

High performance

IMPHY NCW

IIMPHY NCW is a low carbon / low iron Nickel Chromium Molybdenum alloy which shows:

- > Excellent resistance to general corrosion, localized pitting and crevice corrosion.
- > Excellent stress corrosion cracking resistance in severe corrosive environment.
- > With a composition similar to IMPHY 625 but free of Nb, IMPHY NCW is particularly resistant to hot cracking and has low heterogeneity of the solidified structure without intermetallic phase).

Chemical composition

С	Mn	Fe	Nb	Si	W	Ni	Al	Ti	Cr	Мо
		7			2.5	Bal				
0.02	0.5	0.5	0.2	0.5	3.5	Ddl	0.4	0.2	22.5	11

International standards

AWS A5.14 - ERNiCrMo-20 - UNS N06660

Typical applications

IMPHY NCW is used particularly for welding superduplex grades when it is necessary to ensure a good level of toughness at low temperatures (offshore...).

It's also suitable for welding superaustenitic stainless steels, cryogenic 9%Ni steels.

Mechanical properties

		Tensile strength (MPa)	Elongation %
Hot rolled and annealed	Delivery condition at 20°C	900	35 mini

Available Forms

IMPHY NCW is delivered in wire.

©June 2020, Aperam Alloys Imphy
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.

IMPHY® is a registered trademark of Aperam Alloys Imphy. IMPHY NCW is patented by Aperam Alloys Imphy.



www.aperam.com nickel.alloys@aperam.com

