

# Innershield® NR®-152

## Self-shielded cored wire

### Classification

AWS A5.20/A5.20M : E71T-14

### General description

**Self shielded: easiest equipment arrangement**

**Welding galvanized steel**

**Single pass automatic and semi-automatic**

**Recommended for sheets from 1.2 to 5.0mm**

### Welding positions



ISO/ASME



PA/1G



PC/2G



PG/3Gdown PG/5Gdown

### Current type

DC -

### Chemical composition (w%), typical, all weld metal

C	Mn	Si	P	S	Al	Ti	N
0.30	0.99	0.24	0.013	0.007	1.63	0.003	0.051

### Mechanical properties, typical, all weld metal

	Condition	Yield strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation %	Impact ISO-V(J)
Required:	AWS A5.20	not required	480	not required	not required
Typical values	AW		525*		

\* Flat tensile test specimen

### Packaging and available sizes

Unit type	Diameter (mm)
	1.6
22.68 kg coil 50C	X

Innershield® NR®-152: rev. EN 21

**Liability:** All information in this data sheet is based on the best available knowledge, is subject to change without notice and can only be considered as suitable for general guidance **Fumes:** Consult information on Welding Safety Sheet, available upon request

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## Materials to be welded

Steel grades/Standard      Type

### General structural steel

EN 10025 part 2      S185, S235, S275, S355

### Ship plates

ASTM A131      Grade A, B, D, AH32 t/m DH36

### Cast steel

EN 10213-2      GP240R

### Pipe material

EN 10208-1      L210, L240, L290, L360

EN 10208-2      L240, L290, L360

API 5LX      X42, X46, X52

EN 10216-1/      P235T1, P235T2, P275T1

EN 10217-1      P275T2, P355N

### Boiler & pressure vessel steel

EN 10028-2      P235GH, P265GH, P295GH, P355GH

### Fine grained steel

EN 10025 part 3      S275, S355

EN 10025 part 4      S275, S355

## Calculation data at normal setting

Diameter (mm)	Electrical Stick-out (mm)	Wire feed speed cm/min	Current (approx. A)	Arc Voltage (V)	Deposition Rate (kg/h)	kg Wire/ kg Weldmetal
1.6	13	75	90	13	0.55	1.11
		125	150	15	0.9	1.11
		280	250	19	2.0	1.11

## Welding parameters, optimum fill passes

Diameter (mm)	Welding position	Welding position		
		PA/1G	PC/2G	PG/3G (down)
1.6	PB/2F			
	Wire feed speed (cm/min.)	180	150	200
	Current (A)	205	170	220
	Voltage (V)	16.5	18.5	19.5

## Remarks/ Application advice

Spot welds on 0.75mm to 1.5mm thick material

These procedures include automatic processes where excellent striking is required

Galvanized or zinc coated steel may be welded with Innershield NR-152 at travel speeds of 75 to 100 cm/min. The joint design must permit the zinc oxide