# Technical data sheet

150222JMBA

## Cored welding wire

# **GAMMA 400**



**CLASSIFICATION** 

AWS A5.34 / A5.34 M: ENiCu7T0-4 1

EN ISO 12153: T Z Ni 4060 (NiCu30Mn3Ti) B M21 3

#### **DESCRIPTION**

- Flux cored nickel base wire for gas shielded arc welding
- 65% Ni-30% Cu weld metal based on alloy 400
- Latest generation basic slag quality guarantees optimum metallurgical quality and attractive welder appeal
- Produced from a fully matching strip composition
- · Deoxidation system designed to eliminate porosity and hot cracking
- Automatic slag release leaving a clean weld surface
- · Good wetting with the base metal

#### **APPLICATIONS**

GAMMA 400 is specially designed for cladding and weld overlay. A full NiCu-7 composition is achieved in two layers. GAMMA 400 is also suitable for welding nickel copper alloys of similar analysis and for heterogeneous welds between alloy 400 and other alloys or steels

#### Examples:

Alloy	UNS	EN Designation	Material Number
400	N04400	NiCu30Fe	2.4360
405	N04405	LC-NiCu30Fe	2.4361
	N05500	G-NiCu30Nb	2.4365
K500	N65500	NiCu30Al	2.4375

TYPICAL A	LL-WELD	<b>METAL A</b>	NALYSIS	[%]					
С	Mn	Si	Ni	Cu	Ti	Fe	Al	S	Р
0.05	3.5	0.4	63	30	2.0	1.0	0.07	0.005	0.001

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES					
Rm [MPa]	Rp0.2% [MPa] A <sub>5</sub> [%] CVN [J				
480	200	+20°C: 47			
TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES					
Rm [MPa]	Rp0.2% [MPa]	<b>A</b> 5 [%]	CVN [J]		
520	330	35	+20°C: 75		

#### SHIELDING GAS

EN ISO 14175: M21 (Ar + 15% <  $CO_2 \le 25\%$ )

#### **OPERATING CONDITIONS**

Current type	Wire feed speed	Current [A]	Voltage [V]	Stick-out [mm]	Gas flow rate [l/min]
DC+	7 – 10 m/min.	150 - 220	24 - 30	12 - 15	12 - 20

#### **WELDING POSITIONS**

Flat, Horizontal

### **PACKAGING**

PACKAGING	
Diameter	1.2 mm
Spool type	EN ISO 544 – ASME IIC SFA-5.2 M
	BS300
Weight	15 kg

Other packaging and other diameters: please consult us

Welding products and techniques evolve constantly. All descriptions, illustrations and properties given in this data sheet are subject to change without notice and can only be considered as suitable for general guidance. This document is intended to help the user make the correct choice of product. It is his responsibility to assess its suitability for his intended application.

<sup>&</sup>lt;sup>1</sup> Classification pending. The deposit is close to the composition of the ENiCu-7 nickel-based SMAW electrodes but with increased titanium to suppress porosity.