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# TENCAN

## Product Brochure



**BALL MILL MEDIA**

## Tungsten carbide mill ball

High-hardness, wear-resistant tungsten carbide mill ball for grinding in harsh environments. Resists corrosion and bending, ideal replacement for steel balls in milling applications.

<https://www.planetaryballmills.com/products/grinding-series/ball-mill-media/tungsten-carbide-mill-ball.html>

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## Product Overview

High-hardness, wear-resistant tungsten carbide mill ball for grinding in harsh environments. Resists corrosion and bending, ideal replacement for steel balls in milling applications.



## Product Introduction

Carbide balls, commonly known as tungsten steel balls, refer to balls and rolling balls made of cemented carbide. Carbide balls have high hardness, are wear-resistant, corrosion-resistant, bending-resistant, and can be used in harsh environments. They can replace steel ball products.







## Technical parameters

**diameter:**  $\Phi$ 1mm- $\Phi$ 30mm

**Main ingredients:** Made of sintered WC, Co, etc.

**Density (g/cm<sup>3</sup>):** 14.5 - 15.0

**hardness:** Very high, HRA 88-93

**Wear resistance (wear rate):** Top grade, extremely low wear rate, up to  $10^{-9}$  g/h

**Contamination risk:** Low, almost no wear on itself

**Main application areas:** Ultra-fine crushing of super-hard, high value-added materials, such as silicon carbide, high-purity quartz, and cemented carbide powder.

**\* The above parameters are for reference only. The specific parameters are subject to actual conditions or customized parameters can be customized according to special requirements.;**

## Product Features

The main component is tungsten-cobalt alloy (WC-CO), which has higher hardness and wear resistance, better toughness than YG6 alloy balls, and has good impact and vibration resistance. It is suitable for making parts with strong impact and vibration. Punching alloy balls can also be called extruded holes, extruded alloy balls, and carbide punching balls.

- (1) High density, which can be as high as 15.1g/cm<sup>3</sup>, small porosity, super wear resistance and corrosion resistance, and its service life is extended dozens of times than ordinary tungsten steel balls.
- (2) High precision, tolerance not exceeding 0.001MM, good smoothness, no pitting, and strengthened surface treatment (this process is not available in ordinary manufacturers).
- (3) It can be produced in small batches. The company has developed a production process that can produce at least 3 pills and ensure ovality.

## Accessories & Customization

### Accessories

Grinding jars, heating elements, sample holders, control modules and other matching accessories can be selected according to the product configuration.

### Customization

For voltage, capacity, chamber size, process temperature or application requirements, please contact TENCAN for a suitable configuration.