



# SPHERIDURAL

## The Aluminum Cut Wire for delicate surface preparation

Frohn's Spheridural™ Aluminum Cut Wire is a non-sparking, lightweight abrasive ideal for delicate surface preparation tasks. Its unique properties make it the preferred choice in various industries, ensuring both safety and efficiency.



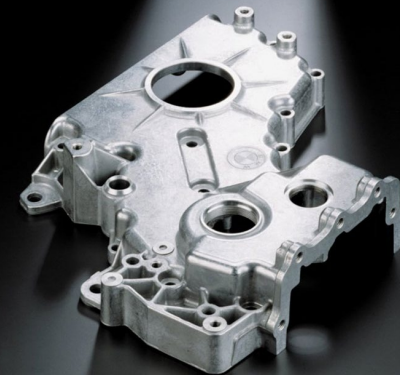
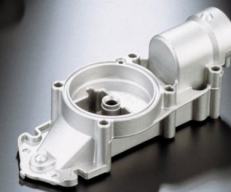
Non-sparking



Soft and lightweight



Copper free



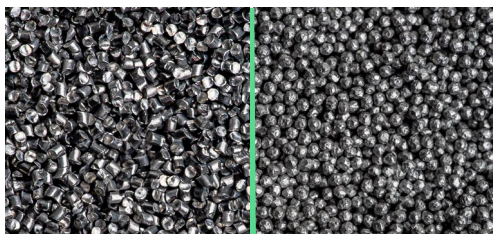
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peening



cleaning



## USERS BENEFITS

### Safe and spark-free for sensitive environments

Non-sparking and electro-chemically neutral—perfect for use on aluminum or magnesium alloys and in explosive atmospheres.

### Gentle on delicate parts

Minimizes deformation and ensures a smooth, clean finish—ideal for thin-walled castings and high-precision components.

### Efficient and cost-saving

Lightweight, recyclable, and low in dust—reduces wear on equipment, cuts maintenance costs, and supports sustainable production.

### Corrosion

Perfect for machining operation after blasting

## MARKETS AND APPLICATIONS



**Automotive** : engine blocks, cylinder heads, transmission housings, cooling fins...



**Aerospace** : turbine blades, aluminum housings, structural airframe parts.



**Electronics**: aluminum heat sinks, connectors, enclosures, shielding components.



**Medical** : prosthetic components, surgical tools, small aluminum casings, diagnostic equipment housings.

## SPECIFICATIONS

Below you will find the 2 chemical compositions available as standard of Spheridural™ Aluminum Wire. Other dimensions, hardness, and specifications available on request..

### Material Composition 2 standard alloys avail:

99% High-Purity Aluminum  
AW5056 (harder)\* and AW6060 (softer)\*

\*The alloys contain no copper, complying with German automotive standards that restrict Cu-content due to the risk of galvanic reactions between aluminum shot residues and treated parts.

### AW6060: AW5056:

Ideal for general surface preparation tasks.  
Primarily used for aluminum forged parts, ensuring optimal performance without compromising quality.

### Hardness Grain Shape Sizes Available Bulk Density Tensile Intensity Microstructure Density

40 – 70 HRB  
Cylindrical with sharp edges (Z) or Rounded / Conditioned (G)  
0.6 mm, 0.8 mm, 0.9 mm, 1.0 mm, 1.2 mm\*  
100 lbs/ft<sup>3</sup> / 1600 kg/m<sup>3</sup>  
80 – 240 MPa  
Deformed α  
2.7 g/cm<sup>3</sup>

### Applications Recyclability

Surface improvement, blast cleaning, deburring, deflashing  
Can be reused multiple times

\*Document for informational purposes only. Not contractual. Contact your local representative for latest version of the technical data sheets.

## Packaging



**Bags**  
20 kg bags standard  
on 1000 kg Euro-Pallet



**Bags**  
10 kg on request



**Metallic cans**  
25 lb / 12 kg



**Metallic Drums**  
55 gallon



**Big Bags**  
500 kg or  
1000 kg

**FROHN**  
by WinoA

# winoa

preparing tomorrow's surfaces



[www.winoa.com](http://www.winoa.com)