

SumiDia PCD Diamond Insert

Since the introduction of SUMIDIA DA polycrystalline diamond (PCD) blanks in 1978, Sumitomo has continually developed and expanded the product line to offer finished inserts in a wide range of grades, shapes and sizes. SUMIDIA inserts consist of a layer of fine grain synthetic diamond crystals bonded to a tungsten carbide substrate which is securely brazed into the pocket of a standard size insert. A high degree of diamond to diamond bonding is achieved by an ultra high pressure-temperature process. This crystal to crystal bonding provides exceptional hardness and abrasion resistance. Our closely controlled manufacturing process

produces unequalled consistency resulting in superior tool edge quality.

SUMIDIA DA inserts and wipers are replacing tungsten carbide and natural diamond cutting tools on a worldwide basis. Use of SUMIDIA DA grades will provide dramatically increased tool life, the ability to hold closer part tolerance, and improved surface finish.

New technological advances have given the industry a new style of PCD insert. The optimum size of PCD used in NF-DA2200 offers a less expensive alternative when machining non-ferrous materials.

GRADE DESCRIPTION

Grade	DA2200	DA150	DA200
Average Diamond crystal size (microns)	0.5	5	0.5
Hardness (Hv)	9,000-10,000	10,000-12,000	8,000-10,000
T.R.S. (kg/mm ²)	250	200	220
Product Description	• High density sintered material made of ultra-micro diamond particles • Superior hardness and wear resistance with sharp edge	• Fine grain diamond • High abrasion resistance	• Ultra-fine grain structure • Superior tool edge sharpness and toughness
Applications	• High Silicon Aluminum • Copper • Fiberglass • Hard Rubber • Graphite Epoxy • Wood • Aluminum Alloys (finish, rough and interrupted)	• High Silicon Aluminum • Copper • Fiberglass • Hard Rubber • Graphite Epoxy • Wood • Carbon	• Plastics • Wood • Aluminum applications where low microfinish is needed



General Info

Negative Inserts

Positive Inserts

Ace-Fix Inserts

Threading, Grooving, & Cut-Off Inserts

Ceramic Inserts

PCBN & PCD Inserts

Toolholders

Swiss Toolholders

Boring Bars

Technical Info

ALMT