WOLFRAM INDUSTRIE
TUNGSTEN TECHNOLOGY GROUP

When it comes to electric resistance welding, we get straight to the point.

The new resistance welding electrode (WHG3) from Wolfram Industrie:

Back-cast from tungsten, copper and copper-tungsten – but worth its weight in gold.

1. Greater durability and higher performance.
2. Improved, reproducible spot welding quality.
3. Efficient and cost-effective parts production.

We combine material properties and their economic advantages.

Resistance welding involves welding together two or more metallic parts (usually sheet metal). The components of two opposing electrodes are pressed together at a specific point under a high level of pressure. This point is also the point of highest electrical resistance. When electricity flows through the two electrodes, heat is generated at this point which makes the parts melt and join together.

The requirements of resistance welding at a glance:

- **High level of hardness and resistance**
- **High level of electrical and thermal conductivity**
- **High level of heat resistance**
- **Low erosion and adhesion tendency**

The new resistance welding electrode (WHG3) from Wolfram Industrie: The best for spot welding

Application-related
The best combination of hardness, elasticity, heat and electrical conductivity.

Economically viable
The best combination of product life, greater performance, better quality and higher efficiency.

Increased hardness, firmness, heat resistance, stability and cleanliness as well as cavity-free and reproducible.

The new resistance welding electrode (WHG3) from Wolfram Industrie has everything you need for spot welding.

Resistance welding electrodes from various materials offer considerable advantages, provided that they are perfectly combined. Wolfram Industrie has developed a process whereby materials like wolfram, pure copper and WCu composites can be combined through back-casting or infiltration.

This results in electrodes with shafts and work surfaces which withstand high thermal and mechanical pressure for longer and with better results, as well as offering technical and economic advantages.

W + WCu
Back-cast/Infiltrated

W + Cu + WCu
Back-cast

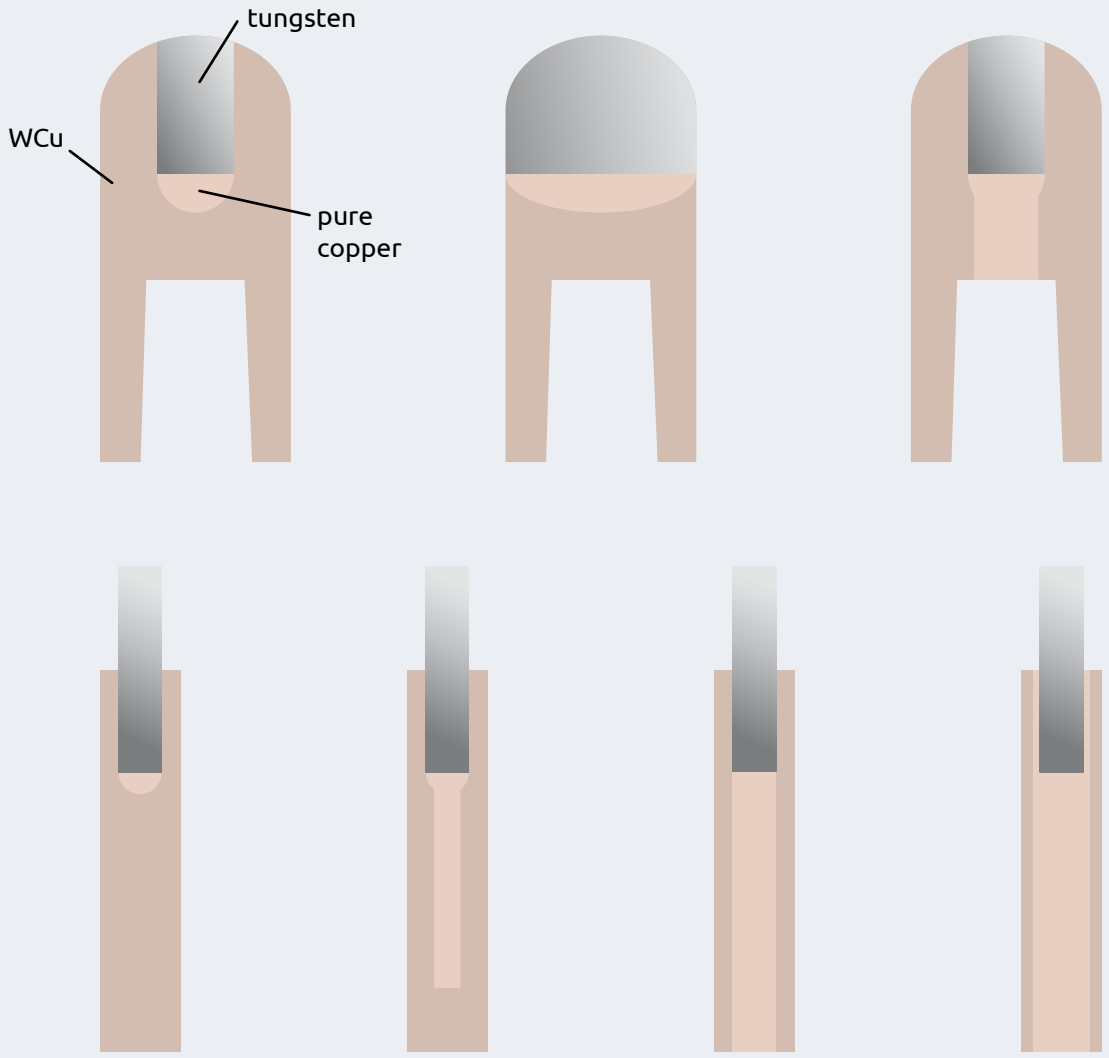
Soldered electrodes

Meets every requirement and stands up to the competition.

Requirements of	copper	CuCrZr	tungsten	W+CuCrZr (Lot)	WHG3 (W+Cu+WCu back-cast)
High hardness or firmness level	→	↑	↑↑	↑↑	↑↑
High electrical and thermal conductivity	↑↑	↑↑	→	→	↑↑
High level of heat resistance	→	→	↑↑	↑	↑↑
Low erosion and adhesion tendency	→	→	↑	↑	↑
Product life	→	↑	↑	↑	↑↑
Overall result	→	→/↑	↑	↑	↑↑

Does not give in to pressing and bending forces – only to your requirements.

The new resistance welding electrode (WHG3) from Wolfram Industrie can be supplied quickly for a range of standard applications. If you have any special requirements in terms of the range of services, dimensions or use of our electrodes, we can produce items individually for you.



The improved resistance welding electrode from Wolfram: unique and fantastic!

Additional information and instructions for safe handling can be found on our homepage.

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