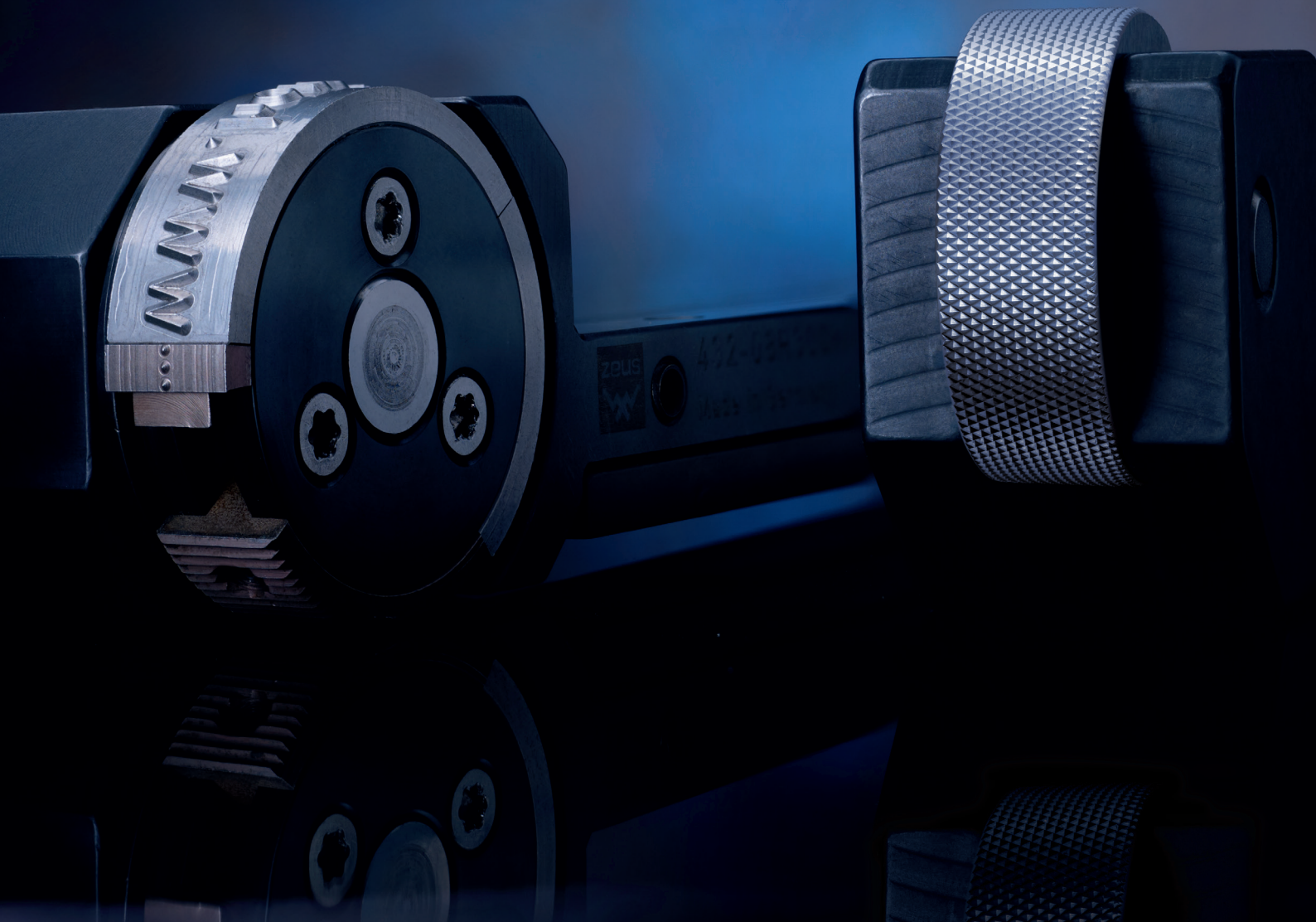




zeus product range

Knurling. Marking. Burnishing.



zeus knurling technology

Our company is global market leader in the field of knurling tools. Perfect precision, excellent visual appearance and first-class surface quality are the performance parameters for a superior knurling profile. zeus knurling tools offer the decisive advance for your success.

Our mission is simple: We will exceed the expectations of our customers with innovative, application-oriented tools and a customer-oriented service offering.

Experience performance by passion: zeus knurling technology.

zeus form knurling

Form knurling is a non-cutting process which is suitable for the treatment of cold forming material.

One of its substantial benefits is the versatility of applications.

Series RD1



Series RD2



Series RD3



- Suitable for all knurling profiles and markings
- Suitable for front, internal and conical knurling
- Knurling to a shoulder
- Tool can be started at any position of the work piece

zeus cut knurling

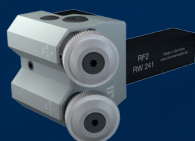
Cut knurling is the milling alternative to form knurling.

One of its substantial benefits is the treatment of small diameters, thin-walled work pieces, soft or difficult to machine materials.

Series RF1



Series RF2



Series RF3



- Material removal at axial feed drive
- Only suitable for cylindrical work pieces in axial tool direction
- Knurling to be started at work piece end or in the middle after a groove

zeus knurling wheels

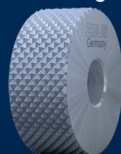
There is a variety of product variants for form and cut knurling applications. In addition to the standard products special profiles and customized knurling wheels complement the product portfolio.

The zeus knurling wheels are made of powder metal by default. Versions of HSS and carbide are available on request.

Surface treatment:

- TENIFER® salt bath nitriding heat treatment
- PVD-Coatings
- Polished knurling wheels

Forming



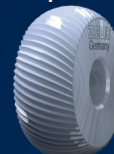
GE45°

Cutting



BL30°

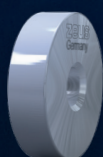
Special



FR 20°

zeus burnishing technology

Advantages



RRA



RRE

- Burnished work pieces show less friction and increased corrosion resistance
- Subsequent-treatments like grinding, honing or lapping can be easily replaced through roller-burnishing processes
- When used as a supportive roll, the bearing axis and clamping devices are less stressed, and the pressure on the work piece is minimized
- Suitable for the treatment of cylindrical work pieces, bores, faces, conical work pieces and also convex and concave outer contours

zeus marking technology

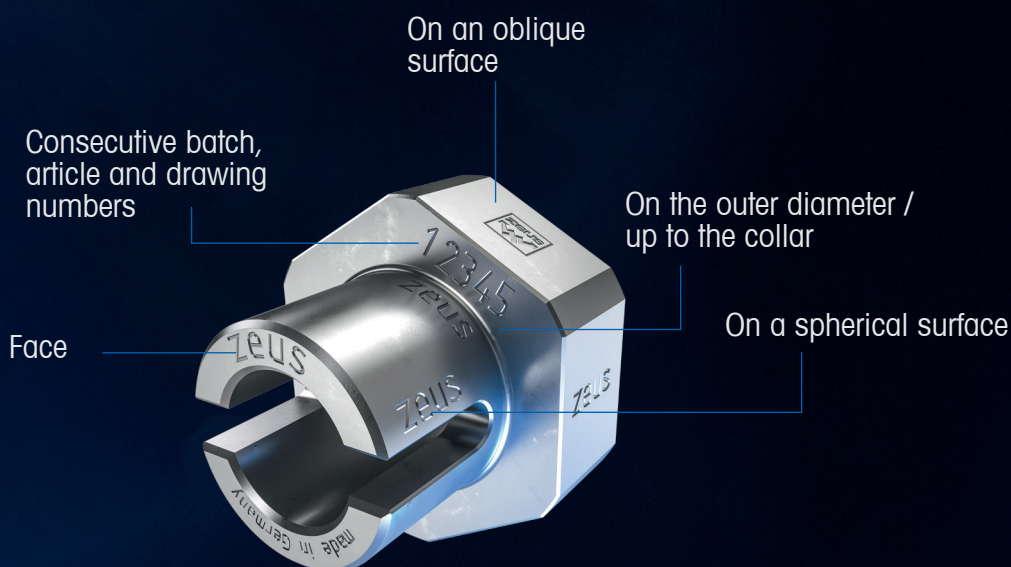


With zeus marking technology, workpieces and turned parts of all types can be marked fast, affordably and flexibly. The marking process is integrated directly in the machining process without changing to a separate machine. As a result, there are no additional setup costs or transport and storage times.

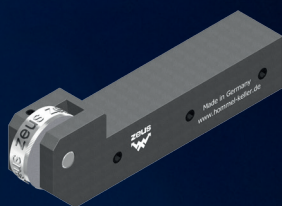
Full flexibility - The marking can be applied in any location up to the collar and on any workpiece diameter.

Efficiency for all series sizes. zeus marking technology is equally well-suited for all series and guarantees you efficiency in all applications – zeus marking technology fulfils your demands and remains permanently visible as it does not wear like e.g. laser marking.

zeus. Setting a mark.

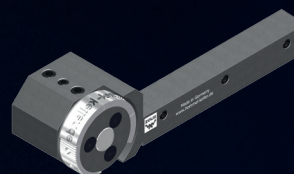


Revolving marking system



- Fast and affordable
- Marking rolls can be easily exchanged
- Easy handling
- Marking depends on the work piece diameter
- Drive provides for perfect revolutions
- Multiple revolutions ensure perfect precision and definition of the impression
- Perfect concentricity is essential
- The workpiece diameter must be guaranteed with only minute tolerance
- Lateral drives may be removed after marking

Spring-return marking system



- Different work piece diameters can be marked
- Flexible marking for different applications due to exchangeable text segments
- When switching to a completely different text: the complete carrier unit can be exchanged quickly and easily
- Marking up to a shoulder
- Three driving points guarantee a perfect impression
- To generate the impression, the roll turns only once and only partly. It stops at the end of the text.
- Achieving the impression depth at rapid traverse is possible



Special solutions

Quite often significant, long-lasting products can only be produced with individually designed tools. And that is precisely our area of expertise - extraordinary applications and the variety of interfaces are our strengths! Let us know your requirements - we develop the appropriate tool for you. More information is available in our catalogue „zeus knurling technology“ and "zeus marking technology".



zeus – a brand name of
Hommel+Keller



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