BORRIES®
MARKING-SYSTEMS

Product information

SCRIBE/STYLUS MARKING TECHNOLOGY

- Conventional marking technology
- Scribe/stylus marking technology
- Type wheel marking technology
- Laser technology
- Traceability
- Special-purpose machines

Visit our website and
use our product configurator.

www.borries.com

LEAVING A LASTING MARK!

MORE THAN 70 YEARS 'MADE IN GERMANY'

◆ **1952**
Founding

◆ **1981**
Business takeover by Lothar von Arnim

◆ **1985**
Worldwide sales of type wheel technology (BORRIES patent)

◆ **1995**
Delivery of the first scribe marking system with camera system

◆ **2000**
Delivery of the first DataMatrix marking system and reading sensors

◆ **2010**
Introduction of highly dynamic drive technology and a more powerful, modular control concept

◆ **2014**
World première: OCV, automatic reading and evaluation in 3-shift production operations

◆ **2018**
Complete takeover of the fixture and plant constructor EnKo Staudinger GmbH in Augsburg

◆ **2022**
Presentation of the small and lightweight 310 marking system

◆ **2023**
Development of our own new laser generation according to customer requirements

◆ **TODAY**
More than 70 years of experience in the development and manufacture of standard marking systems and individual special-purpose machines. The superior technology, constant innovations and the consistent focus on growth markets assure the future success of the company.

Marking: Then. Now. In future.

Are the direct, the material displacing or permanent marking of your parts or components a central topic? Are you looking for a sparring partner who can help in advancing developments for the marking of your products in future?

Then you have come to the best possible address. Founded in 1952, we can now look back at more than 70 years of experience in the technical environment of marking systems.

The fact that we, as a traditional company, place importance on a trusting and cooperative partnership speaks for us and our values. Just like our understanding of reliability, punctuality and flexibility. And it goes almost without saying that, for all of our claims, we are also ISO-certified.

REMARKABLE BASICS

If everything is to stay the way it is:
CONVENTIONAL MARKING TECHNOLOGY

If you need consistent texts and consecutive numbering, this is the recommended marking technology. You can look forward to very short marking times, large marking depths and low investment.

Quick off the mark:
SCRIBE/STYLUS MARKING TECHNOLOGY

Does your focus lie on maximum flexibility in marking texts, font heights and widths as well as the marking depth on your product? Then scribe and stylus marking technologies are the optimum solutions for rapid marking with alphanumeric characters, logos or 2D codes. By the way: Thanks to the low application of force, this technology is ideally suited for solid, hollow and even sensitive parts.

We like to spin the wheel sometimes:
TYPE WHEEL MARKING TECHNOLOGY

Embossing recessed or raised markings in surfaces while marking variably, quickly and quietly - these are the features of our patented „typewriter on metal".

The powerful gentle one: **LASER**

High writing speeds are one thing, and gentle component handling is the other. If you want both and still want to remain flexible, you can do everything right with a laser. The short time requirement and the variability in character representation or component properties come free of charge.

Keeping things on track:
DATA MATRIX CODE/TRACEABILITY

Track & Trace and identification or traceability are the topics of the day - in virtually all industries. Make it easy for yourself as well: use a DataMatrix code (DMC) on the component or workpiece. We also have suitable systems for this.
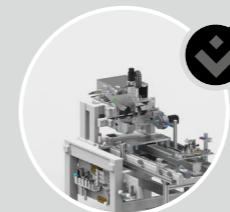
Nothing off the shelf:
SPECIAL SOLUTIONS

There is nothing that does not exist (yet). If you nevertheless have very special requirements for marking or a marking system, we can configure and combine marking systems exactly as your process requires – our know-how in the field of fixture and plant or special machine construction makes it possible.

There is hardly anything that we cannot do:

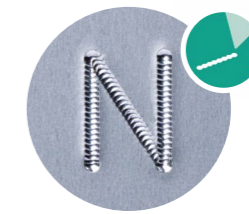## SCRIBE, STYLUS, DOT PEENING, DATAMATRIX & VIBROPEENING MARKING TECHNOLOGY

Our standard delivery includes the marking system, media feed and control. All of these components can be ordered individually.

Look here:
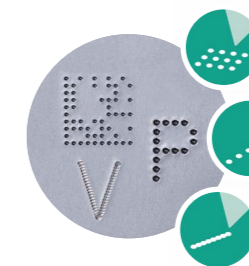**Your typeface can look like this.**

Scribe stylus marking

A diamond or carbide needle is drawn through the workpiece surface almost without chips.

Stylus marking

A carbide needle is driven into the workpiece surface at high frequency.

Dot peening, DataMatrix and Vibropeening

A carbide needle is driven into the workpiece surface in a precisely controlled manner at high speed.

We promise you:

◆ Flexibility due to font heights and widths from 0.5 mm, freely scalable, marking depth up to 0,3 mm possible, individually adjustable

◆ High efficiency thanks to marking speeds of up to 15 characters/second

◆ Open for all markets due to different character sets/special characters

◆ Low noise level (scribe marking)

◆ Cost efficiency in the acquisition of standard systems

◆ Complete package of marking system, media feed and control*

*Components can be ordered individually

All Illustrations by way of example.
Errors and technical modification subject to change.

WE HAVE LEFT A MARK HERE WITH OUR TECHNOLOGIES:

◆ Automotive industry
◆ Medical technology
◆ Rail industry
◆ Aerospace industry
◆ Steel industry
◆ Foundries

Thanks to their compact and solid design, our built-in units/integration units can be perfectly integrated into your production and assembly line. With variable options, these marking systems can be optimally adapted to the respective requirements.

For example, various integrated interfaces such as Profibus and Profitnet, pneumatic or electric Z-axes, probing devices or the large variety of marking heads and marking needles can be selected.

🔗 **Link** to BORRIES built-in units

THE INTEGRATIVE ONE
AMONG THE MARKING SYSTEMS

			MARKING PROCESS	MARKING AREA SIZE (IN MM)	DIMENSIONS (IN MM)	WEIGHT
The compact model: 310	The 310 is the lightweight junior in our built-in unit series. In welding cells, for example, it marks dot peening and DataMatrix codes on various materials such as aluminium, steel and plastic. The 310 is excellently suited for use on robots and wherever space is at a premium.		◆ Dot matrix marking ◆ DataMatrix coding	51 x 26	120 x 71 x 179,5	approx. 2 kg
The proven model: 312V / 312L	If it needs to be compact and easy to integrate, take this one: the 312V/L is designed as a built-in unit and ideally suited for production lines.		◆ Scribe stylus marking ◆ Stylus marking ◆ Dot matrix marking ◆ DataMatrix coding ◆ Vibropeening	51 x 51 / 65 x 51	150 x 150 x 270	approx. 4 kg
The well-known model: 313	If it has to be as compact and simple as the 312V/L model, but you need a larger marking area size, the 313 is a safe choice.		◆ Scribe stylus marking ◆ Stylus marking ◆ Dot matrix marking ◆ DataMatrix coding ◆ Vibropeening	120 x 20	230 x 156 x 213	approx. 4 kg
The successor: 314	An evolution of the 312V/L and 313, the 314 has a little bit more of everything. If you are looking for a high-performance, compact and stable marking unit for integration into production or on the holding device of your choice, the 314 is the right choice.		◆ Scribe stylus marking ◆ Stylus marking ◆ Dot matrix marking ◆ DataMatrix coding ◆ Vibropeening	80 x 50	268 x 220 x 160	approx. 7 kg
The new generation: 317	If you like the 314, but the marking area size is not big enough, then the 317 is the best choice for you. In terms of performance and construction, it is otherwise entirely the same as the 314.		◆ Scribe stylus marking ◆ Stylus marking ◆ Dot matrix marking ◆ DataMatrix coding ◆ Vibropeening	120 x 25	268 x 168 x 220	approx. 6 kg
The hard-boiled: 315	When things get hot and still have to keep going, the encapsulated 315 is a wise decision. The 315 runs at its best with deep marking in harsh environments. With a pneumatic or electric adjustment unit, you always remain flexible in terms of marking area sizes.		◆ Scribe stylus marking ◆ Stylus marking ◆ Dot matrix marking ◆ DataMatrix coding ◆ Vibropeening (Combinations possible)	150 x 100 (optional: 150 x 150, special sizes possible)	approx. 500 x 560 x 410	approx. 37 kg
The inexhaustible model: 322	Runs and runs and runs. That's all you need to know about the 322. The robust marking system was specifically designed for shift operation. It is universal, flexible to use and even configurable.		◆ Scribe stylus marking ◆ Stylus marking ◆ Dot matrix marking ◆ DataMatrix coding ◆ Vibropeening (Combinations possible)	100 x 100 or 100 x 50 (Special sizes possible, e.g. 600 x 200 mm)	approx. 325 x 255 x 173 (For marking area size 100 x 100; in mm)	approx. 13 kg

THE AUTONOMOUS MODELS AMONG THE MARKING SYSTEMS

If your component is not brought to the marking system fully automatically, workshop units are a clever alternative. The autonomously operating marking systems are mounted on a manually or electrically-operated column and placed on a table.

To ensure that you remain flexible, you can choose from fixtures for fixing workpieces in place, feed modules for automatic nameplate feeding or a rotary device for round components.

Link to BORRIES workshop units

		MARKING PROCESS	MARKING AREA SIZE (IN MM)	DIMENSIONS (IN MM)	WEIGHT
The robust model: **317**	Known as a very compact marking system for permanent and flexible markings on virtually all materials, the 317 is enjoying growing popularity	◆ Scribe stylus marking ◆ Stylus marking ◆ Dot matrix marking ◆ DataMatrix coding ◆ Vibropeening	120 x 25	350 x 460 x 705	approx. 26 kg
The universal model*: **320**	The 320 not only impresses with its marking quality for small and very small series. Above all, the machine scores with an unbeatable cost/benefit ratio and as a universal marking system.	◆ Scribe stylus marking ◆ Dot matrix marking ◆ DataMatrix coding ◆ Vibropeening	120 x 100	350 x 460 x 705	approx. 30 kg
The in-depth model: **322**	If there's one thing the 322 can do, it's nameplates with deep markings! The machine marks individual parts or prototypes, but will not let you down even with large series.	◆ Scribe stylus marking ◆ Stylus marking ◆ Dot matrix marking ◆ DataMatrix coding ◆ Vibropeening	100 x 100	350 x 460 x 705	approx. 33 kg
The electrically-driven model*: **520**	The electrically-operated marking unit impresses with permanent, flexible markings on virtually all materials such as metals or plastics. The best part: It could hardly be more wear-resistant and low-maintenance.	◆ Dot matrix marking ◆ DataMatrix coding ◆ Vibropeening	120 x 100	330 x 370 x 602	approx. 20 kg

*Figures with integrated control

All Illustrations by way of example. Errors and technical modification subject to change.

THE PORTABLE MODEL AMONG THE MARKING SYSTEMS

When marking parts that are difficult to transport or marking positions that are difficult to access, portable marking systems are at their best. Thanks to their ergonomic features and ease of use, they make even difficult tasks, such as marking pipes, much easier.
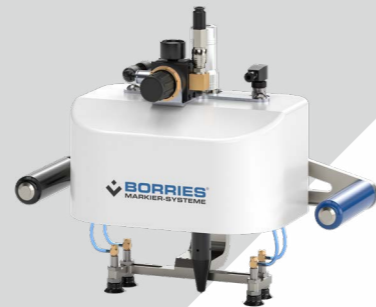
THE PERFECT PAIR

The BORRIES combination systems consisting of a stable machine column and flexible, portable marking system combine the advantages of the workshop marking system with those of the easily transportable marking unit.

Table/column combination with portable systems

312

313

317

Quick fix carrying unit,
easy to open, tool-free

WEIGHT
approx. 20kg

Without them, everything is nothing:
Positive stops with points and rubber buffers are always included.

Positive stops with points

Positive stops with rubber buffers

Vacuum adapter

Prism adapter

Figures without controls! See page 12.
All Illustrations by way of example. Errors and technical modification subject to change.

COMPACT CONTROL

CONTROLLER EK2-BOX AND BMC

The EK2-Box and BMC marking controllers are part of the scope of delivery. They can be operated manually or alternatively used for automated workpiece handling.

Their integration is quick and uncomplicated. The respective stand-alone software also offers connection to higher-level systems using the common interfaces.

BORRIES MARKING CONTROLLER

EK2-BOX
2-AXIS CONTROLLER

BMC WALL MOUNTING
2-/3-AXIS CONTROLLER

BMC TABLE VERSION
2-/3-AXIS CONTROLLER

HIGHER-LEVEL CONTROL

PC

SPS

STANDARD INTERFACES:
◆ Ethernet
◆ RS232
◆ RS422 (only EK2-Box)

OPTIONAL INTERFACES:
◆ Profibus   ◆ Ethernet/IP
◆ Profinet-IRT   ◆ DeviceNet (only EK2-Box)
                   ◆ 24 Volt I/O (only EK2-Box)

SHORT DESCRIPTION BMC AND EK2-BOX

	BMC	EK2-BOX
USE	315, 322, 325 (on request also for 310, 312V/L, 313, 314, 317)	310, 312V/L, 313, 314, 317
NUMBER OF MOTOR AXIS	2 or 3	2
DIMENSIONS	355 x 225 x 236	220 x 144 x 82
DISPLAY	fully graphic 10" touch display	four-line LCD display
CABLE LENGTH	up to 15 m	up to 10 m
CONFIGURATION ON THE CONTROLLER	yes	only partially possible
DESIGN AND PREVIEW OF MARKING LAYOUTS	yes	only in connection with PC
POSSIBLE LANGUAGES	all	only latin ones
INTERPOLATION (PRECISE AND MORE BEAUTIFUL FONTS)	yes	no
FIELDBUS EXCHANGEABLE ON SITE „PLUG AND PLAY"	yes	no

🔗 **Link** to Marking Controller BMC

We remain flexible.

Interfaces such as barcode scanners, camera systems or others are possible at any time on request. Please contact us or use the link or QR code below to find the accessories you require.

🔗 **Link** to BORRIES accessories

WE CAN ALSO
BE DIFFERENT!

In the area of special solutions or special-purpose machine construction, we have a wide range of products ready for you. The marking of special characters, DataMatrix codes or chassis numbers and the marking of complex components can be implemented using the various marking technologies:

From conventional marking technology to flexible, modular scribing and stylus marking machines to customised marking solutions for integration into the manufacturing process.

Since we regard ourselves as your system partner and that everything comes from a single source, we can respond to any customer requirements in the best possible way and in the shortest possible time, especially in the case of special-purpose machines.
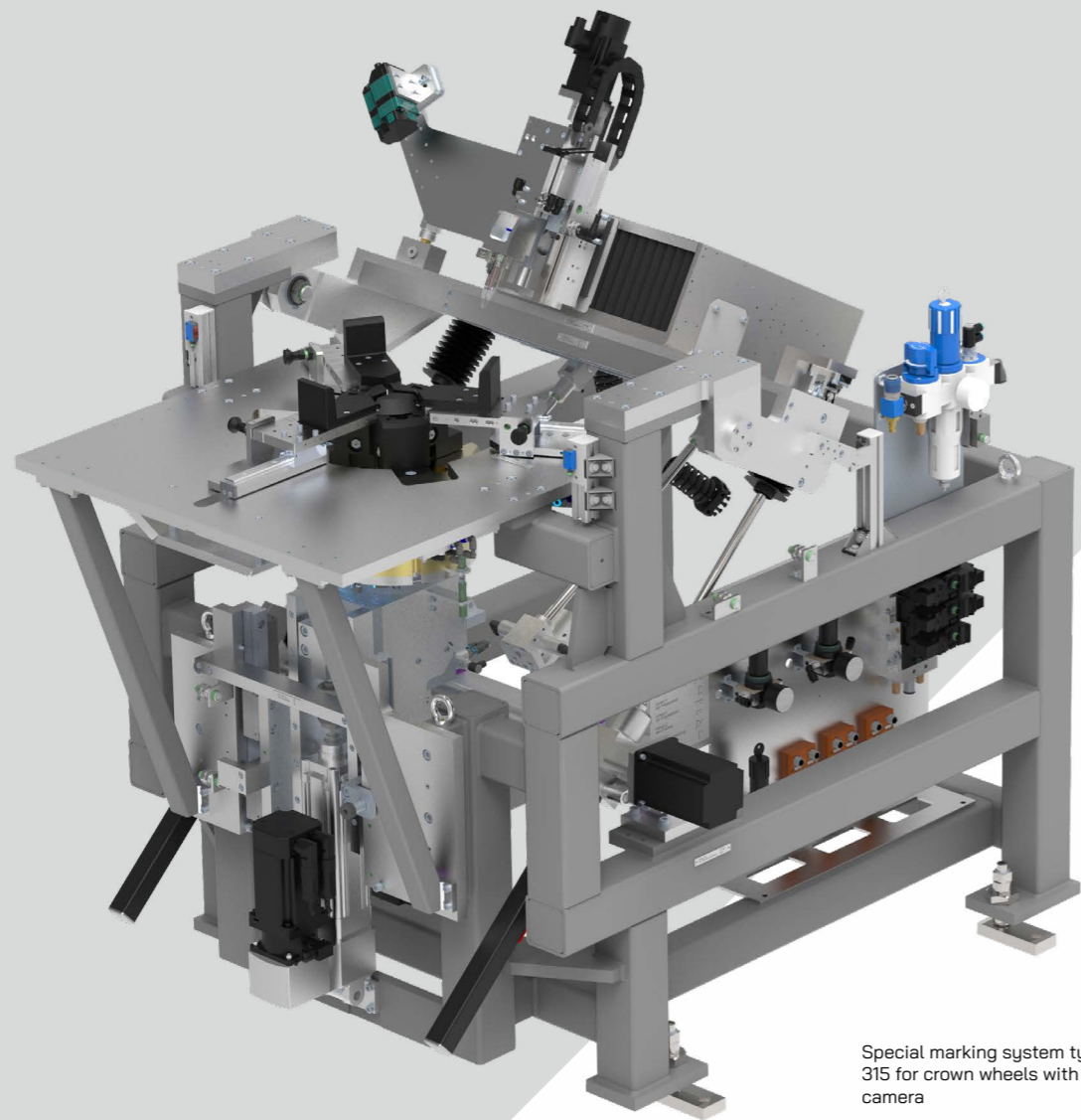
Special marking system type 315 for crown wheels with camera

Special solutions are easy for us.
Visit our website or give us a call.
TEL.: +49/ (0)71 27/ 97 97-0

🔗 **Link** to BORRIES special solutions

BORRIES® LEAVING A LASTING MARK!

WE NEVER LEAVE
YOU ON YOUR OWN.

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