

# 非磁性·耐腐蚀性超硬合金KN20



## NON-MAGNETIC AND ANTI-CORROSIVE CEMENTED CARBIDE - KN20

### 非磁性·高耐腐蚀性超硬合金

KN20超硬本身没有磁性、即使受外部影响也没有磁性。  
具有非常高的耐腐蚀性和耐化学性。  
比普通的WC-Co类超硬合金具有更好地抗氧化性。

### Non-magnetic and anti-corrosive cemented carbide

Completely free magnetism and magnetization from extraneous effect.  
Outstanding corrosion-resistance and chemical proof.  
Excellent oxidation-resistance than general WC-Co cemented carbides.

 <p>产品说明 Explanation</p>	<p>通过使用超硬合金的结合相Ni实现了非磁性。 由于结合相是Ni, 因此具有良好的耐腐蚀性, 并对各种溶剂环境皆能发挥稳定的性能。 Non-magnetic carbide by binder phase with Ni. Stable corrosion-resistance against various liquid solution and atmospherics by binder phase with Ni.</p>
 <p>用途/实例 Applications</p>	<p>磁场成型用模具、磁带用工具、电子设备、化学设备用零件, 机械密封、装饰用品等超硬合金部件。 Magnetic field forming mold, Tools for magnetic tape, Electronic equipment, Parts for chemical equipment, Mechanical seal, Decorative parts, etc.</p>

### KN20物理性能

Physical property of KN20

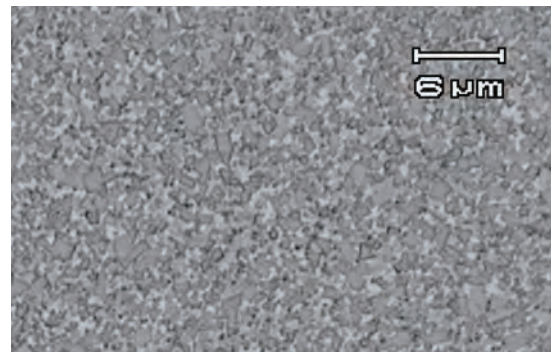
本公司产品代号 Our grade	密度 Density [ $\times 10^3 \text{ kg/m}^3$ ] [ $\text{g/cm}^3$ ]	硬度 Hardness HRA	抗弯强度 TRS [GPa]	透磁率 Magnetic permeability [H/m]
KN20	14.2	90.0	3.2	$1.28 \times 10^{-6}$

(代表值 / Typical figures)

透磁率越接近  $1.26 \times 10^{-6} \text{H/m}$ 、非磁性性能越高  
The nearer magnetic permeability is  $1.26 \times 10^{-6} \text{H/m}$ ,  
the higher non-magnetic performance is.

### KN20组织照片

Micrographs of KN20



金属显微镜 (X1000)  
By metallurgical microscope ( $\times 1000$ )

### KN20之耐腐蚀性(与G类进行比较)

Corrosion-resistance of KN20 (Comparison with G grade)

本公司产品代号 Our grade	腐蚀减少量 Decrease in corrosiveness [ $\text{g}/(\text{m}^2 \cdot \text{h})$ ]			
	10 % NaOH	10 % KOH	10 % HCl	10 % HNO <sub>3</sub>
	KN20	0	0.01	0.08
G2	0.02	0.03	0.09	7.99
G5	0.02	0.04	0.09	28.34