

# TIGWELD 2209

TIG Rods [GTAW]

Stainless and high alloyed steels

<b>CLASSIFICATION:</b> EN ISO 14343-A : W 22 9 3 N L DIN 8556 : SG-X2 CrNiMoN22 9 3 AWS A-5.9 : ER 2209 W.Nr. : 1.4462	<b>APPROVALS:</b>	<b>APPLICATION:</b> Power generation industry Petrochemical and chemical industry Shipbuilding&Offshore
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- TIG rod designed for welding ferritic-austenitic duplex steels.
- The alloy has high tensile strength and ductility.
- Excellent resistance to corrosion, stress cracking and pitting.
- Very low oxygen deposit.

## Application

Filler material mainly for duplex type 2205. Used for general pipeline production in the offshore oil and gas industry and in the chemical industry. Suitable for steel cladding. Paper machines, lye tanks, digesters for pulp and paper, cellulose fermenters, bleaching washers, pre-steaming vessels. Pressure vessels, pollution control equipment, pipelines, heat exchangers for gas and oil transport. Impellers, fans, shafts and press rolls requiring combined strength and corrosion resistance. Cargo tanks for ships and trucks, biofuel plants. Sea water cooler pipes, pulverized coal gasification coolers. In the urea production: working pump body, pump valves, shut-off valves and all other elements most highly to damage.


## Base material

DIN	W.Nr.	AISI/ASME
X2CrNiMoN 22 5 3	1.4462	2205, S31803, S32205
X2CrNiN 23 4	1.4362	S32304
X4 CrNiMoNb25 7	1.4582	
X2CrNiMoN 22 5 3 with X10CrNiMoNb 18 12	1.4583	318
X2CrNiMoN 22 5 3 with P235GH, P265GH, S255N, P295GH, S355N, 16Mo3	1.4583	318
GX2 CrNiMoN25 7 3	1.4417	
X3CrNiMoN 27 5 2	1.4460	329
G-X6 CrNiMo24 82	1.4463	
G-X8 CrNi26 7	1.4347	

## Typical chemical composition %

C	Si	Mn	Cr	Ni	Mo	N
0,025	0,50	1,60	23,00	9,00	3,00	0,14

## Typical mechanical properties

<b>Yield strength Re [N/mm<sup>2</sup>]</b>	>560
<b>Tensile strength Rm [N/mm<sup>2</sup>]</b>	>730
<b>Elongation A5 [%]</b>	>26
<b>Impact energy Kv [J]</b>	>37] (-60°C) /
<b>Wire/rod type</b>	solid
<b>Welding current</b>	

**Welding positions****Shielding gases acc. to EN ISO 14175**

I1 - Ar / I3 - Ar + &gt;0-95% He /

**Remarks**

In case of critical applications, it is recommended to add a small amount of nitrogen to the shielding or protective gas.

**Welding parameters and packing**

∅	Length [mm]	Weight of packet [kg]
1,6	1000 /	5,0
2,0	1000 /	5,0
2,4	1000 /	5,0

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