



## **DURMAT<sup>®</sup>-NIFD**

**CLASSIFICATION:** Flux-Cored Wire DIN 8555 — MF21-55-CGZ

**GENERAL CHARACTERISTICS:** DURMAT-NIFD is a cored metal wire filled with fused tungsten carbide and Ni-Cr-B-Si- matrix for semi-automatic welding application. DURMAT-NIFD was developed to protect surfaces where extreme abrasive wear in combination with corrosion are encountered. The deposit alloy consists of approximately 60% FTC and 35 - 40% Ni-Cr-B-Si-matrix. The alloy has a low melting range of between 900 – 1050°C (1.652 – 1.922°F) and flows extremely well and leaves a smooth and clean surface. The matrix is highly resistant to acids, bases, lye's and other corrosive media.

**APPLICATIONS:** Repairing & hardfacing ferritic and austenitic steel tools and machine parts (steel castings). Specially developed for semi and fully automatic welding on tool joints and stabilizers in the petroleum industry.

### **RECOMMENDED WELDING DIRECTIONS:**

The area to be hardfaced should be free of rust, scale, oil and other dirt. Be sure that the base material is not overheated and choose amps and volts as low as possible to avoid melting the tungsten carbide.

NOTE: The base metal's alloy should have enough tensile strength so that the hardfacing material cannot be pressed into it.

**TYPICAL HARDNESS:** FTC: approx. 2360 HV<sub>0,4</sub>  
Matrix: approx. 450 – 480 HV<sub>0,1</sub>

<b>SIZES AVAILABLE AND CURRENT SETTINGS</b>				
Ø mm	Ø inch	Coil Size DIN EN 759	Amps	Voltage
1,6	1/16	B 300 cages ca. 15 kg	160 - 180 A	18 - 20 V
2,4	3/32	B 435 cages ca. 25 kg	200 - 230 A	21 - 23 V
2,8	7/64	B 435 cages ca. 25 kg	220 - 260 A	21 - 23 V
3,2	1/8	B 435 cages ca. 25 kg	240 - 280 A	23 - 25 V