


<h1>CIN-3</h1>	A SPECIAL ELECTRODE THAT DEPOSITS A WELD METAL WHOSE COMPOSITION MATCHES THAT OF STANDARD CAST IRONS					DATA SHEET NO. 147				
SPECIFICATION	AWS			BS EN		JIS				
CLASSIFICATION	NO INTERNATIONAL SPECIFICATIONS									
PRODUCT DESCRIPTION	<p>A chemically basic flux coated electrode that contains a high proportion of amorphous graphite and ferro alloys for deoxidation and grain refinement.</p> <p>The flux is extruded into a mild steel core wire using a blend of silicates that ensures coating strength and stability.</p>									
WELDING FEATURES OF THE ELECTRODE	<p>The electrode welds with a soft, stable, low penetrating arc on both AC and DC.</p> <p>The cone at the end of the electrode is rather shallow so it is necessary to maintain a constant arc.</p> <p>The weld seams are slightly convex but smooth and the electrode shows great tolerance to porosity on contaminated surfaces.</p>									
APPLICATIONS AND MATERIALS TO BE WELDED	<p>The weld deposits are non-machinable but of matching colour to that of standard cast irons and is thus used for the rectification of initial cast irons and repair build-ups on cast irons that have become worn or damaged in use.</p> <p>Because of the high hardenability of both the weld metal and base materials, a pre-heat of minimum 200 °C is essential as is slow cooling.</p>									
WELD METAL ANALYSIS COMPOSITION % BY Wt.	C	Mn	Si	S	P	Cr	Ni	Mo	Nb	Fe
MIN	-	-	-	-	-	-	-	-	-	-
MAX	3.5	1.0	0.80	3.0	0.03	-	-	-	-	-
TYPICAL	1.7	0.5	0.30	0.1	0.01	0.05	1.4	0.01	0.001	Bal.
WELD METAL PROPERTIES (ALL WELD METAL)	<u>PROPERTY</u>		<u>UNITS</u>	<u>MINIMUM</u>	<u>TYPICAL</u>	<u>OTHERS</u>				
	Tensile strength		N/mm ²	-	670	HV 320 (NO PRE-HEAT)				
	0.2% Proof stress		N/mm ²	-	64					
	Elongation on 4d		%	-	3					
	Reduction of Area (RA)		%	-	-					
WELDING AMPERE AC or DC	Ø (mm)	3.2	4.0		5.0					
	MIN	90	130		180					
	MAX	150	190		240					
OTHER DATA	Electrodes that have become damp should be re-dried at 150°C for 30 mins.									
RELATED PRODUCTS	Please contact our Technical Department for detail.									