

Technical data sheet

011121MBA

Cored welding wire

GAMMA V 4648**CLASSIFICATION**

Material number: 2.4648
 EN ISO 12153: T Ni 6083(NiCr20Mn6Fe4Nb) P M21 1
 AWS A 5.34 / AWS A5.34M: ENiCr3T1-4 (Nearest)¹

¹ GAMMA 4648 is over-alloyed in manganese and contains deliberate molybdenum additions

DESCRIPTION

- Flux cored nickel base wire for gas shielded arc welding
- Together with enhanced productivity, GAMMA V 4648 offers many other advantages compared to solid wires: improved wetting properties, increased resistance to cracking, better bead appearance and shape, use of classical M21 gas mixtures
- Maximum performance in all position welding

APPLICATIONS

- GAMMA V 4648 is suitable for welding and cladding nickel-based alloys such as alloy 600 or similar materials.
- It is also used for dissimilar welding of most nickel-based alloys to each other, to alloyed steels, or to stainless steels.
- GAMMA V 4648 can be used up to service temperatures of 900°C.
- It is a first choice consumable for heterogeneous weldments between creep-resisting ferritic steels and austenitic steels for use at high temperatures. If necessary, such joints may be stress relieved
- Repair welding on "hard-to-weld" steels

Examples:

Alloy	UNS	EN Symbol	Material number
600	N06600	NiCr15Fe	2.4816
800	N08800	X10 NiCrAlTi 32-21	1.4876
800H	N08810	X10 NiCrAlTi 32-21	1.4876
800HT	N08811	X8 NiCrAlTi 32-21	1.4959
330	N08330	X12 NiCrSi 36-16	1.4864

TYPICAL ALL-WELD METAL ANALYSIS [%]

C	Mn	Si	Cr	Nb	Mo	Fe	Ni
0.02	5.5	0.2	20	2.4	1.3	2.4	Bal.

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
600	360	25	+20°C: 70

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
650	400	40	-196°C: 80

SHIELDING GAS

EN ISO 14175: M21 (Ar + 15 - 25% CO₂)

OPERATING CONDITIONS

Diameter [mm]	Current type	Current [A]	Voltage [V]	Stick-out [mm]	Gas flow [l/min]
1.2	DC+	130 - 250	24 - 32	12 - 25	10 - 20
1.6	DC+	150 - 300	24 - 32	12 - 25	10 - 20

WELDING POSITIONS

All positions

PACKAGING

Diameter	1.2 mm	1.6 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.