

Wire

Welding alloys



IMPHY 25-9-4 is a high alloy duplex stainless steel (austenitic-ferritic) which shows :

- Outstanding resistance to a wide range of highly corrosive media under oxidizing and reducing conditions.
- High resistance to erosion corrosion and corrosion fatigue.
- Excellent resistance to pitting and crevice corrosion and to stress corrosion cracking in chloride environment.
- Very high mechanical strength.

Typical analysis

C	Cr	Ni	Mo	Mn	Si	P	S	N	Cu	W
0.03	24	8	2.5	2.5	1	<0.03	< 0.02	0.2	1.5	1
	27	10.5	4.5					0.3		

Specifications

AWS A5.9 ER2594 ; EN 12072: 25 9 4 L

Mechanical properties

Hot rolled and pickled	Delivery condition at 20°C	Tensile strength (MPa)	Elongation %
		< 1000	10 - 35

Welding

IMPHY 25-9-4 is used for welding of duplex and super-austenitic stainless steels.
IMPHY 25-9-4 is useful for the surfacing of wide range of steels in particularly aggressive environments.

Typical applications

Welding of plates, sheets, and tubes in the chemical and petrochemical process industry (chloride environment), in the pulp and paper industry, 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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