高硬度・高韧性・耐腐蚀性超硬合金EW类

LINE UP.....EW10, EW25, EW40

HIGH-HARDNESS, HIGH-TOUGHNESS AND CORROSION-RESISTANT CEMENTED CARBIDE - EW GRADE

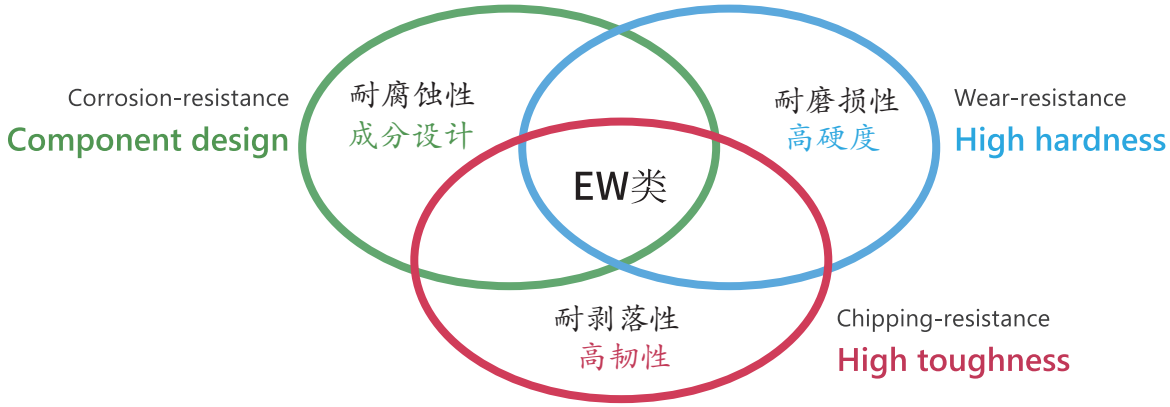
高硬度・高韧性・耐腐蚀性材质

优化耐磨损、耐剥落、耐腐蚀的平衡。

High hardness, toughness and corrosion-resistant cemented carbide

Optimized resistance balance of wear, chipping and corrosion.

产品说明 Explanation	与同一硬度材质进行比较，由于破坏的韧性值相对较高，在不降低硬度的情况下，预防和改善裂纹，剥落，碎片的情况。另外，耐腐蚀性也很突出。 When compare to other grade which is same hardness, there is possibility that resistance of chipping and defects will be improved without dropping hardness because fracture toughness is relatively high. Corrosion-resistance is excellent also.
用途/实例 Applications	对于发生剥落或破损的耐磨损部品，适合放电加工的耐磨损部品或长时间用水介质线切割加工的耐磨损部品。 For wear-resistant parts which has concern about chipping or defect, EDM process or WEDM (water type) processing in prolonged manufacturing.



EW类的物理性能
Physical properties of EW grade

本公司产品代号 Our grade	硬度 Hardness HRA	抗弯强度 TRS [GPa]	破坏韧性值 Fracture toughness value [MPa・m$^{1/2}$]	密度 Density [×10^3 kg/m^3] {g/cm^3}
EW10	91.0	3.5	15	14.8
EW25	89.5	3.5	22	14.3
EW40	88.0	3.5	29	13.9

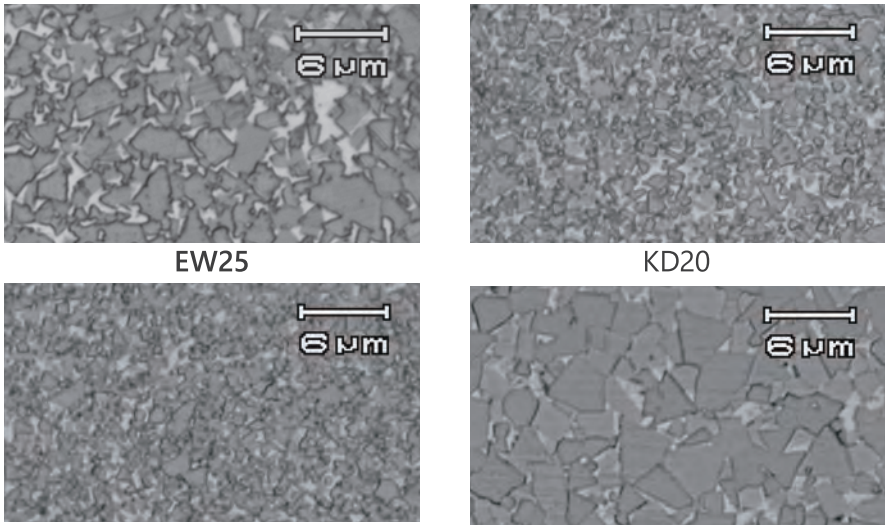
(代表值 / Typical figures)

特性
Characteristics

本公司产品代号 Our grade	硬度 Hardness HRA	抗弯强度 TRS [GPa]	破坏韧性值 Fracture toughness value [MPa・m$^{1/2}$]	密度 Density [×10^3 kg/m^3] {g/cm^3}
EW25	89.5	3.5	22	14.3
KD20	90.0	3.7	16	14.2
WD20	90.5	3.7	16	14.1
MC20	90.0	2.8	19	14.9

(代表值 / Typical figures)

组织照片
Micrographs

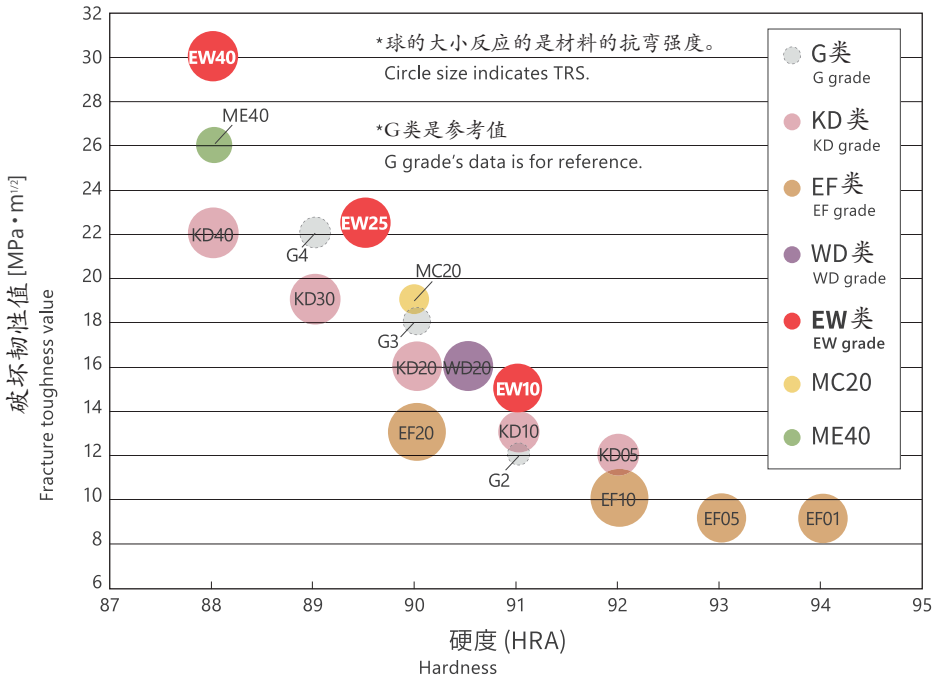


EW25　KD20

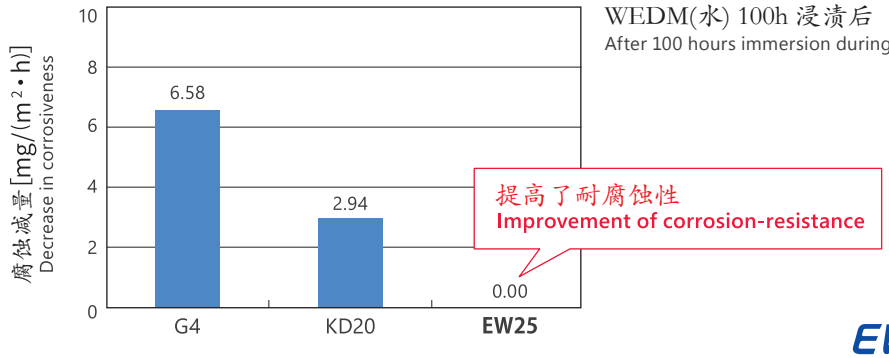
WD20　MC20

金属显微镜（X1000）
By metallurgical microscope (×1000)

耐腐蚀硬质合金定位表
Positioning in corrosion-resistant cemented carbide



耐腐蚀性能
Performance of corrosion-resistance



WEDM(水) 100h 浸渍后
After 100 hours immersion during WEDM (water type) process.