# WIRES FOR MILD STEEL TECHNICAL DATA SHEETS



Founded in 1983 Wilkinson Star is one of the UK's leading importers and wholesale distributors of industrial and welding equipment. We offer a comprehensive range of welding and resistance welding equipment, welder generators, generators and lighting towers along with a comprehensive range of welding consumables, PPE equipment, gas equipment, air compressors, air accessories and air & hand tools.

In our aim to provide unrivalled service and complete customer satisfaction, all our industry leading brands are supported by our world class on site Welding Training Academy/Demonstration Centre and Marketing Services Facility. Furthermore our technical expertise for product innovation and development is at the core of our Technical Support Centre and this has been further enhanced with the addition of the Inverter Technology Centre at Manchester in 2015. We have been assembling air compressors in our Manchester based Fiac Production Facility since 1991.

We offer over 900 man years of knowledge in our industry, offering over 20,000 quality product lines, serving over 2,000 authorised UK outlets and export partners with a strong commitment to widen our product ranges to meet the growing demands of our partners in the years ahead.

**New for 2022** is our acquisition of Wardley Cross, opposite sites to our headquarters. Wardley Cross is not only home to our 2m stockholding of wires and consumables but also our new marketing and design centre and our state of the art 150m<sup>2</sup> exhibition space - the first of its kind in the UK.

### Sales & Technical Support, Ordering & Delivery

Our Customer Sales & Technical Centre is open Monday to Friday 8.30am to 5.00pm. Our national sales team of Area Managers and Technical Engineers cover the whole of the UK and Eire.









### Tianjin Bridge Welding Materials Group

Founded in 1957, Tianjin Bridge Welding Materials Group is one of the top 3 producers of welding consumables globally.

Located in Xiqing economic development zone of Tianjin city, covering a total area of 1,200,000 square metres, a production area of 868,000 square metres, with an annual production output of over 1,500,000 tonnes. Tianjin Bridge also has production bases in Jinghai district of Tianjin city, Hengyang city of Hunan province, Yinchuan city of Ningxia province, and Changji city of Xinjiang province to ensure continuity of our supply chain.

After 65 years of innovating industry, Tianjin Bridge has developed into a comprehensive company mainly specialising in the research, development and production of premium quality welding materials.

Tianjin Bridge products are currently being exported to more than 130 countries worldwide. The high quality products are used in major industrial sectors including, energy and power, petrochemical, pressure vessels, construction, bridges, ships, marine engineering, rail transit, construction machinery, nuclear power and military installations etc.

Wilkinson Star has the import and export rights for UK, Eire and several parts of mainland Europe. We are looking forward to working with our new exclusive partner.









### What is Green Wire?

Green wire is virgin wire that's made from a primary raw material sourced from specialised steel mills. A lot of wires in the market today are manufactured from recycled scrap materials sourced from anywhere in the world, this ultimately can result in a much lower quality product.

### Some advantages of using Green Wire;

- · Less fumes during welding
- Rapid start of the arc
- Constant feeding with lower resistance
- Stable arc and uninterrupted welding
- Significant reduction in spatter
- Excellent mechanical properties
- Good bead appearance
- Reassurance of consistent quality



## Wilkinson Star's Approvals



CE acc. EN 13479



TÜV 1153



DB Systemtechnik







TÛ\	V Wilk	steller/Lieferer: inson Star Limit Herstellerwerken	ed n gemäß TÜV-Verban	d Liste 1000		2 Nummer: 19928.88 31.85.2822
3 Schweißz	usatz*:	Drahtelekti	rode			•
4 Marke*:		Weld Star	SG2 (G3Si1)			
7 Typ*:		ISO 14341-A	A - G 42 3 C1/ G 4	12 4 M21 35i1		
11 Durchme	esserbereich:	0,8 bis 1,6	5 mm mm			
12 Hilfsstoff	le:	ISO 14175	- M2,M3, C1			
13 Die Gült	igkeit wird dur	ch Erscheinen des Ke	annblattes im Schweißz	usatzwerkstoffportal	bescheinigt.	
15 Wärmeb	ehandlung (V	/b) nach dem Schweil	Ben und Werkstoffe			
Pos Wb	Gruppe / Wi	arkstoff 1	Text	Gruppe / We	rkstoff 2	Ber
U	Gruppe 1.1					
U	Gruppe 1.2					
U	Gruppe 1.3	(ReH max. 420 MPa)				
16 Die Werl	kstoffeinteilun	g entspricht ISO 1560	8:2000			<u> </u>
21 Wurzels	chweißbarkeit	nachgewiese	en			
23 Wanddio	ike:	bis 40 nm				
24 Stromart	und Polung:	Ge.				
		DIN EN ISO 6947:19	97.05: DA	PB. PC. PD. PE.	DE DC	
			eich wie Grundwerkstof		358 °C	
		eratur im Langzeitber		, jedoch max	3° °C	
			toff, jedoch nicht tiefer i	No.	-40 1)	
	unaskennwer			Grundwerkstoff	-40 1)	
	atz im Langze		***	GI GIIGHEI KACOII		
		eit nachoewiesen nac				
Betriebst 33 Die Eign	erwendung emperatur unosprüfung	wie Grundwerkst	der Gruppe C1, gi off, jedoch nicht erfolgte auf der Grund keine abweichenden Pr	tiefer als -30	d-Merkblattes 1	153 und der DIN Er Schweißzusatz unt
Beachtung	des Anhangs	I Abschnitt 4 der Rich	dinie 2014/68/EU für de	in Einsatz nach Druc	kgeräterichtlinie (	geeignet.
at Ertäuterungen		A - angelassen L - Elsunospeptifit u. abprechr	S - spannungsamn geglüte	W - weichgeglüht		Steichstorn Phagail Seichstorn Minuscol
		N - normalgagitht	U-ungegilde V-vergilde			Nechaelcon
35 Erstellt o	lurch:		TÜV	SÜD Industrie S	ervice GmbH.	München

DB Schweißzusätze und Schweißhilfsstoffe Wilkinson Star Limited Shield Drive, Wardley Industrial Estate Worsley Weld Star I SG2 (G3Si1) eich aufgrund der nach VA 918 490 durchgeführten Eignungsprüfung:  $\frac{\text{Mit den Schutzgasen nach DIN EN ISO 14175 - C1. M2. M3}}{2.1 \, (\text{R}_{\text{PM}} \le 420 \, \text{MPa})}$ PA, PB, PC, PD, PE, PF, PG Stromart und Polung: öser, den 15.06.2022

# SG2 - G3Si1

### Mild Steel MIG/GMAW

### **Standards**

**EN/ISO-Standard** - 14341-A **AWS-Standard** - A5.18 **EN/ISO-Classification** - G 42 3 C1 / G 42 4 M21 3Si1 **AWS-Classification** - ER 70S-6

### **Features and Applications**

- A copper coated solid wire suitable for single pass or multipass welding of unalloyed and low-alloyed carbon-manganese steels.
- Good mechanical properties at sub-zero temperatures down to -40°C.
- Vacuum-sealed plastic bag packaging to prevent moisture absorption.
- · Fitted with alignment hole clip to ensure smooth feeding.
- Precision layer wound for superior wire feeding characteristics.
- Typically used on boilers, industrial machinery, bridges, shipbuilding, automotive, rail, structural and engineering fabrications etc.
- Green wire is produced using virgin raw materials sourced from specialised steel mills, which ensures consistent reliability and quality.
- Test Certificates can be found online @wilkinsonstar247.com



### **Typical Base Materials**

S185, S235, S275, S355 - Grade A, B, D, AH32 to DH36 - L210, L240, L290, L360, L240NB, L290NB, L360NB, L360QB, L240MB, L290MB, L360MB, L415MB - X42, X46, X52, X60 - P235T1, P235T2, P275T1 - P275T2, P355N - P235GH, P265GH, P295GH, P355GH - S275, S355, S420, S275M, S275ML, S355M, S355ML, S420M, S420ML\*

### **Welding Positions**

EN ISO 6947 - PA, PB, PC, PD, PE, PF, PG

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EN ISO 14175 - C1, M21 MAG DC (+)

### **Welding Parameters**

Ø mm	0.80	1.00	1.20
Current (A)	60-180	80-230	120-350
Voltage (V)	18-22	20-28	26-34

### **Mechanical Properties (Typical) - C1**

Tensile Strength	Yield Strength	Elongation	Impact	Test
(N/mm²)	(N/mm²)	(%)	Strength (J)	Temperature
540	440	30	70	-30°C

### **Mechanical Properties (Typical) - M21**

Tensile Strength	Yield Strength	Elongation	Impact	Test
(N/mm²)	(N/mm²)	(%)	Strength (J)	Temperature
580	460	26	90	-40°C

Mechanical properties are approximate and may vary based on the heat, shielding gas, welding parameters and other factors.

### **Chemical Composition % (Typical)**

<b>C</b> %	Si %	Mn %	P %	<b>S</b> %	Cu %ª	Cr%	Ni %	Mo %	AI %	V %	Zr+Ti %
0.07	0.85	1.45	<0.025	<0.025	< 0.35	<0.15	<0.15	<0.15	<0.020	<0.030	<0.15

**Polarity** 

### **Packaging Data**

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity	
3010200449	0.80	15	BS300 PLW	72	
3010200451	1.00	15	BS300 PLW	72	
3010200453	1.20	15	BS300 PLW	72	

1kg, 5kg, D300 & Drums also available.









<sup>\*</sup> Illustrative, not exhaustive list

a (includes copper coating)

# SG2 - G3Si1

### Mild Steel MIG/GMAW

### **Standards**

**EN/ISO-Standard** - 14341-A **AWS-Standard** - A5.18 **EN/ISO-Classification** - G 42 3 C1 / G 42 4 M21 3Si1 **AWS-Classification** - ER 70S-6

### **Features and Applications**

- A copper coated solid wire suitable for single pass or multipass welding of unalloyed and low-alloyed carbon-manganese steels.
- Good mechanical properties at sub-zero temperatures down to -40°C.
- Vacuum-sealed aluminium foil packaging to prevent moisture absorption.
- Precision layer wound for superior wire feeding characteristics.
- Typically used on boilers, industrial machinery, bridges, shipbuilding, automotive, rail, structural and engineering fabrications etc.
- Green wire is produced using virgin raw materials sourced from specialised steel mills, which ensures consistent reliability and quality.
- Test Certificates can be found online @wilkinsonstar247.com



### **Typical Base Materials**

S185, S235, S275, S355 - Grade A, B, D, AH32 to DH36 - L210, L240, L290, L360, L240NB, L290NB, L360NB, L360QB, L240MB, L290MB, L360MB, L415MB - X42, X46, X52, X60 - P235T1, P235T2, P275T1 - P275T2, P355N - P235GH, P265GH, P295GH, P355GH - S275, S355, S420, S275M, S275ML, S355M, S355ML, S420M, S420ML\*

### **Welding Positions**

EN ISO 6947 - PA, PB, PC, PD, PE, PF, PG

Shielding (	Gases
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EN ISO 14175 - C1, M21

### **Polarity**

MAG DC (+)

### **Welding Parameters**

Ø mm	0.60	0.80	1.00	1.20	1.60
Current (A)	50-100	60-180	80-230	120-350	220-500
Voltage (V)	15-20	18-22	20-28	26-34	28-38

### Mechanical Properties (Typical) - C1

Tensile Strength	Yield Strength	Elongation	Impact	Test
(N/mm²)	(N/mm²)	(%)	Strength (J)	Temperature
540	440	30	70	-30°C

### Mechanical Properties (Typical) - M21

Tensile Strength	Yield Strength	Elongation	Impact	Test
(N/mm²)	(N/mm²)	(%)	Strength (J)	Temperature
580	460	26	90	

Mechanical properties are approximate and may vary based on the heat, shielding gas, welding parameters and other factors.

### **Chemical Composition % (Typical)**

<b>C</b> %	Si %	Mn %	P %	<b>S</b> %	Cu %a	Cr%	Ni %	Mo %	AI %	<b>V</b> %	Zr+Ti %
0.07	0.85	1.45	< 0.025	< 0.025	< 0.35	<0.15	<0.15	<0.15	<0.020	< 0.030	<0.15

a (includes copper coating)

### **Packaging Data**

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity
3010200522	0.60	15	D300 PLW	72
3010200523	0.80	15	D300 PLW	72
3010200525	1.00	15	D300 PLW	72
3010200527	1.20	15	D300 PLW	72
3010200454	1.60	15	D300 PLW	72

1kg, 5kg, BS300 & Drums also available.









<sup>\*</sup> Illustrative, not exhaustive list

Scan for Accessories

# SG2 - G3Si1 (ENDURANCE PAC)

### Mild Steel MIG/GMAW

### **Standards**

**EN/ISO-Standard -** 14341-A **AWS-Standard -** A5.18 **EN/ISO-Classification -** G 42 3 C1 / G 42 4 M21 3Si1 **AWS-Classification -** ER 70S-6

### **Features and Applications**

- Bulk wire drum system that offers a high productivity solution for continuous high volume welding applications.
- A copper coated solid wire suitable for single pass or multipass welding of unalloyed and low-alloyed carbon-manganese steels.
- Good mechanical properties at sub-zero temperatures down to -40°C.
- Typically used on boilers, industrial machinery, bridges, shipbuilding, automotive, rail, structural and engineering fabrications etc.
- Green wire is produced using virgin raw materials sourced from specialised steel mills, which ensures consistent reliability and quality.
- Test Certificates can be found online @wilkinsonstar247.com



Wire Length	0.80	1.00	1.20
Meters	68,375	43,062	29,625
Miles	42.50	26.76	18.41

### **Typical Base Materials**

S185, S235, S275, S355 - Grade A, B, D, AH32 to DH36 - L210, L240, L290, L360, L240NB, L290NB, L360NB, L360QB, L240MB, L290MB, L360MB, L415MB - X42, X46, X52, X60 - P235T1, P235T2, P275T1 - P275T2, P355N - P235GH, P265GH, P295GH, P355GH - S275, S355, S420, S275M, S275ML, S355M, S355ML, S420M, S420ML\*

### **Welding Positions**

EN ISO 6947 - PA, PB, PC, PD, PE, PF, PG

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EN ISO 14175 - C1, M21

### **Polarity**

MAG DC (+)

# Welding Parameters

Ø mm	0.80	1.00	1.20
Current (A)	60-180	80-230	120-350
Voltage (V)	18-22	20-28	26-34

### **Mechanical Properties (Typical) - C1**

Tensile Strength	Yield Strength	Elongation	Impact	Test
(N/mm²)	(N/mm²)	(%)	Strength (J)	Temperature
540	440	30	70	-30°C

### Mechanical Properties (Typical) - M21

Tensile Strength	Yield Strength	Elongation	Impact	Test
(N/mm²)	(N/mm²)	(%)	Strength (J)	Temperature
580	460	26	90	

Mechanical properties are approximate and may vary based on the heat, shielding gas, welding parameters and other factors.

### **Chemical Composition % (Typical)**

<b>C</b> %	Si %	Mn %	P %	<b>S</b> %	Cu %a	Cr %	Ni %	Mo %	AI %	<b>V</b> %	Zr+Ti %
0.07	0.85	1.45	<0.025	<0.025	< 0.35	<0.15	<0.15	<0.15	<0.020	<0.030	<0.15

a (includes copper coating)

### **Packaging Data**

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity
3010250080	0.80	250	Drum	4
3010250100	1.00	250	Drum	4
3010250120	1.20	250	Drum	4

1kg, 5kg, D300 & BS300 spools also available.









<sup>\*</sup> Illustrative, not exhaustive list

# SG3 - G4Si1

### Mild Steel MIG/GMAW

### **Standards**

**EN/ISO-Standard** - 14341-A **AWS-Standard** - A5.18 **EN/ISO-Classification** - G 42 3 C1 / G 46 4 M21 4Si1 **AWS-Classification** - ER 70S-6

### **Features and Applications**

- A copper coated solid wire suitable for single pass or multipass welding of unalloyed and low-alloyed carbon-manganese steels.
- The higher Si-Mn content increases the weld metal strength and leaves a good bead appearance.
- Designed for semi-automatic and full-automatic GMAW applications.
- Good mechanical properties at sub-zero temperatures down to -40°C.
- Vacuum-sealed aluminium foil packaging to prevent moisture absorption.
- Precision layer wound for superior wire feeding characteristics.
- Typically used on boilers, industrial machinery, bridges, shipbuilding, automotive, rail, structural and engineering fabrications.
- Green wire is produced using virgin raw materials sourced from specialised steel mills, which ensures consistent reliability and quality.
- Test Certificates can be found online @wilkinsonstar247.com



### **Typical Base Materials**

S185, S235, S275, S355 - Grade A, B, D, AH32 to DH36 - L210, L240, L290, L360, L240NB, L290NB, L360NB, L360QB, L240MB, L290MB, L360MB, L415MB - X42, X46, X52, X60 - P235T1, P235T2, P275T1 - P275T2, P355N - P235GH, P265GH, P295GH, P355GH - S275, S355, S420, S275M, S275ML, S355M, S355ML, S420M, S420ML\*

\* Illustrative, not exhaustive list

### **Welding Positions**

EN ISO 6947 - PA, PB, PC, PD, PE, PF, PG

Shielding G
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EN ISO 14175 - C1, M21

### Polarity

MAG DC (+)

### **Welding Parameters**

Ø mm	0.80	1.00	1.20
Current (A)	60-180	80-230	120-350
Voltage (V)	18-22	20-28	26-34

### **Mechanical Properties (Typical) - C1**

Tensile Strength	Yield Strength	Elongation	Impact	Test
(N/mm²)	(N/mm²)	(%)	Strength (J)	Temperature
570	460	30	58	-30°C

### **Mechanical Properties (Typical) - M21**

Tensile Strength	Yield Strength	Elongation	Impact	Test
(N/mm²)	(N/mm²)	(%)	Strength (J)	Temperature
590	490	28	88	-40°C

Mechanical properties are approximate and may vary based on the heat, shielding gas, welding parameters and other factors.

### **Chemical Composition % (Typical)**

<b>C</b> %	Si %	Mn %	P %	<b>S</b> %	Cu %a	Cr%	Ni %	Mo %	AI %	<b>V</b> %	Zr+Ti %
0.08	0.95	1.70	<0.020	<0.020	<0.25	<0.15	<0.15	< 0.050	<0.020	< 0.030	<0.15

a (includes copper coating)

### **Packaging Data**

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity
3010301508	0.80	15	D300 PLW	72
3010301510	1.00	15	D300 PLW	72
3010301512	1.20	15	D300 PLW	72

Drums also available.







# SG3 - G4Si1(ENDURANCE PAC)

### Mild Steel MIG/GMAW

### **Standards**

**EN/ISO-Standard -** 14341-A **AWS-Standard -** A5.18 **EN/ISO-Classification -** G 42 3 C1 / G 46 4 M21 4Si1 **AWS-Classification -** ER 70S-6

### **Features and Applications**

- Bulk wire drum system that offers a high productivity solution for continuous high volume welding applications.
- A copper coated solid wire suitable for single pass or multipass welding of unalloyed and low-alloyed carbon-manganese steels.
- The higher Si-Mn content increases the weld metal strength and leaves a good bead appearance.
- Designed for semi-automatic and full-automatic GMAW applications.
- Good mechanical properties at sub-zero temperatures down to -40°C.
- Typically used on boilers, industrial machinery, bridges, shipbuilding, automotive, rail, structural and engineering fabrications.
- Green wire is produced using virgin raw materials sourced from specialised steel mills, which ensures consistent reliability and quality.
- Test Certificates can be found online @wilkinsonstar247.com



Wire Length	0.80	1.00	1.20
Meters	68,375	43,062	29,625
Miles	42.50	26.76	18.41

### **Typical Base Materials**

S185, S235, S275, S355 - Grade A, B, D, AH32 to DH36 - L210, L240, L290, L360, L240NB, L290NB, L360NB, L360QB, L240MB, L290MB, L360MB, L415MB - X42, X46, X52, X60 - P235T1, P235T2, P275T1 - P275T2, P355N - P235GH, P265GH, P295GH, P355GH - S275, S355, S420, S275M, S275ML, S355M, S355ML, S420M, S420ML\*

\* Illustrative, not exhaustive list

### **Welding Positions**

EN ISO 6947 - PA, PB, PC, PD, PE, PF, PG

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JIIIC	unig	uases

**Polarity** 

EN ISO 14175 - C1, M21

MAG DC (+)



### **Welding Parameters**

Ø mm	0.80	1.00	1.20
Current (A)	60-180	80-230	120-350
Voltage (V)	18-22	20-28	26-34

### **Mechanical Properties (Typical) - C1**

Tensile Strength	Yield Strength	Elongation	Impact	Test
(N/mm²)	(N/mm²)	(%)	Strength (J)	Temperature
570	460	30	58	-30°C

### **Mechanical Properties (Typical) - M21**

Tensile Strength	Yield Strength	Elongation	Impact	Test
(N/mm²)	(N/mm²)	(%)	Strength (J)	Temperature
590	490	28	88	-40°C

Mechanical properties are approximate and may vary based on the heat, shielding gas, welding parameters and other factors.

### **Chemical Composition % (Typical)**

<b>C</b> %	Si %	Mn %	P %	<b>S</b> %	Cu %a	Cr%	Ni %	Mo %	AI %	V %	Zr+Ti %
0.08	0.95	1.70	< 0.020	< 0.020	< 0.25	< 0.15	<0.15	< 0.050	< 0.020	< 0.030	< 0.15

<sup>&</sup>lt;sup>a</sup> (includes copper coating)

### **Packaging Data**

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity
3010301514	0.80	250	Drum	4
3010301516	1.00	250	Drum	4
3010301518	1.20	250	Drum	4

D300 spools also available.









# CF2 - G3Si1 (Copper Free)

### Mild Steel MIG/GMAW

### **Standards**

**EN/ISO-Standard -** 14341-A **EN/ISO-Classification -** G 42 3 C1 / G 42 4 M21 3Si1

**AWS-Standard -** A5.18 **AWS-Classification -** ER 70S-6

### **Features and Applications**

- A non-copper coated solid wire suitable for single pass or multipass welding of unalloyed and low-alloyed carbon-manganese steels.
- Environmentally friendly when compared against traditional copper wires offering less fume and smoke in the working environment.
- Advantages of a stable arc when working with increased welding speeds that achieves high quality welds with almost no spatter.
- Good mechanical properties at sub-zero temperatures down to -40°C.
- Vacuum-sealed plastic bag packaging to prevent moisture absorption.
- · Fitted with alignment hole clip to ensure smooth feeding.
- Precision layer wound for superior wire feeding characteristics.
- Typically used on boilers, industrial machinery, bridges, shipbuilding, automotive, rail, structural and engineering fabrications etc.
- Green wire is produced using virgin raw materials sourced from specialised steel mills, which ensures consistent reliability and quality.
- Test Certificates can be found online @wilkinsonstar247.com



### **Typical Base Materials**

S185, S235, S275, S355 - Grade A, B, D, AH32 to DH36 - L210, L240, L290, L360, L240NB, L290NB, L360NB, L360QB, L240MB, L290MB, L360MB, L415MB - X42, X46, X52, X60 - P235T1, P235T2, P275T1 - P275T2, P355N - P235GH, P265GH, P295GH, P355GH - S275, S355, S420, S275M, S275ML, S355M, S355ML, S420M, S420ML\*

\* Illustrative, not exhaustive list

### **Welding Positions**

EN ISO 6947 - PA, PB, PC, PD, PE, PF, PG

<b>Shielding Gases</b>	
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EN ISO 14175 - C1, M21

### **Polarity**

MAG DC (+)

### **Welding Parameters**

Ø mm	0.80	1.00	1.20
Current (A)	60-180	80-230	120-350
Voltage (V)	18-22	20-28	26-34

### Mechanical Properties (Typical) - C1

Tensile Strength	Yield Strength	Elongation	Impact	Test
(N/mm²)	(N/mm²)	(%)	Strength (J)	Temperature
540	440	30	70	-30°C

### **Mechanical Properties (Typical) - M21**

Tensile Strength	Yield Strength	Elongation	Impact	Test	
(N/mm²)	(N/mm²)	(%)	Strength (J)	Temperature	
580	460	26	90	-40°C	

Mechanical properties are approximate and may vary based on the heat, shielding gas, welding parameters and other factors.

### **Chemical Composition % (Typical)**

<b>C</b> %	Si %	Mn %	P %	<b>S</b> %	Cu %	Cr%	Ni %	Mo %	AI %	<b>V</b> %	Zr+Ti %
0.07	0.85	1.45	< 0.025	< 0.025	0.010	<0.15	< 0.15	< 0.15	< 0.020	< 0.030	< 0.15

### **Packaging Data**

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity	
3010200837	0.80	15	BS300 PLW	72	
3010200839	1.00	18	BS300 PLW	56	
3010200841	1.20	18	BS300 PLW	56	

Drums also available.







# CF2 - G3Si1 (ENDURANCE PAC)

### Mild Steel MIG/GMAW

### **Standards**

**EN/ISO-Standard -** 14341-A **EN/ISO-Classification -** G 42 3 C1 / G 42 4 M21 3Si1

**AWS-Standard -** A5.18 **AWS-Classification -** ER 70S-6

### **Features and Applications**

- Bulk wire drum system that offers a high productivity solution for continuous high volume welding applications.
- A non-copper coated solid wire suitable for single pass or multipass welding of unalloyed and low-alloyed carbon-manganese steels.
- Environmentally friendly when compared against traditional copper wires offering less fume and smoke in the working environment.
- Advantages of a stable arc when working with increased welding speeds that achieves high quality welds with almost no spatter.
- Good mechanical properties at sub-zero temperatures down to -40°C.
- Typically used on boilers, industrial machinery, bridges, shipbuilding, automotive, rail, structural and engineering fabrications etc.
- Green wire is produced using virgin raw materials sourced from specialised steel mills, which ensures consistent reliability and quality.
- Test Certificates can be found online @wilkinsonstar247.com



Wire Length	0.80	1.00	1.20
Meters	68,375	43,062	29,625
Miles	42.50	26.76	18.41

### **Typical Base Materials**

S185, S235, S275, S355 - Grade A, B, D, AH32 to DH36 - L210, L240, L290, L360, L240NB, L290NB, L360NB, L360QB, L240MB, L290MB, L360MB, L415MB - X42, X46, X52, X60 - P235T1, P235T2, P275T1 - P275T2, P355N - P235GH, P265GH, P295GH, P355GH - S275, S355, S420, S275M, S275ML, S355M, S355ML, S420M, S420ML\*

\* Illustrative, not exhaustive list

### **Welding Positions**

EN ISO 6947 - PA, PB, PC, PD, PE, PF, PG

Shielding Gases	Polarity
EN ISO 14175 - C1, M21	MAG DC (+)

Scan for Accessories

WELD STAR | WIRE

SOKG | ENDURANCE PAC

GREEN
WIRE

### **Welding Parameters**

Ø mm	0.80	1.00	1.20
Current (A)	60-180	80-230	120-350
Voltage (V)	18-22	20-28	26-34

### **Mechanical Properties (Typical) - C1**

Tensile Strength	Yield Strength	Elongation	Impact	Test	
(N/mm²)	(N/mm²)	(%)	Strength (J)	Temperature	
540	440	30	70	-30°C	

### **Mechanical Properties (Typical) - M21**

Tensile Strength	Yield Strength	Elongation	Impact	Test	
(N/mm²)	(N/mm²)	(%)	Strength (J)	Temperature	
580	460	26	90	-40°C	

Mechanical properties are approximate and may vary based on the heat, shielding gas, welding parameters and other factors.

### **Chemical Composition % (Typical)**

<b>C</b> %	Si %	Mn %	P %	<b>S</b> %	Cu %	Cr%	Ni %	Mo %	AI %	<b>V</b> %	Zr+Ti %
0.07	0.85	1.45	< 0.025	< 0.025	0.010	< 0.15	<0.15	<0.15	< 0.020	< 0.030	< 0.15

### **Packaging Data**

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity	
3010200918	0.80	250	Drum	4	
3010200922	1.00	250	Drum	4	
3010200926	1.20	250	Drum	4	

BS300 spools also available.











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Distributed by:

E&OE Issue 1 09/22

