

**BROELL GmbH & Co.KG produces high-quality components from ultra pure, high-tech fine ceramics: from powder to product.**

**BROELL is specialized in the development and production of components made of advanced ceramics joined with metal and plastic.**



# Culture

Founded in 1884, BROELL is a dynamic manufacturing company that is steeped in tradition and progressive with our young employees. Innovations distinguish our enterprise.

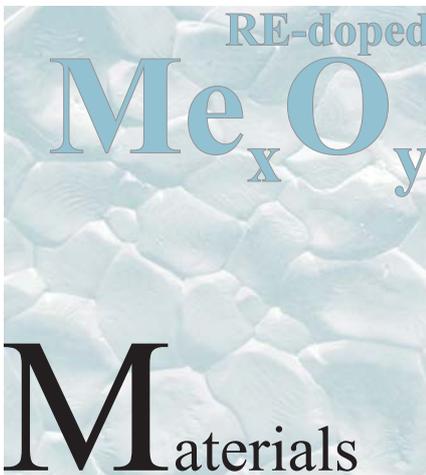
We use national and international grants for our basic industrial research and the permanent build-up of new technologies. We have 3D-Print and other rapid manufacturing methods in specified BROELL-ceramics. Therefore the production of a single piece up to series production of > 100.000 pcs/a is always in series quality!



# Power

Custom-made highly advanced ceramics are strategically relevant for us. BROELL installed a full-level manufacturing facility in Dornbirn/Austria in 2000 - for the highest level of quality.

These BROELL components released an innovative progress in textile machinery engineering. The employment of extremely wear-resistant and fiber-friendly advanced ceramics led to a world-wide market acceptance of our products: BROELL became the market leader with the development and production of high speed nozzles for rotor spinning within four years.



# Materials

For the production of our advanced ceramics we use only ultra pure metallic oxides, which we process in our facility from BCA- powder to the finished component - with special surface specifications.

We join the different materials and groups of components by sophisticated force fitting techniques.

With advanced ceramics there is much concern about tenacity / brittleness / optics of these materials. Our ambition is to squeeze out the maximum of the physical-theoretical characteristic values.

By doing this, we are able to minimize the defects due to specialised production engineering. Not only do the wear and break characteristics improve, but also the heat conductivity of our alumina is twice as high as austenitic steel.



# Ability

BROELL links material, surface and textile technology to sophisticated advanced components.

BROELL challenges all tribological problems: Many problems including loss of power, loss of productivity, contamination, as well as many others are due to changes of friction, wear and lubrication.

BROELL solves these problems regarding functionality and economy completely. The knowledge of process engineering, surface technology and material sciences comes together at our company. With components from BROELL a consistent conversion and exploration of the potential of these materials take place to adopted surfaces and innovative plug and play - products.



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