

High performance

IMPHY 72

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.

Chemical composition

C	Mn	Si	Ni	Cr	Cu	Ti	Al	Fe
0.01	< 0.2	< 0.2	55	42	< 0.5	0.3	< 0.2	< 0.5
0.1			60	44		1.0		

International standards

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

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.

Mechanical properties

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

Available Forms

IMPHY 72 is delivered in wire.

