


NiFe 55 Tig

CATEGORY	GMAW-GTAW Solid wires																							
TYPE	Nickel iron TIG wire for joining dissimilar materials and cast iron																							
APPLICATIONS	Cast Iron repairs, rebuilding shafts, wheels, critical joints between steel and cast iron etc.																							
PROPERTIES	Nickel Iron based filler metal for joint welding and claddings on cast Iron. Very well suited also for dissimilar welding between cast iron and high alloyed stainless and heat resistant steels or mild steels. Excellent Weldability with extreme crack resistance with a ductile weld deposit. Good welding and wetting characteristics and high resistance against porosity. The weld metal is corrosion and heat resistant. Very well suitable for welding with robotics or automated processes.																							
CLASSIFICATION	AWS	A 5.15: E NiFe-C1																						
	EN ISO	1071: NiFe-1																						
	DIN: W.Nr.	2.4472																						
	DIN	1736:																						
SUITABLE FOR	Grey cast iron, malleable, nodular : NF A 32-101 : FGL 150, 200, 250, 300, 350, 400. NF A 32-201 : FGS 370-17, 400-12, 500-7, 600-3, 700-2. NF A 32-702 : MN 350-10, 380-18, 450-6, 350-4, 650-3. DIN 1691 : CG-14, 18, 25, 30. DIN 1693 : GGG-40, 50, 60, 70. DIN 1692 : GTS-35, 45, 55, 65, 70.																							
APPROVALS	CE approved																							
WELDING POSITIONS:																								
WELD METAL ANALYSIS %	<table border="1"> <thead> <tr> <th>Ni</th> <th>C</th> <th>Cu</th> <th>Mn</th> <th>Si</th> <th>Fe</th> </tr> </thead> <tbody> <tr> <td>55</td> <td>0.03</td> <td>0.4</td> <td>0.7</td> <td>0.1</td> <td>Rest</td> </tr> </tbody> </table>					Ni	C	Cu	Mn	Si	Fe	55	0.03	0.4	0.7	0.1	Rest							
Ni	C	Cu	Mn	Si	Fe																			
55	0.03	0.4	0.7	0.1	Rest																			
MECHANICAL PROPERTIES	<table border="1"> <thead> <tr> <th rowspan="2">Heat Treatment</th> <th rowspan="2">R_{p0,2} (N/mm²)</th> <th rowspan="2">R_m (N/mm²)</th> <th rowspan="2">A₅ (%)</th> <th colspan="3">Impact Energy (J) ISO-V</th> <th rowspan="2">Hardness HB 30</th> </tr> <tr> <th>-20°C</th> <th>-40°C</th> <th>-60°C</th> </tr> </thead> <tbody> <tr> <td>AW</td> <td>~350</td> <td>~450</td> <td>16</td> <td></td> <td></td> <td></td> <td>185</td> </tr> </tbody> </table>					Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HB 30	-20°C	-40°C	-60°C	AW	~350	~450	16				185
Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V						Hardness HB 30														
				-20°C	-40°C	-60°C																		
AW	~350	~450	16				185																	
AW: as welded																								
WELDING PARAMETERS / PACKING	<table border="1"> <thead> <tr> <th rowspan="2">D (mm)</th> <th colspan="3">Welding Parameters</th> <th rowspan="2">Packing kg / tube</th> </tr> <tr> <th>Length (mm)</th> <th>Current (A)</th> <th></th> </tr> </thead> <tbody> <tr> <td>2.0</td> <td>1000</td> <td>70-110</td> <td></td> <td>5</td> </tr> <tr> <td>2.4</td> <td>1000</td> <td>110-180</td> <td></td> <td>5</td> </tr> </tbody> </table>					D (mm)	Welding Parameters			Packing kg / tube	Length (mm)	Current (A)		2.0	1000	70-110		5	2.4	1000	110-180		5	
D (mm)	Welding Parameters			Packing kg / tube																				
	Length (mm)	Current (A)																						
2.0	1000	70-110		5																				
2.4	1000	110-180		5																				
REDRYING TEMPERATURE	not required																							