANGE

△ cutting angle	90°
● (Ø mm)	20–70
■ (V×V mm)	15×15–60×60
■ (V×S mm)	15×15–90×60
●● (Ø mm)	2 × Ø10–2 × Ø35
■■ (V×V mm)	2 × 10×10–2 × 30×30
cutting speed (m/min)	60–220/600–2200
remnant length (mm)	90

### ExactCut MAC/MAM 105 TWIN

#### TECHNICAL DATA

for cutting of	steel/non-ferrous metals
saw blade type	HSS / carbide
saw blade gripping	Ø40/50, 4×16×80/4×21×90
saw blade diameter (Ø mm)	300/360

#### CUTTING RANGE

△ cutting angle	90°
● (Ø mm)	20–105
■ (V×V mm)	20×20–90×90
■ (V×S mm)	20×20–105×80
●● (Ø mm)	2 × Ø20–2 × Ø50
■■ (V×V mm)	2 × 20×20–2 × 50×50
cutting speed (m/min)	60–220/600–2200
remnant length (mm)	60

### ExactCut MAC/MAM 155

#### TECHNICAL DATA

for cutting of	steel/non-ferrous metals
saw blade type	HSS / carbide
saw blade gripping	Ø40/50, 4×16×80/4×21×90
saw blade diameter (Ø mm)	425/460

#### CUTTING RANGE

△ cutting angle	90°
● (Ø mm)	30–155
■ (V×V mm)	30×30–115×115
■ (V×S mm)	30×30–155×115
●● (Ø mm)	–
■■ (V×V mm)	–
cutting speed (m/min)	60–220/600–2200
remnant length (mm)	60

### ExactCut MAC/MAM 205

#### TECHNICAL DATA

for cutting of	steel/non-ferrous metals
saw blade type	HSS / carbide
saw blade gripping	Ø50, 4×16×80/4×21×90
saw blade diameter (Ø mm)	460/560/620

#### CUTTING RANGE

△ cutting angle	90°
● (Ø mm)	50–205
■ (V×V mm)	50×50–180×180
■ (V×S mm)	50×50–180×205
●● (Ø mm)	–
■■ (V×V mm)	–
cutting speed (m/min)	60–220/600–2200
remnant length (mm)	110

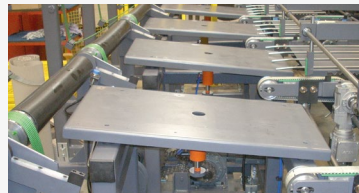
## Material preparation

All input devices of the cutting line provide smooth and fully automatic feeding of material to the cutting process. important criteria for suitable selection include the method of material loading, cutting length, cross-section variety, etc. all the devices which we deliver are of modular design, thus enabling assembly in different lengths to suit any customer need.



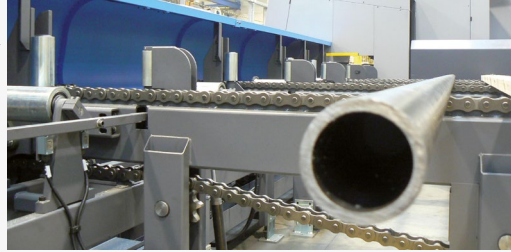
### Automatic bundle magazine

- fully automatic material transfer during the cycle
- bundle stacking by means of a crane or fork-lift truck



### Vibrating tables

- separation of small sections twisted in the stacked bundles
- delivered in combination with the bundle magazine and transverse belt conveyor



### Transverse chain/belt conveyor

- robust conveyor design
- suitable for materials of all sections
- automatic setting during diameter change



### Gravity magazine

- adjustable angle of transverse guiding for materials of various diameters
- suitable particularly for circular cross-sections



### Transverse pocket conveyor

- suitable for materials of all sections
- intended particularly for shaped sections with pre-defined orientation of stacking



## Material processing

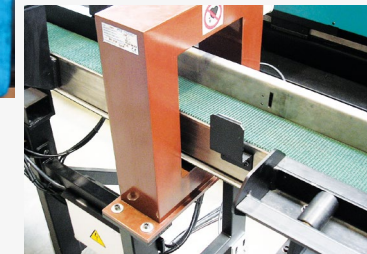
Upon customers' requirements, new devices are continuously developed, serving for subsequent processing of workpieces and supplied as accessories to our standard machines. One of the most frequently used material processing technologies is post-cutting both-sided chamfering of metal pieces, performed with various levels of automation. Other frequently supplied devices include machines for demagnetising, machining and flushing pipes, and final length control. Individual operations may be further combined and adjusted as required by the customer.



### Material washing



### Pass-through material deburring

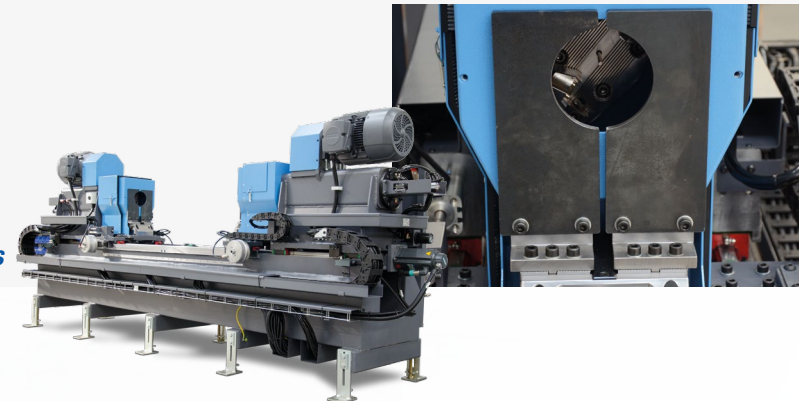


### Demagnetization



### Material marking

## End machining solutions



## Effective work with the material

Thanks to the special applications, the machine can be easily extended from regular performance circular saw to high performance cutting center.

### Material unloading

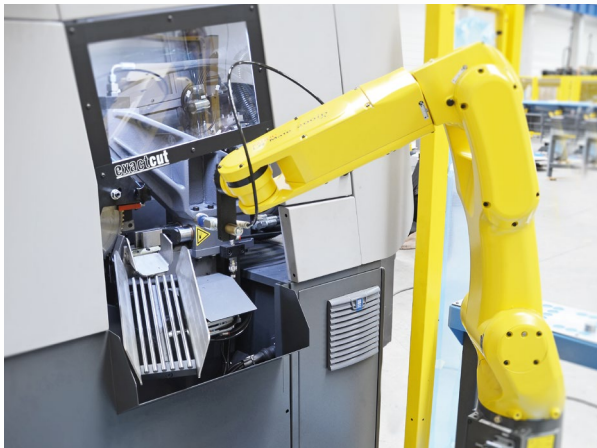
In order to simplify working processes and to meet requirements of our customers, accessories for output operations following cutting the workpiece are continuously developed. Automatic handling is particularly suitable for cut pieces of bigger weight, for pieces which should be stored precisely in crates, and for transfer to another operation.

### Packaging unit

- grouping and inserting the required number of workpieces before the actual packaging
- fully automatic packaging with stretch foil
- better manipulation and storage of final pieces

### Bundle magazine

- automatic storage of material cut
- option for two positions for different lengths of workpieces
- bundling of material cut

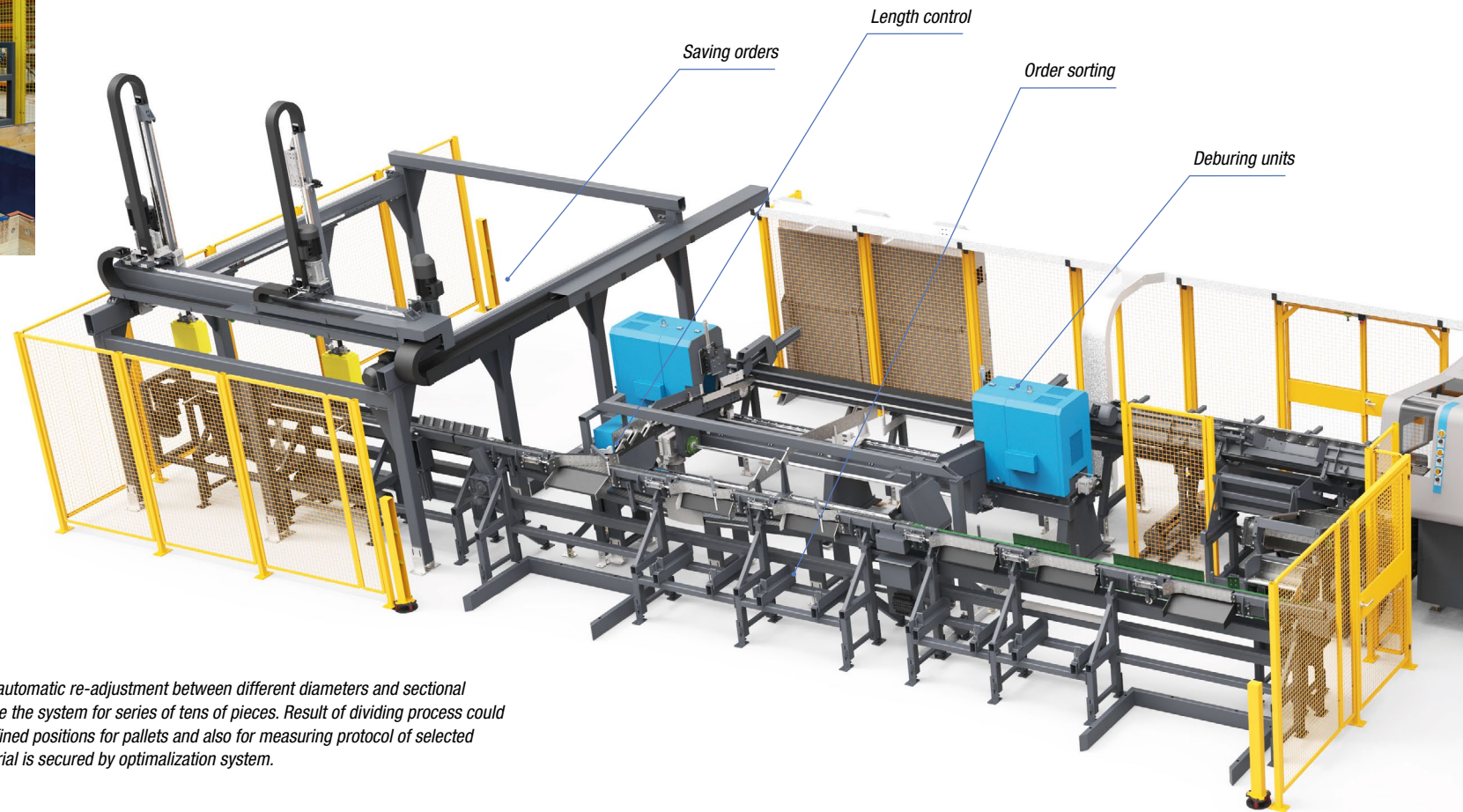


### Sorting and storage by means of a robot

- automatic stowing and separation of cut pieces into defined positions
- possible transfer of cut pieces to further operations
- various types of robot grabs
- highly flexible usage



Deposition into cases



## Automatic line

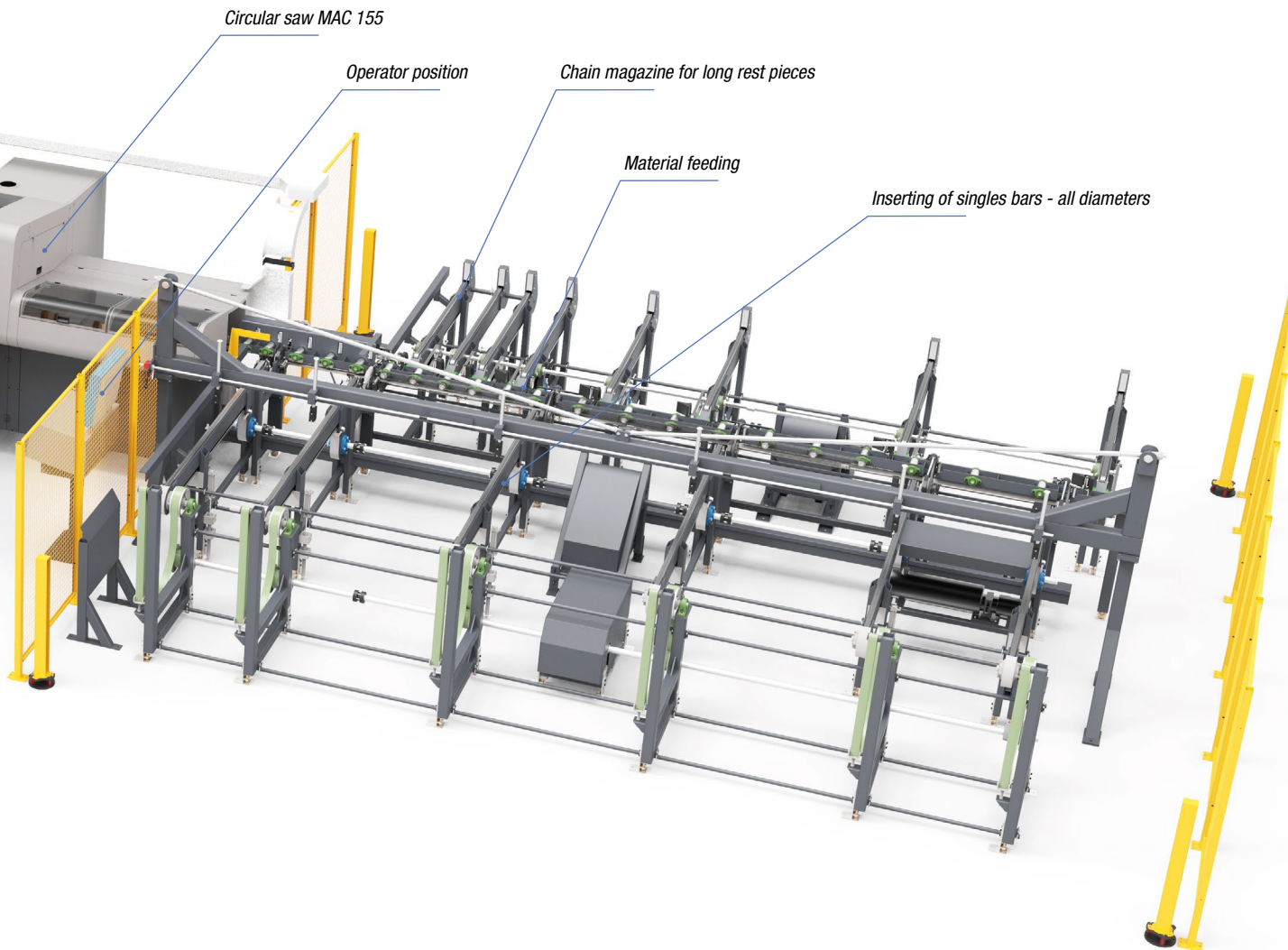
with circular saw ExactCut MAC 155

Cutting centre is equipped with fully automatic re-adjustment between different diameters and sectional lengths. Thanks to that is possible use the system for series of tens of pieces. Result of dividing process could be upto 12 orders divided into predefined positions for pallets and also for measuring protocol of selected order. Maximum usage of intial material is secured by optimization system.

- » input roller bed with fully automated material loading
- » circular saw ExactCut MAC 155 for steel
- » output sorting and handling set
- » ORBITAL deburring equipment
- » equipment for 100% length check
- » gantry manipulator with two magnetic heads

## Ready for automation

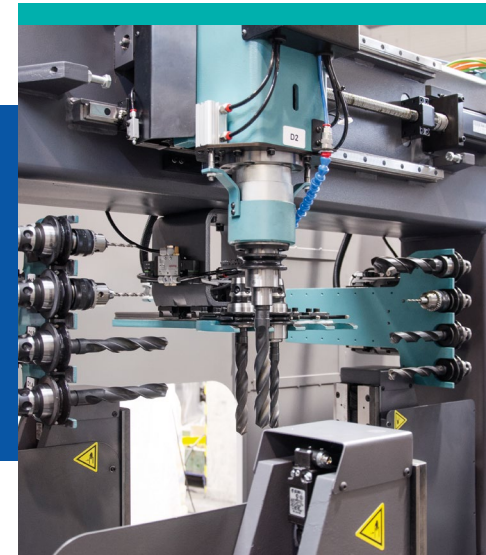
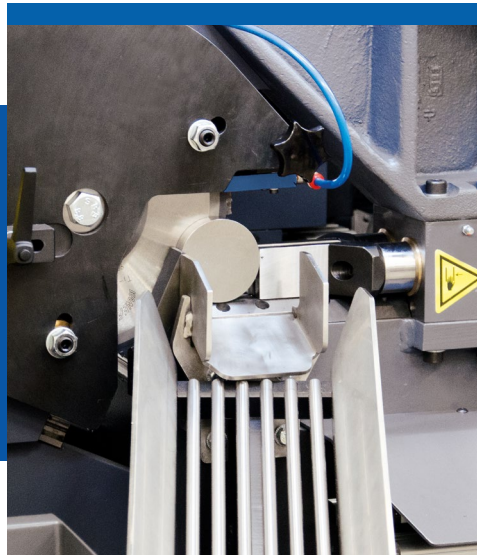
Already in development of a each machine, we are thinking about its usefull in different conditions and in different productions. The MAC machine is ready to be a part of a huge automatic lines for complete production processes. You can easily extend the machine and connect the special parts as a material loading and feeding systems. This is the way we can turn the production proceses to the effective way.



The real demonstration of the cutting center

# **BEC** Solution Group

*Our company ExactCut, is a member of the BEC group, consisting of BOMAR sawing technology company and CTM drilling technologies. We would like to introduce ourselves as your new partner for all products in the group:*



[www.exactcut.cz](http://www.exactcut.cz)