

Wire Welding alloys



IMPHY 825 is a Ni Fe Cr Alloy showing a particularly high resistance against numerous corrosion environments :

- Due to its high content of Ni and Cr and to significant additions of Mo and Cu, IMPHY 825.
- Presents an outstanding resistance in pitting and crevice corrosion but also in stress corrosion.
- The Alloy is protected against intergranular corrosion by Ti addition and can be used at temperature till 500°C keeping good strength properties.

Typical analysis

C	Si	Mn	Cr	Ni	Mo	Cu	Ti	Fe
< 0.05	< 0.50	< 1.0	19.5 – 23.5	38.0 – 46.0	2.5 – 3.5	1.5 – 3.0	0.6 – 1.2	> 22.0

Specifications

UNS N08825 ; Werkstoff Nr 2.4858

Mechanical properties

Hot rolled and solution annealed	Delivery condition at 20°C	Tensile strength (MPa)	Elongation %
		550 – 650	40 - 45

Typical applications

Considering the variety of the environments in which it can be used, IMPHY 825 is particularly appreciated in paper and petrochemical industries such as acid production, wells and pickling equipments, filtration or waste incineration.

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.