

Wire Welding alloys



IMPHY 276 is a low-carbon Nickel-Chromium-Molybdenum Tungsten alloy which shows:

- Resistance to general corrosion, stress corrosion cracking, pitting and crevice corrosion in a broad range of severe environment.
- Resistance to carbide precipitation during welding.

Typical analysis

С	Mn	Fe	Р	S	Si	Cu	Ni	Со	Cr	Мо	V	W
<0.02	-1	4	<0.04	<0.03	<0.08	<0.5	Bal	<2.5	14.5	15	<0.35	3
<0.02	< 1	7	<0.04	<0.03	<0.06	<0.5	Dai		16.5	17		4.5

Specifications

AWS A5.14 - ERNiCrMo-4; UNS N10276; Werkstoff Nr 2.4886, 2.4819; BS 2901 Part 5 - NA48

Mechanical properties

Hot rolled and	Delivery condition at	Tensile strength (MPa)	Elongation %	
Solution annealed	20°C	800	50-60	

Welding

IMPHY 276 is used for welding of Alloy 276 and Nickel-Chromium-Molybdenum alloys.

IMPHY 276 is useful for dissimilar welding of corrosion resistant alloys, carbon steels, low alloy steels and stainless steels.

High strength of the weld metal over a large temperature range.

Typical applications

Cladding of water wall sections and super heaters tubes in waste incineration plants by overlay welding. Welding of plates, sheets and tubes in the chemical process industry (acetic acid production, sulphuric acid coolers), in the pulp and paper industry, in the flue gas desulphurization equipment, pollution control equipment for environmental protection.

The data enclosed in this document are only given as indicative values and correspond to our standard product. Different specific requirements are subject to discussion and formal approval by Aperam Alloys Imphy. For further information or special request, please contact us.

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