

ABN

ABN700 ABN760P

Element Six announces two additional cubic boron nitride products to its ABN Series, designated ABN700 and ABN760P. These new products offer a unique combination of intermediate strength, good thermal stability and sharp fracture characteristics.

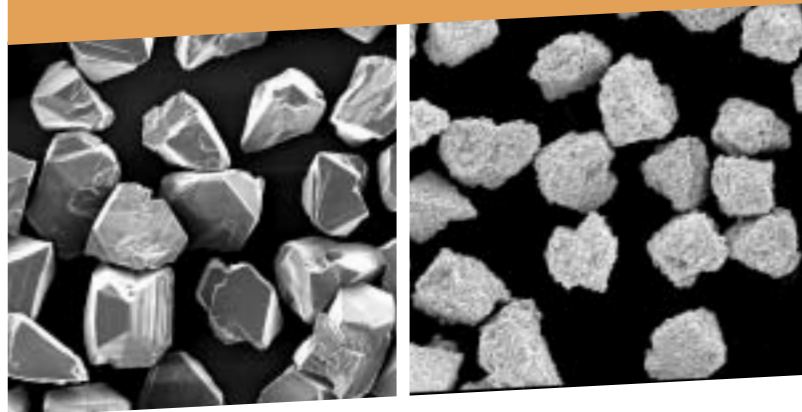
ABN700 increases the choice of cBN abrasives available to the toolmaker by offering a product with a particle strength intermediate between that of the high strength ABN800 and the friable ABN200 products. An option is thus provided where a product is required to withstand higher grinding forces than that of ABN200, but where the very high strength of ABN800 may not be required. Its higher thermal stability makes it particularly suitable in vitrified bonds.

The success of ABN800 in the most demanding applications has demonstrated the desirability of sharp fracture characteristics resulting in lower grinding forces. ABN700 has a crystal morphology and structure close to that of ABN800 which ensures this desirable crystal fracture behaviour.

ABN760P comprises ABN700 with an electrolytic cladding of nickel (60% by weight). ABN760P is primarily designed for use in high performance resin bond tools, where the combination of intermediate strength for good metal removal rates and sharp cutting characteristics for free-cutting are required. An electrolytic rough nickel cladding has been selected for ABN760P to ensure good bond retention.

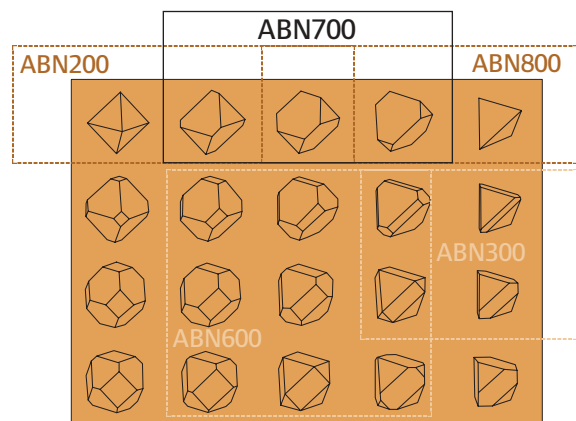
Advantages

- ABN700 – Intermediate strength, high thermal stability, sharp fracture characteristics.
- ABN760P – Clad with 60% weight electrolytic nickel for optimum bond retention.



ABN700

ABN760P



Morphology chart to show the comparison between ABN800 and ABN700.