CIN-3

A SPECIAL ELECTRODE THAT DEPOSITS A WELD METAL WHOSE COMPOSITION MATCHES THAT OF STANDARD CAST IRONS

DATA SHEET NO. 147

SPECIFICATION	-
CLASSIFICATION	
PRODUCT DESCRIPTION	A chemically basic flux coated electrode that contains a high proportion of amorphous graphite and ferro alloys for deoxidation and grain refinement. The flux is extruded into a mild steel core wire using a blend of silicates that ensures coating strength and stability.
WELDING FEATURES OF THE ELECTRODE	The electrode welds with a soft, stable, low penetrating arc on both AC and DC. The cone at the end of the electrode is rather shallow so it is necessary to maintain a constant arc. The weld seams are slightly convex but smooth and the electrode shows great tolerance to porosity on contaminated surfaces.
APPLICATIONS AND MATERIALS TO BE WELDED	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. Because of the high hardenability of both the weld metal and base materials, a pre-heat of minimum 200 ºC is essential as is slow cooling.

WELD METAL ANALYSIS COMPOSITION % BY Wt.

	C	Mn	Si	S	Fe
Min.		-	-	-	
Max.	3.5	1.0	1.5	0.05	
Typical	1.7	0.5	0.3	0.03	Bal.

WELD METAL PROPERTIES (ALL WELD METAL)

PROPERTY	UNITS	MINIMUM	TYPICAL	OTHERS
Tensile strength	N/mm^2	-	670	
0.2% Proof stress	N/mm^2	-	64	HV 320 (NO PRE-HEAT)
Elongation on 4d	%	-	3	
Reduction of Area (RA)	%	-	-	

WELDING AMPERE AC or DC

∅ x Length (mm)	2.6 x 350	3.2 x 350	4.0 x 400
Min.	60	90	130
Max.	100	150	190

OTHER DATA	Electrodes that have become damp should be re-dried at 150ºC for 30 minutes
RELATED PRODUCTS	Please contact our Technical Department for detail.