

## Wire

### Welding alloys



IMPHY 72 is an austenitic Nickel-Chromium alloy:

- Due to its high Chromium content, IMPHY 72 presents an excellent corrosion resistance at high temperature including in severe atmospheres containing Sulphur or Vanadium oxides
- IMPHY 72 benefits of some chemical adjustments leading to the improvement of its Ductility-Dip Cracking (DDC) resistance.

#### Typical analysis

C	Mn	Si	Ni	Cr	Cu	Ti	Al	Fe
0.01	<0.2	<0.2	55.0	42.0	<0.50	0.30	<0.20	<0.50
0.1			60.0	44.0		1.00		

#### Specifications

AWS A5.14 – ERNiCr-4 ; UNS N06072 ; EN ISO 18274 : 2002 NiCr44Ti

#### Mechanical properties

Hot rolled and Solution annealed	Delivery condition at 20°C	Tensile strength (MPa)	Elongation %	Red. of area %
		650 / 700	> 40	> 60

#### Welding

IMPHY 72 is used for joining of Ni alloys such as Alloys 800 or 690 or in overlay of carbon or stainless steels.

IMPHY 72 can be implemented by usual welding processes TIG, MIG or SAW.

#### Typical applications

IMPHY 72 is used in particular for waterwall overlay because of its outstanding corrosion properties at high temperature in the sulphurized fossil fuel boiler atmosphere regularly enhanced by the increasing requirements of the environment regulation.

*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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