

Tungsten Round Sputtering Target for Vacuum Coating

This high-purity tungsten sputtering target is designed for vacuum coating applications. It maintains hardness and ductility, making it suitable for semiconductor and micro-electronic applications.



Product Overview

High-Purity Tungsten Sputtering Targets

These tungsten sputtering targets are engineered for high-performance vacuum coating and PVD processes, offering exceptional stability in high-temperature environments. Characterized by the highest melting point of all pure metals and the lowest coefficient of thermal expansion, they ensure the deposition of homogeneous thin films. These targets are specifically optimized for semiconductor, micro-electronics, and TFT-LCD screen manufacturing where chemical purity and density are critical for electrical conductivity.

Material Properties

Melting Point	3422 °C
Thermal Expansion	Lowest coefficient of any pure metal
Key Physical Traits	High Tensile Strength, Low Vapor Pressure, High Ductility, High Density

Technical Specifications

Chemical Purity

3N5 (99.95%) • High Purity

Manufacturing Methods

- Forging
- Stretching
- Extrusion
- Sintering

Quality Analysis Methods

- GDMS (Metallic elements)
- ICP-OES (Metallic elements)
- LECO (Gas elements)

Applications

Primary Applications

- Semiconductor Manufacturing
- Micro-electronics
- TFT-LCD Screen Components
- Thin-film Transistors

Performance Metrics

Performance Advantages

1650 °C

Low Vapor Pressure Threshold

99.95 %

Standard Purity