

High performance

# IMPHY 82

IMPHY 82 is a low-carbon / low-iron Nickel-Chromium-Niobium alloy which shows:

- > High strength and creep rupture strength at elevated temperatures.
- > Good corrosion resistance.

## Chemical composition

C	Mn	Fe	P	S	Si	Cu	Ni	Cr	Nb+Ta
0.1	2.5 3.5	3	< 0.03	< 0.015	0.5	0.5	67 mini	18 22	2 3

## International standards

AWS A5.14 – ERNiCr-3 ; UNS N06082 ; Werkstoff Nr 2.4806 ; BS 2901 Part 5 – NA35

## Typical applications

IMPHY 82 is mainly used for dissimilar welding when long term service at elevated temperature is required, such as in furnace equipment, petrochemical and power generation plants.

## Mechanical properties

		Tensile strength (MPa)	Elongation %	Red. of area %
Hot rolled and solution annealed	Delivery condition at 20°C	750	40	60

## Welding

IMPHY 82 is used for welding of Alloy 600, Alloy 601, Alloy 690, Alloy 800 and Alloys 330.

IMPHY 82 is also used joining corrosion-resistant alloys to Nickel, Nickel-Copper Alloys, stainless steels and carbon steels, and for surfacing of steels.

The weld metal has a high strength and creep-rupture resistance at elevated temperatures as well as good corrosion resistance.

## Available Forms

IMPHY 82 is delivered in wire.

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The data enclosed in this document are 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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