

▲ 概述:

耐诺碳化钨珠NanorWC由掌握关键核心技术的全球领先的滴定滚动工艺成型，在密封电炉中加压烧结而成。硬质合金材质和致密的晶相结构造就了珠子至高的密度、强度和优异耐磨性，是研磨介质微珠行业革命性的创造。

▲ 特点

- 至高的密度: $>14.5\text{kg/dm}^3$ ，是氧化锆珠的2.5倍；
- 超高的硬度: $>1500\text{kg/mm}^2$ ，高出氧化锆珠约25%；
- 超高的耐压强度: $>250\text{kgf}$ ，高出氧化锆珠30%；
- 稳定性佳: 耐酸碱腐蚀，耐高温老化。

▲ 应用领域

- 超硬材料的研磨: 氧化铝、氮化硼、碳化硅、氮化硅和碳化钨等材料；
- 纳米行业: 高密度的碳化钨微珠能完成高效的能量的传递，超低的磨耗保证物料进行无污染的纳米级研磨。如新能源电池材料、电子浆料、显示屏颜料和半导体材料等。



0.3mm(放大照)



1.0~1.2mm

▲ Description:

NanorWC cemented carbide bead is shaped with cutting edge dropping & rolling method and is sintered in the pressure electric oven. The compact microstructure of bead offer the bead the highest density and wear resistance. It is a creative invention of grinding media special in small sizes for nano size grinding.

▲ Features:

- Highest density: $>14.5\text{kg/dm}^3$, is 2.5 times of zirconia bead;
- Super hardness: $>1500\text{kg/mm}^2$, more than 25% higher than zirconia bead;
- High compressive strength: $>250\text{kgf}$, 30% stronger than zirconia beads.
- Super stability: acid & alkaliresistance, high temperature resistance.

▲ Applications:

- For high hard material grinding: alumina, boron nitride, silicon nitride, silicon carbide, tungsten carbide and other material.
- Nano grinding and dispersion: higher energy transmit to small sizes of Nanor-WC bead guarantee nano meter grinding in free contamination.



▲ 化学成分 Chemical Composition:

成分	WC	Co
wt%	$\approx 90\%$	$\approx 10\%$

▲ 物理性质 Typical Properties:

比重 Specific Gravity	散重 Bulk Density	莫氏硬度 Hardness Mohs	维氏硬度 Hardness Vickers	耐压强度 Crushing Strength	断裂韧性 Fracture Toughness	弹性模量 Elasticity Module
$\geq 14.5\text{kg/dm}^3$	$\geq 8.5\text{ kg/L}$	9.5	$>1500\text{kg/mm}^2$	$> 250\text{kgf}(2\text{mm})$	$>15\text{ MPa}\cdot\text{m}^{\frac{1}{2}}$	$>710\text{GPa}^{\frac{1}{2}}$

▲ 规格 (Sizes) 珠 (Beads):

型号 Code	NW1	NW2	NW3	NW4	NW5	NW6	NW7	NW8	NW10	NW12	NW14	NW16	NW20	NW25
粒径(mm) Sizes	0.1	0.2	0.3	0.4	0.4~0.6	0.6~0.8	0.7~0.9	0.8~1.0	1.0~1.2	1.2~1.4	1.4~1.6	1.6~1.8	2.0mm	2.5mm

▲ 球 (Balls):

型号 Code	NWB3	NWB3.5	NWB4	NWB4.5	NWB5	NWB5.5	NWB6	NWB6.5	NWB7	NWB7.5
粒径(mm) Sizes	3.0mm	3.5mm	4.0mm	4.5mm	5.0mm	5.5mm	6.0mm	6.5mm	7.0mm	7.5mm

型号 Code	NWB8	NWB8.5	NWB9	NWB9.5	NWB10	NWB10.5	NWB11	NWB11.5	NWB12	NWB12.5
粒径(mm) Sizes	8.0mm	8.5mm	9.0mm	9.5mm	10.0mm	10.5mm	11.0mm	11.5mm	12.0mm	12.5mm