NIMOTEN PLUS 535

CLASSIFICATIONS

AWS A/SFA 5.5 E 11016 G (nearest)

IDENTIFICATION: Name Printed

CURRENT CONDITIONS: AC (90V) or DC (+)

6.3	5.00	4.00	3.2
260-320	190-230	140-180	100-130

COATING TYPE: Basic

WELDING POSITIONS
F, H, V-up, OH

REDRYING CONDITIONS
300^{0}C for 1 hour

CHARACTERISTICS
A medium-heavy-coated hydrogen-controlled electrode depositing low alloy weld metal. Developed specially for joining and overlay work for the steel mills and forging industry. The weld deposit approx. contains 2.5% Cr, 2% Ni, 1.25% Mo & 0.15% V, giving a tensile strength of over 950 N/mm^2 which can be also raised to 1100 N/mm^2 by suitable heat treatment. The electrode give smooth arc, less spatter, and easily detachable slag. Three layered weld deposit gives hardness up to 320 BHN approx. The electrode gives radiographic quality welds. Can be used in all positions.

TYPICAL APPLICATIONS
Forging dies for filling all types of die impressions. Machinery parts made of high tensile steel, parts of earth moving equipment. Automative parts and certain grades of armour steel, chemical plants where Ni-Cr-Mo steels are used. Steam turbine rotors in service up to 538^{0}C. Repair of case-hardening steel parts after removing the hard zone for repairing cracks in Ni-Cr hot working dies.

WELD METAL CHEMISTRY, wt%

C	-	0.07-0.09	Cr	-	2.50-3.00	V-0.10-0.20		
Mn	-	1.20-1.70	Ni	-	1.80-2.20	S-0.03 max		
Si	-	0.15-0.25	Mo	-	1.00-1.50	P-0.03 max		

Diffusible H_2 content <5 ml / 100gm

MECHANICAL PROPERTIES- ALL-WELD

Condition	UTS MPa	YS MPa	% Elongation (L = 4xd)	Hardness BHN
As-welded	950-1100	860-980	16 min	260-330

PACKING DATA

Dia., mm	6.3	5.0	4.0	3.2
Length, mm	450	450	450	450
Pcs per carton, Nos	34	53	86	127
Cartons / box	4	4	4	4
Pcs per box, Nos	136	212	344	508
Approx. Wt. of 1000 pcs,kg	147	94	58	39