DIFFUSION
Innovative superconditioning solutions

NODURON 60

Noduron 60 is a specially developed basic graphite coated electrode consisting of a very complex flux chemistry and a bimetallic Ferro-nickel core wire.this is a unique electrode,which deposites a weld metal, which compensates the solidification shrinkage and hence the weld is highly crack resistant.The fux coating is designed to give a fully covering slag, which can be easily removed after the bead is cooled.This electrode is unique in one more respect, it gives a transition zone (zone of partial melting) which is nearly free from iron carbide and it also gives a heat affected zone, which contains very little martensite-the hard phase.hence both the transition zone as well as HAZ are fully Machinable,even with a high speed steel tool.the weld bead also is quite soft and completely machinable.It has an excellent color match with all cast irons & steel.

Special Features:
1 it can weld all cast irons.
2 welded joint is completely machinable – through transition zone.
3 It can weld dirty,oily cast iron.
4 The weld metal is highly crack resistant.
5 It can joint steel to cast iron.
6 It can be used for joining thick to thin cast iron section.
7 It has excellent colour match with cast iron.
8 It is an all position electrode.

Applications:

Noduron 60 can cold weld all types of cast irons- grey cast iron,malleable cast iron,nodular cast iron or ductile iron – pearlitic as well as ferritic varientes. It can also weld cast iron to steel.
In order to obtain optimum machinability,it is recommended that the slag be removed only after the bead is cooled.Pre-heating of the work piece upto 150^0 C further improves the machinability of the HAZ. It can successfully weld dirty, oily and greasy cast iron.

Procedure:

Gouge out / grind the cracks in U shape. Clean the weld area,if possible, removing all oil and grease.Employ lowest possible current, short arc and stringer beads of 20-30 mm length.DO NOT WEAVE.Use staggered welding sequences. Remove the slag only after the weld has cooled to about 200^0 C.Peen the deposit in between the passes.

Technical Data	:			
Tensile Strength	:	45-50 Kg / sq.mm		
% Elongation	:	15% minimum		
Hardness	:	180 BHN		
Size (mm), Ø	:	3.15	4.00	5.00
Recommended Welding Current (Amps)	:	70-100	90-120	160-210

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