

# Premium Grade Graphite

# **TTK Series**

- Super high accuracy mold machining -

### **Electrode Machinability**

Extremely low & even distributions of impact on Cutting tools result "Superior shape machining" of electrodes.

Realize high speed machining by Low cutting resistance (about 1/10 of Metals like copper).

No burrs to remove in secondary operation

### Wire-cut EDM

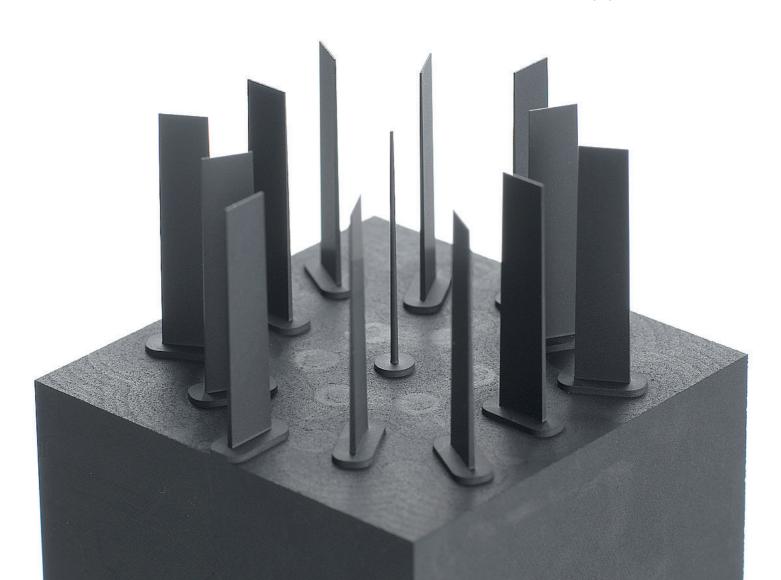
Extremely low & even pore distribution structure result in a "No Oxide" attack which could cause wire breakage"

2 to 3 times of higher EDMing speed (Compared with conventional graphite)

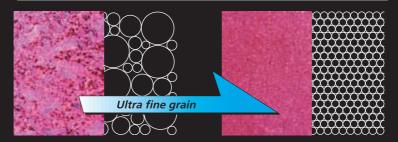
No warping & deforming in super small (thin) ribs machining are realized by low C.T.E property. C.T.E: Coe·cient of Thermal Expansion

### Die sinker EDM

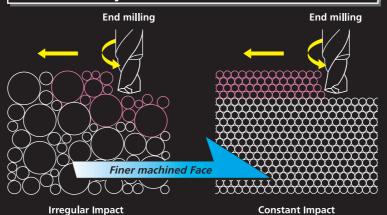
Extremely low electrode wear rate realizes sharper corners & edges. Realize no waviness on all discharging surfaces.



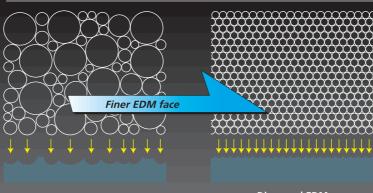
### Structure



### Machinability



### **Surface Roughness**



**Dispersed EDM** 

### **Physical Properties**

| Material Name          | _            | ISEM-8 | TTK-50 | TTK-4 | TTK-9 |
|------------------------|--------------|--------|--------|-------|-------|
| Bulk Density           | <b>Mg</b> /㎡ | 1.78   | 1.80   | 1.78  | 1.77  |
| Hardness               | HSD          | 63     | 70     | 72    | 90    |
| Electrical Resistivity | μΩ·m         | 13.4   | 13.0   | 14.0  | 18.0  |
| Flex.Strength          | MPa          | 52     | 60     | 73    | 92    |

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