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ERNiCrMo-7

AWS ERNiCrMo-7 Physical Properties	
Property	**Value**
Tensile Strength (σb)	115-234 MPa
Yield Strength (σ0.2 ≥)	23 MPa
Elongation (δ5 ≥)	65%
ψ (Reduction of Area)	-
Akv (Impact Energy)	-
Brinell Hardness (HBS)	123-321
Rockwell Hardness (HRC)	30 -

AWS ERNiCrMo-7 Mechanical Properties		
Property	**Value**	**Unit**
Tensile Strength	231-231	MPa
Yield Strength	≥154	MPa
Elongation	≥56	%
ψ (Reduction of Area)	-	%
Akv (Impact Toughness)	-	J
Hardness (HBS)	235-268	-
Hardness (HRC)	30	-

ERNiCrMo-7 Nickel Alloy Welding Rod

AWS ERNiCrMo-7 welding rod is a nickel-chromium-molybdenum alloy designed for welding similar alloys and dissimilar metals. It offers excellent resistance to corrosion, oxidation, and high-temperature environments. Commonly used in industries like chemical processing, aerospace, and power generation, it is suitable for welding applications requiring high strength and durability. The rod ensures good weld ability, crack resistance, and stability in harsh conditions, making it ideal for critical welding tasks.

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AWS ERNiCrMo-7 Heat Treatment Regime					
Heat Treatment Regime	**Annealing**	**Quenching**	**Tempering**	**Normalizing**	**Q & T**
AWS ERNiCrMo-7	✓	✓	✓	✓	✓

AWS ERNiCrMo-7 Chemical composition (mass fraction) (wt.%)						
C	**Si**	**Mn**	**P**	**S**	**Cr**	**Ni**
-	-	-	-	-	14	15
0.015	0.08	1	0.04	0.03	18	18
Mo	**V**	**Ta**	**W**	**N**	**Cu**	**Co**
-	-	-	-	-	-	-
0.5	0.5	-	-	2	3	0.5
Pb	**B**	**Nb**	**Al**	**Ti**	**Other**	
-	-	-	-	-	-	
-	-	3	0.7	2	-	

C	**Si**	**Mn**	**P**	**S**	**Cr**	**Ni**
≤ 0.015	≤ 0.08	≤ 1.0	≤ 0.04	≤ 0.03	14 - 18	15 - 18
Mo	**Al**	**Cu**	**Nb + Ta**	**Ti**	**V**	**Fe**
≤ 0.5	≤ 0.7	≤ 3.0	≤ 3.0	≤ 2.0	≤ 0.5	-
N	**Co**	**Pb**	**W**	**Other**		
≤ 2.0	≤ 0.5	-	-	-		