



NIA

CLASSIFICATION: Welding Rod DIN 8555 — G21-GF-55-CG

GENERAL CHARACTERISTICS: **NIA** is a cold rolled, formed, closed seam nickel tube filled with fused tungsten carbide (**FTC**) and Cr, B and Si for oxyacetylene application. The deposited alloy consists of approximately 65% FTC and 35% Ni-Cr-B-Si-matrix. **NIA** wets easily and has excellent flow producing a smooth, clean surface. **NIA** has a low melting point of approx. 900 – 1050°C. The overlay is extremely resistant to acids, bases, lyes and other corrosive media and other excessive wear conditions.

APPLICATIONS: Hardfacing on ferritic and austenitic steels (steel casings), overlaying mixer blades and conveyors & screws in : chemical & dye industry and food industry. Recommended for hardfacing rock bits and stabilizers in the petroleum industry.

RECOMMENDED WELDING DIRECTIONS: The surface to be hardfaced should be clean and free of rust, scale or grease and other dirt, preferably by grinding or shot blasting. Deposits should be made using a gas flame with a neutral to slight acetylene excess. To avoid puddling and overheating, sweat deposits on the base metal with minimum penetration.

TYPICAL HARDNESS : FTC: approx. 2360 HV_{0,4}
Ni-Cr-B-Si-Matrix: approx. 450 - 520 HV_{0,1}

SIZES AVAILABLE :					
Type	ø mm	Ø inch	grain size mm	US mesh size	Colour code
4005	4,0	5/32	0,25 – 0,70	24 – 60	White
4010	4,0	5/32	0,70 – 1,20	14 – 24	yellow
4015	4,0	5/32	1,00 – 1,60	10 – 16	red
5005	5,0	3/16	0,25 – 0,70	24 – 60	white
5010	5,0	3/16	0,70 – 1,20	14 – 24	yellow
5020	5,0	3/16	1,00 – 2,00	9 – 16	green
6005	6,0	1/4	0,25 – 0,70	24 – 60	white
6010	6,0	1/4	0,70 – 1,20	14 – 24	yellow
6020	6,0	1/4	1,00 – 2,00	9 – 16	green

Standard tube metal length: 700mm (28")