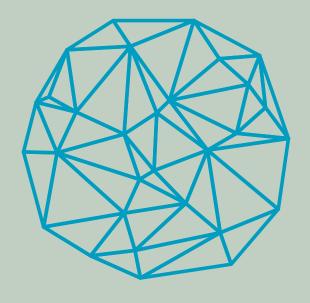
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# FOR HIGHEST DEMANDS

DIAMOND AND CBN TOOLS





# PERFECTION IS OUR STRENGTH



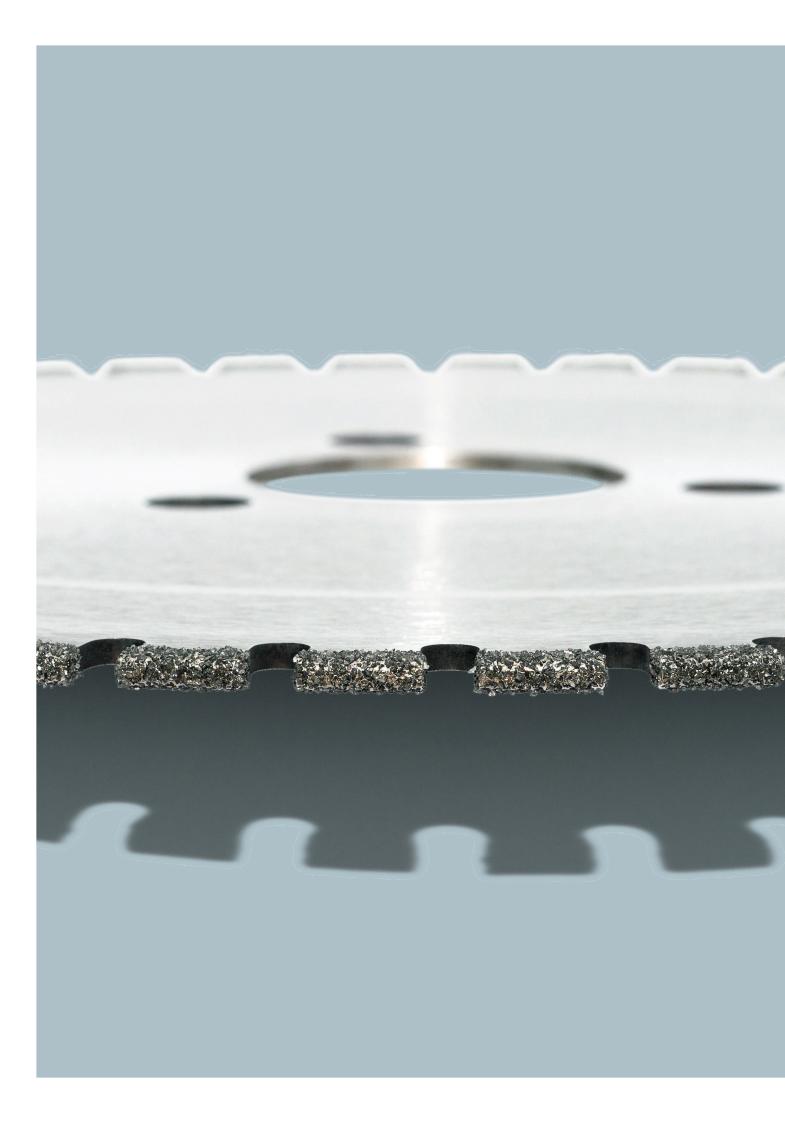


#### **BREU DIAMANTWERKZEUG GMBH**

We are an innovative, flexible, family-owned company with headquarters and one production site in Arbon (Swiss side of Lake Constance) and a subsidiary in Indaiatuba near São Paulo (Brazil).

Since 1994 we are specialized in the production and coating of high-quality electroplated diamond and CBN tools. Due to constant development of the technologies and the adaptation to the requirements of the market, we can today cover a wide range of industries and products.

Our advantages are customer-specific solutions and the accompanying high degree of flexibility.



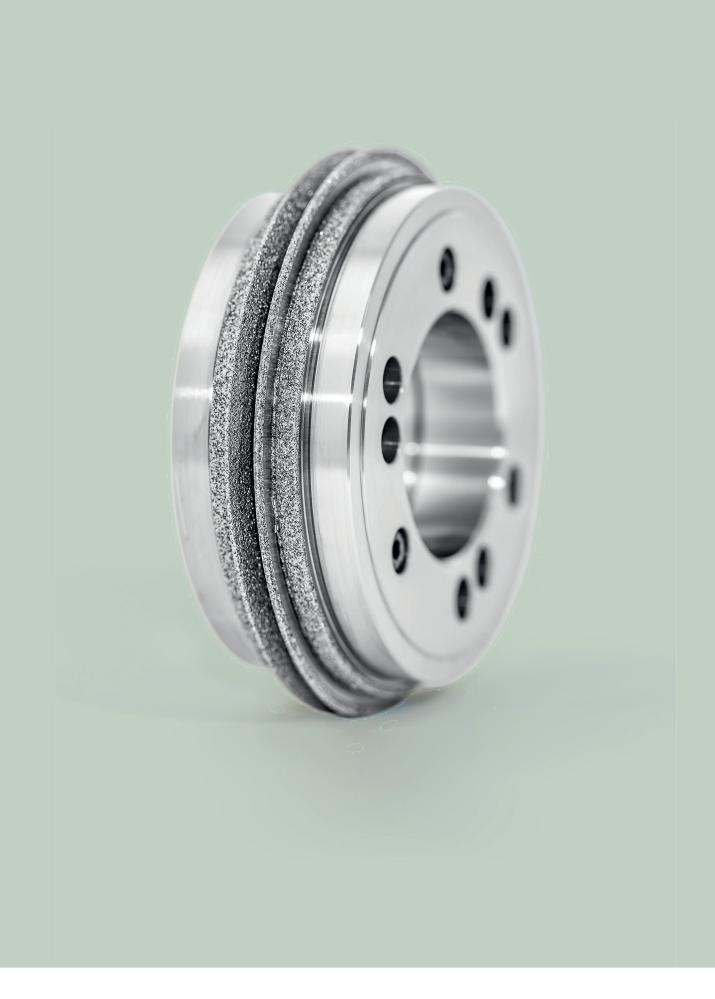
### DIAMOND FOR PERFECTION

We differentiate between natural diamond and synthetic diamond for coating. With both grain types the cutting edges of the diamond particles in the electroplated bond are renewed by grain breakage, which causes a continuous re-sharpening of the tools in use.

Diamond, as hardest material, is absolutely inevitable for machining of base materials, which cannot be machined with conventional abrasives. Additionally a higher torque at identical gripping power can be achieved with a diamond coating on gripping jaws.

Our range of products mainly covers:

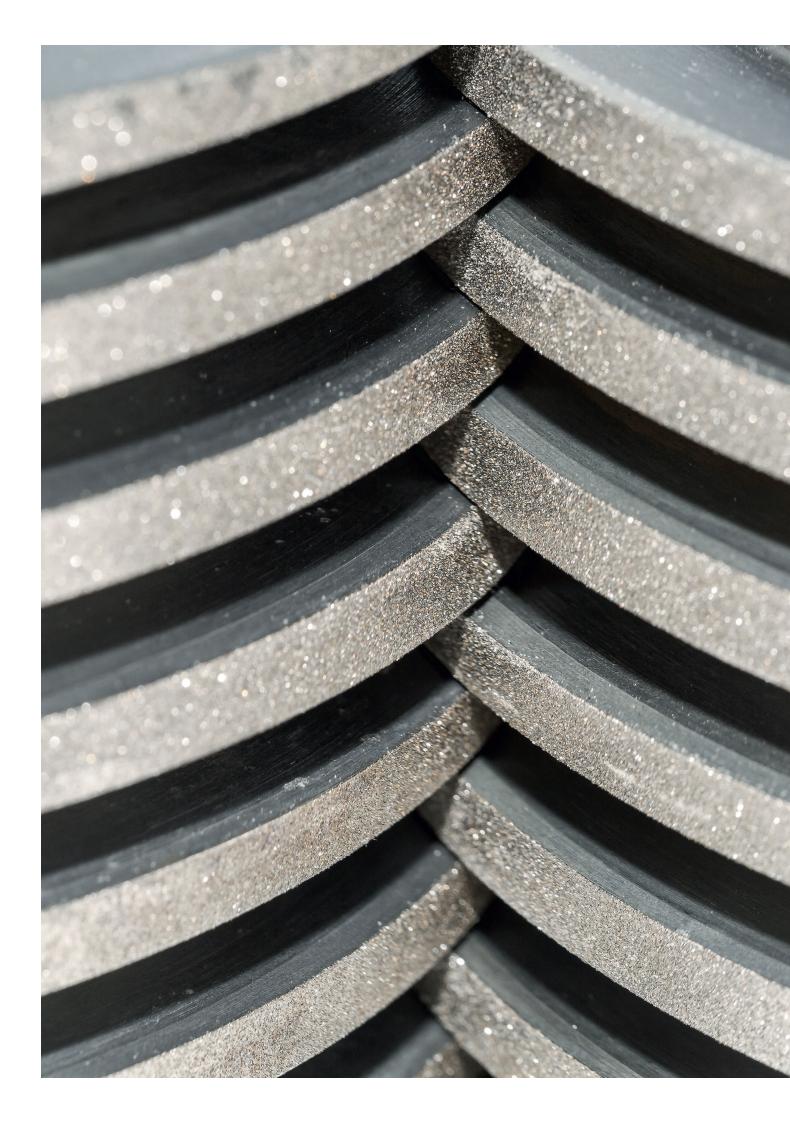
- Abrasive cutting wheels, milling and drilling tools for use in the glass and ceramics processing industries, glass fiber and carbon fiber processing, automotive and jewel industry
- Clamping and gripping jaws
- Driving rollers
- Wear parts and guides
- Files and deburring tools



### **GEAR GRINDING**

We produce the suitable tools for every generating grinding machine available on the tool market. With the specialized software we have developed, we are able to support you in the setup of your complete project, starting from the layout of the tool, down to the completely machined gear wheel.

- CBN profile discs for rough grinding and finishing operations
- Single-cone and twin-cone discs
- full section rollers for single-flank and dual-flank dressing processes



## CBN FOR MACHINING OF STEEL

We manufacture elctroplated CBN tools in constantly high quality. CBN enjoys a significant advantage over diamond as grinding material in terms of its thermal stability. Diamond suffers massive loss of hardness at about 700 °C, whereas the hardness of CBN remains almost unaltered even at above 1000 °C. Like with diamond, also the cutting edges of the grinding particles on electroplated CBN tools are re-sharpened in use continuously by grain breakage.

Electroplated CBN discs are most suitable for preparational machining operations in serial production.

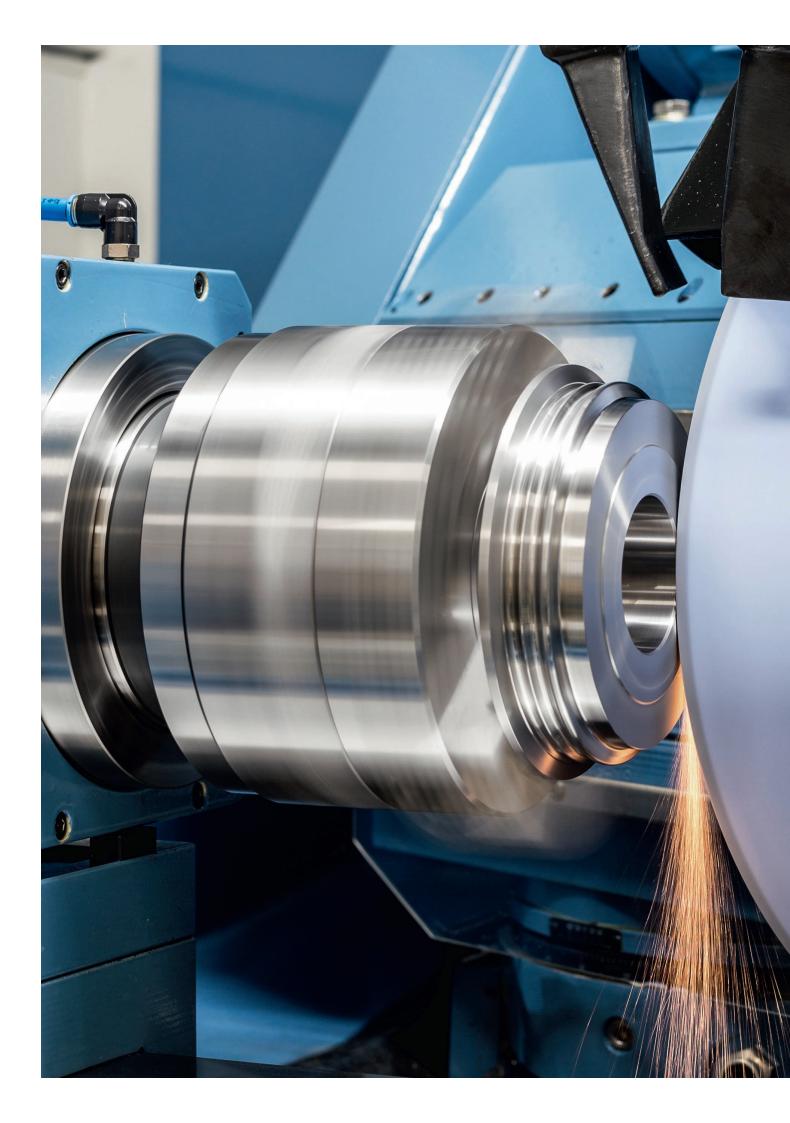
The main advantages are:

- No trimming (and therefore no additional operation costs)
- Cost effectiveness through multiple re-coating of the same tool body
- Enormous abrasive performance

#### We manufacture:

- Form-grinding discs for use in automotive and mechanical engineering.
- Grinding discs for use in machining of blades and finishing of any profiles.
- Profile discs for deburring and rough grinding.
- Special grinding discs for the use in medical industries.



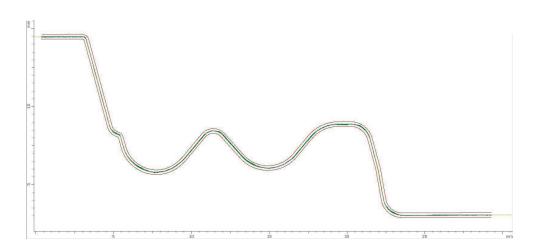




### DRESSING WITH DIAMOND DRESSING TOOLS

We manufacture electroplated male dressing tools, which are most suitable for producing small series or prototypes.

In the dressing process dressable grinding discs, e.g. corundum or ceramic grinding discs, are reconditioned with an electroplated diamond tool.



The advantages of electroplated male dressing tools are:

- Short delivery times
- Cost effectiveness
- Re-coating is possible

Our production range includes form wheels, contour wheels, dressing wheels and special dressing tools for dressing in processes like cylindrical and surface grinding, contour grinding, grinding and honing processes, machining of valves, machining of ball bearing rings and production of turbine blades.

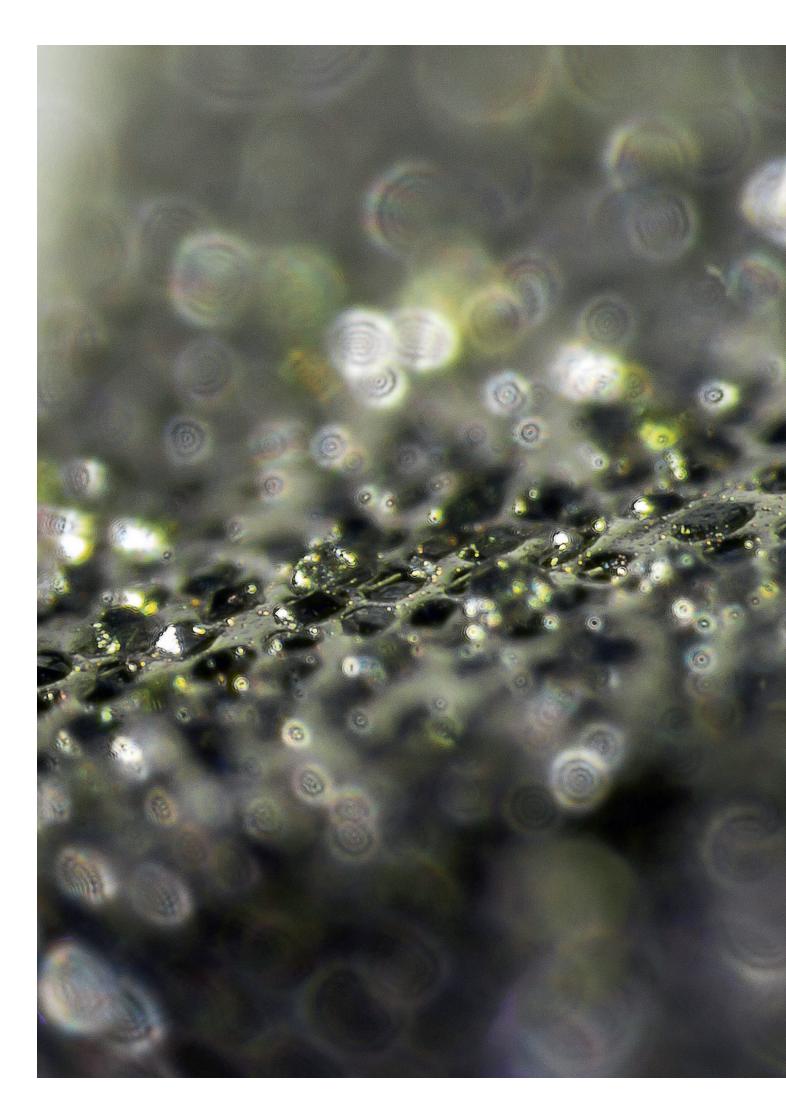


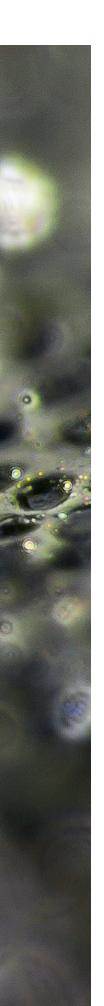
#### **SPECIAL COATINGS**

We can coat tools with different grain sizes on one tool, which enables the execution of different operations like rough grinding and finishing, without the change of tools.

Tools with multi-layer coatings with equal or different grain sizes achieve longer tool life. By this the additional advantage of cost reduction is gained, due to the necessity of fewer tool changes.

Coating of almost any tool shape and on various base materials, like carbide metal, brass, aluminium and ceramics is possible.





## QUALITY AS PHILOSOPHY

Both production sites, Switzerland, as well as Brazil, are certified according to ISO 9001.

Continuous improvement and optimisation of our processes leads to a constant increase in our product quality.



## COATING WITH MICRO GRAINS

We coat tools, starting from grain size of D/B 7 as standard. Finer grain sizes can be offered upon request.

To comply with the high requirements of certain finishing and superfinishing processes of hard materials, the use of micro grains is inevitable.

These tools are mainly used in the automotive, semi-conductor, clock and watch industries, as well as in micro electronics, glass fiber and medical industries.





#### **BREU DO BRASIL LTDA.**

With the founding of our subsidiary Breu do Brasil Ltda. in June 2006 we started our activities on the South-American market. Parallel to the activities in Switzerland, high-quality diamond and CBN tools for automotive, aircraft and sub-supplier industries are produced in our plant in Indaiatuba near São Paulo.

Due to the advantage of a local factory in Brazil our subsidiary in Brazil grew faster than expected. Breu do Brasil Ltda. succeeded in gaining a foothold on famous companies on the national market soon and by that developing the existing technologies at a high speed.

In June 2015 we were able to transfer production into the newly built factory. We mainly produce tools for the Brazilian market, but also for the whole of South America, as well as Mexico and Asia.

### **CONTACT**

We would be pleased to receive your request for a personal consultation. Contact us, as we would like to assist you in your project.



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