

## **DATA SHEET DS 216** Rev. 05 dd 27/09/2013 **INE MONEL**

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#### **CLASSIFICATION**

#### **APPROVALS**

AWS SPECIFICATIONS	EN SPECIFICATIONS		
(AWS A 5.15: ENiCu-B)			
(ASME SFA 5.15: ENiCu-B)			

#### **ALLOY TYPE**

Graphite-coated electrode for cold welding of cast iron.

#### **APPLICATIONS**

Graphite-coated electrode with Monel (nickel-copper) core designed for cold welding of cast iron. It could be used for repairing of castings and welding of cast iron steel or like weatherproof layer. Applications include construction field, car and industrial machinery. Intended for all positions; suitable for machining; it has a coloring similar to cast iron. The use of the lowest value of current and cleaning of the base material are recommended.

#### **MATERIALS TO BE WELDED**

ASTM		EN	Others
			Cast iron
			Grey cast iron
			_

#### **WELDING GUIDELINES**

Preheat and PWHT are not required. In some cases a slight preheat at 300°C is recommended, followed by slow cooling.

### **TECHNICAL INFORMATION**



WEI DING PARAMETERS

WELDING FARAIVETERS							
Current	AC / DC - (+) Straight polarity						
Diameter (mm)	2.5	3.2					
Length (mm)	300	350					
Intensity (A)	50 ÷ 90	70 ÷ 110					



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#### TYPICAL CHEMICAL COMPOSITION OF WELD METAL

C %	Mn %	Si %	S %	Cu %	Ni %	Fe %		
0.50	1.40	0.50	0.015	30.00	65.00	4.00		

### **TYPICAL MECHANICAL PROPERTIES**

	Yield strength	Tensile strength	Elongation on % 5d	Impact energy (Charpy V)				
	Rs	Rm	A 5d	+20°C	0°C	-20°C	-40°C	-60°C
	(MPa)	(MPa)	%	(Joule)	(Joule)	(Joule)	(Joule)	(Joule)
as welded	-	-	-	-	-	-	-	-

#### **PRODUCTS AVAILABLE**

Process	Product	Classification AWS	Classification EN
MIG/MAG			
Solid wire			
TIG			
Rods			
SAW			
Submerged arc			
FCAW			
Cored wire			
SMAW			
Electrodes			