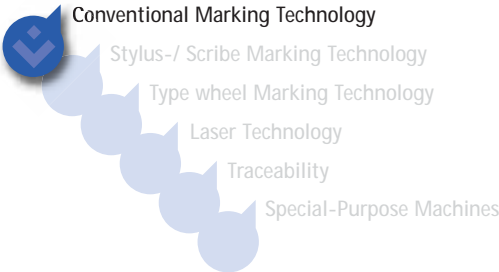
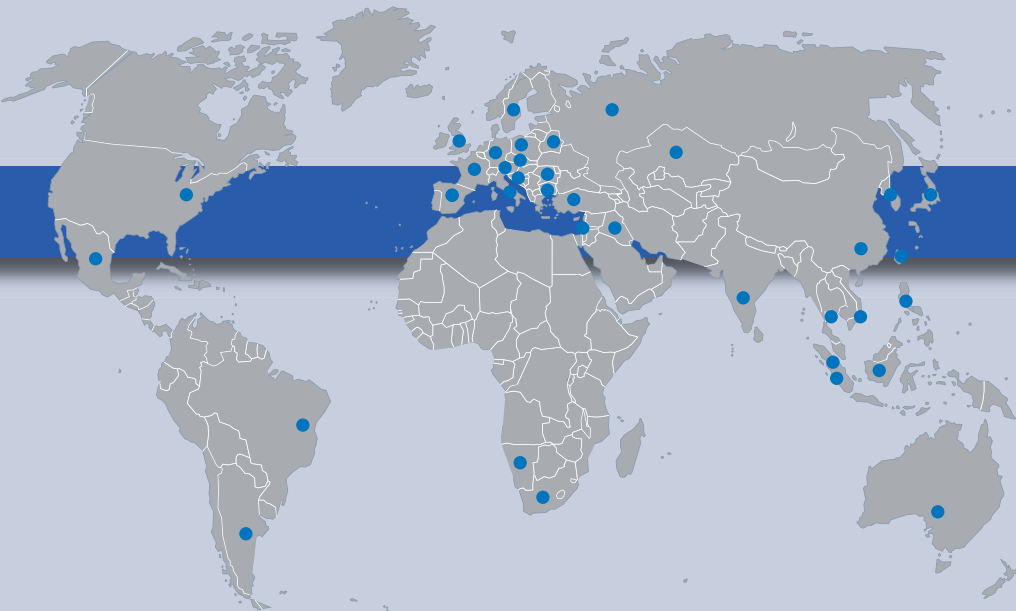


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Subject to technical modifications



Conventional Marking Technology



Product information
Product information
Product information

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Leaving a lasting mark!



Borries Marking-Systems manufactures machines and tools for direct marking, material-displacement marking and permanent marking. Our marking systems can be found in service the world over: Throughout the whole of the automobile industry including the automotive suppliers, in aerospace, in the machine building industry, in the electrical and steel industries as well as in medical technology. Our company was founded in 1952 in Ludwigsburg. The domicile of the company is now Pliezhausen near Tübingen. We are - and have been for a long time now - one of the largest, most innovative and high-performance suppliers in the marketplace.

Borries Marking-Systems – leaving a lasting mark!



Characteristics and method of functioning for the tools and machines used in conventional marking

The tools and machines used in conventional marking permanently mark workpieces made of metal or plastic. These devices are used in marking for control purposes as well as in tracking and in component arrangements.

The advantages of using conventional techniques used for marking are the short times required, the associated investments are manageable and the large marking depths possible.

Why do components have to be marked?

Designating, coding, identifying, marking – our company providing information like this would not exist without the need for numbers, letters, codes and combinations of these, and without such meaningful identification there would be chaos everywhere.

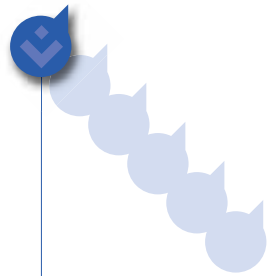
This applies both for products of our everyday life as well as for industrial goods.

Why are products marked?

- 1. Organization in manufacturing
- 2. Quality assurance / ISO 9000 / CE symbol
- 3. Product liability
- 4. Protection against plagiarism



Conventional Marking Technology



Marking tools

Steel types

Steel types can be combined in the type holder as well as in special numbering heads.

- Engraving similar to DIN 1451 (medium-spaced lettering)
- Nickel-plated finish
- Available individually or in the type box
- Standard characters available: A - Z; 0 - 9; . (dot); , (comma); - (dash); / (forward slash)



Steel types

Engraved stamps

Engraved stamps are available as individual stamps, stamps for several characters at once, stamps with special characters, logos, etc.

- Medium-spaced, semi-close or close-space lettering
- Pointed, blunt, wide-area or perforated engraving



Engraved stamps

Stamping inserts

The dimensions, shape and type of the stamping inserts are realized in the design for the mortise stamp to meet individual customer requirements.



Stamping inserts

Type holder

The text to be marked is created in the type holder by inserting the appropriate steel types. These can be changed as required.

- Standard-type holder: Lettering sizes from 1 to 5 mm; one or several lines
- Round type holder THR for marking in an arch on a flat surface
- Circular segment type holder THR-S for marking in a certain radius on flat surfaces
- Special type holders on request



Type holder

Numbering heads

Borries numbering heads are used for marking by sequential numbering, for serial-number numbering and designating different models.

- ANPW – Automatic numbering head
The number is automatically incremented after each marking operation;
Standard lettering heights 1 – 8 mm
- VNPW – Manually adjustable numbering head
The wheel is locked by hand in the desired position;
Standard lettering heights 1 – 8 mm
- TNPW – The touch-numbering head is set by hand
The wheels are set by hand by depressing the touching lever;
Standard lettering heights 1 – 8 mm
- MNPW - Manually adjustable numbering head
The marking tool is locked by hand using the locking pins;
Lettering heights 1 – 4 mm
- Customized variants on requests



TNPW

Hand-held punch

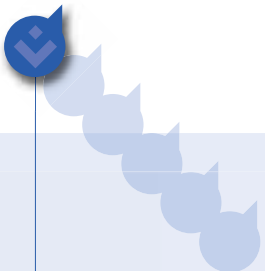
Used preferentially in center-punching, control stamping, marking and numbering.

- Punching impact infinitely adjustable
- Absolutely recoil-free
- Engraving possible: Control characters, numbers from 0 – 9, and capital letters from A – Z with 2.5 mm lettering height available ex-stock



BM 8

Conventional Marking Technology



Marking machines

Hand stamping tools

Hand stamping tools are preferentially used for center-punching, control stamping and for general marking jobs. These are in service as either hand-operated or as inbuilt devices. Their straightforward operation and flexibility in the applications that are possible, together with the quick and simple exchange of center-punching inserts and stamping tools, make these indispensable devices in many trades and in industry alike.

- Pneumatic
- Low forces required for triggering the impacting operation
- Recoil-free
- Punching impact infinitely adjustable

Variants:
BM 10 (Stamping performance 10 kN)
BM 22 (Stamping performance 20 kN)
BM 25 (Stamping performance 35 kN)



BM 22

Stamping units

Stamping units are suitable for amongst others, use on transfer lines, rotary indexing tables and test equipment. The large useful travel makes it possible to mark workpieces that are different in height yet without having to make any adjustments for this.

The punching impact is infinitely adjustable.

Variants:
BM 12 PN (Stamping performance 4 kN, pneumatic)
BM 22 PN (Stamping performance 18 kN, pneumatic)
BM 21 PN (Stamping performance 25 kN, pneumatic)
BM 21 HY (Stamping performance 25 kN, hydraulic)
BM 25 PN (Stamping performance 40 kN, pneumatic)
BM 35 PN (Stamping performance 50 kN, pneumatic)
BM 35 HY (Stamping performance 50 kN, hydraulic)



BM 22 PN

Stamping machines

Stamping machines are used in the workshop as well as in low and medium-volume series production. The straightforward method of operation, the maturity of the design and the extensive range of stamps available for marking make very many application areas possible for their universal use.

- High impact from the low force applied
- Manual or pneumatic operation
- Punching impact infinitely adjustable

Variants:
BM 11 (maximum punching impact 4 kN, manual)
BM 12 (maximum punching impact 4 kN, pneumatic)
BM 18 (maximum punching impact 25 kN, manual)
BM 21 (maximum punching impact 25 kN, pneumatic)
BM 30 (maximum punching impact 50 kN, manual)
BM 35 (maximum punching impact 50 kN, pneumatic)



BM 21

Pneumo-hydraulic stamping machines

Pneumo-hydraulic stamping machines are suitable where high forces are needed to realize the marking. Such machines are available as amongst others, complete systems in column or C-hoop frames, and as built-in units for transfer lines and rotary indexing tables.

- Inbuilt pressure boosters for generating a high impact over a short distance for marking.
- The noise level is below 75 dB(A) here,
- Type holders with steel types, engraving stamps and marking heads are used
- For marking almost any material that undergoes plastic deformation
- Impact ranges available from 40 to 240 kN

Variants:
PHP 80 (Stamping force at 10 bar air pressure: 159 kN)
PHP 40 (Stamping force at 10 bar air pressure: 79 kN)
Other stamping forces available on request



PHP 80 with two-hand control system

Roll marking machines

Roll marking machines are used for marking solid or hollow round parts. Marking flat workpieces is also possible by using suitable fixtures and tools.

- Continuous high marking performance from low forces
- Marking length and marking depth are straightforward to adjust
- High workpiece throughput rate
- Straightforward adjustment of both workpiece diameter and the marking depth
- Electric or manual operation

Variants:
BM 73 H (for workpiece diameters up to approx. 100 mm, manual)
BM 73 EL (for workpiece diameters up to approx. 100 mm, electric)
BM 76 (for variable workpiece diameters, electric, lettering height 0 - 5 mm)
BM 79 (for variable workpiece diameters, electric, lettering height as of 5 mm)



BM 73 EL

AkkuMarker

The AkkuMarker is an easy-to-use device for mobile and quick applications as it is a battery-operated tool.

- Marking head can be turned through 330°
- Electrohydraulic
- Multi-function LED display indicating the maintenance status and the charge level
- Quick retooling

Variants:
BMH50 (Stamping force: 50 kN)
BMH120 (Stamping force: 120 kN)



BMH 120