

# WS2® WITSTAR®

## The best TIG-electrode in the world?



The Original  
Made in Germany



Wolfram Industrie  
**TUNGSTEN TECHNOLOGY**  
Germany

## This is our WS2® WITSTAR®

- absolutely reliable arc-striking
- low burn-off rate
- highest quality of arc
- **35%** less power consumption, with optimized equipment
- **40%** prolonged service life
- **50%** less set-up costs
- **50%** less gas consumption with our WS2® WITSTAR®, in combination with the right accessories
- **100%** reproducible results
- free of radioactivity
- environmentally friendly due to significantly lower material consumption and, therefore, also resource-saving

- On the market you will hardly find an electrode of this quality. Only our **"Made in Germany" quality** shows such a homogeneous structure that a **reproducibility** of the work piece is **guaranteed**. A **reduced burn-off rate** and an **extremely high ignition capability** will additionally convince you.

- If this first-class electrode is even combined with the competence of an expert, the correct inert gas and accessories, not only the top result will convince you, but also the **long-term savings in energy, consumables and time**.

- Hard to believe, but true. Our **WS2® WITSTAR®** can be used **for all materials**.

- Our **WS2® WITSTAR®** is the result of **100 years of experience** in working with tungsten.

## Our recommendation

### Recommendation for WS2® WITSTAR®, current and gas for different materials

Materials	Direct Current DC		Alternating Current AC	Ar	He	Filler Material acc. to DIN
	+ Pole	- Pole				
Unalloyed and alloyed steels		•		•		8559, 8575, 8556
		•		• <sup>1</sup>		
Copper and copper alloys		•		•	•	1733
Nickel and nickel alloys		•		•	•	1736
Aluminium and aluminium alloys	(•)			(•)	(•)	1732
			•	•	•	
		•			•	
Magnesium and magnesium alloys	(•)			(•)	(•)	
			•	•	•	
Titanium, titanium alloys, zirconium, tantalum, molybdenum, tungsten						
		•		•		

(•) only in case of thin walls    <sup>1</sup> argon or argon with low hydrogen fractions

### Recommended amperage depending on the electrode diameter of WS2® WITSTAR®

Electrode Ø in mm	Direct Current, A		Alternating Current, A
	electrode negative (-)	electrode positive (+)	tungsten with oxide additives
	tungsten with oxide additives	tungsten with oxide additives	
1,0	10 to 75	no indication	15 to 70
1,6	60 to 150	10 to 20	60 to 125
2,0	100 to 200	15 to 25	85 to 160
2,4	150 to 250	15 to 30	120 to 210
3,2	225 to 330	20 to 35	150 to 250
4,0	350 to 480	35 to 50	240 to 350

### Recommended amperage (DC) considering the tip angle of the WS2® WITSTAR®

Elektroden Ø in mm	15°	30°	45°	60°	75°
1,0	5 - 20 A	10 - 30 A	20 - 80 A	-	-
1,6	10 - 50 A	20 - 75 A	30 - 100 A	50 - 140 A	-
2,4	30 - 50 A	20 - 90 A	30 - 140 A	50 - 180 A	80 - 230 A
3,2	30 - 80 A	40 - 140 A	50 - 220 A	70 - 300 A	80 - 320 A
4,0	50 - 100 A	50 - 150 A	60 - 250 A	70 - 350 A	90 - 450 A