

# Product Introduction

## Super-abrasives CBN & Diamond

### Ultra-precision Mounted Point(CBN & Diamond)

FSK is capable to standardize electroplated mounted point from 0.05mm , and vitrified bonded mounted point from 0.8mm.

Also, FSK has long terms relationship with the fuel injection nozzle industries from gasoline engines to the high pressure required common rail diesel engines, as well as miniature bearing industries in which required the most precision and consistency as the mass production line items.

Our over 65 years vitrified bonded system experiences help the solution of the customer's request, we achieve lower grinding resistance and continuous stable grinding performance which used to conflict each other.



The synthetic diamond had been invented in the 50s, to take a place of the natural diamonds, with industrial stable quality to be selected for each grinding appreciation. It is still the hardest material on earth.

In 1969, General Electrics had invented the synthesis of Cubic Boron Nitride (CBN) which revolutionized the grinding capability for steel, cast iron and super alloys that were difficult to apply the diamond grit.

CBN is not found naturally, and introduced to the market as the second hardest valuable material on earth.

## VITBORA

After 1969, as company G.E. invented CBN "Borazon", then FSK introduced "VITBORA(vitrified bonded CBN Grinding wheel)" into the market. FSK is the 1st company to develop CBN vitrified bonded grinding wheel in May, 1971.

\*VITBORA is the registered name by FSK Inc.,

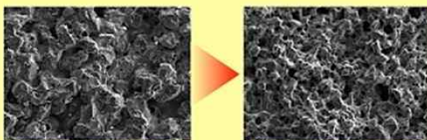


## VITBORA G type

Suitable for high precision mass product internal grinding, with better dressing ability.

Uniformity pores make higher holding capability of the abrasive. This provides lower grinding resistance and continuous stable grinding performance.

Also, lower dressing resistance makes longer dressing stone's life. At the precision mass product internal grinding, this G-type provides less rejection ratio because of better grinding ability and stable surface finish after the dressing.



Stable after dressing, because of large number of pores and uniformity.

### Share of Mounted Points.



With general-use mounted points and CBN/diamond mounted points together making up 600 kinds of mounted wheels in standard stock, we are ready for immediate delivery. From general grinding to precision finishing. Our unrivaled product line and speedy service, our customers' ideas take shape.



**Conventional Precision Grinding Field.**  
Our product range starts from 0.8mm to any size depending on client needs. One of our strong fields for miniature bearing industries, both race and bore. We also can offer you from stainless steel to tungsten carbide shank which can be returned to re-work the grinding stone.

### Skilled Abrasive Tool Design.



Using our skills and know-how accumulated over long years, we have created a "Bond System" to control our binder. By choosing the optimum binder for a given set of processing conditions, we are manufacturing abrasive tools that meet the needs of our customers. While at the same time doubling tool performance, we continue our research and development to further improve tolerances.

### The Preferred Honing Tools.



We design and manufacture honing tools to match the product being honed and the machine being used so that under every condition, 100% performance is brought to bear. With thorough support to meet our customers' needs, e.g. the requirements of 1.5mm minimum small-bore ID honing, we will bring about tolerances such as a circularity of less than 0.5µm and a cylindricity of less than 1.0µm.

### Abrasive Stone Manufacturer.



To increase the tolerance of PCD & PCBN tools, we design and manufacture diamond abrasive wheels used in tool grinding machines. Because we are an abrasive wheels manufacturer that makes our own diamond abrasive wheels, we are capable of producing PCD & PCBN tools with a tolerance in the micron. Also, we have developed our own machine cutting tools, and while continuing to improve the tolerance of our PCD&PCBN tools, we are meeting the challenge of regrinding.

### Deburring Tools.



We, FSK Inc., are selecting the most suitable item from various types of deburring tools, to solve the deburring operation for any types of operation process. Especially our Electroplated Diamond Slit Pin applied to the burr at the internal hole process, we offer you our own design and made-to-order product with our original know-how to meet your own operation step.