



# Flux-Cored Wires

# When a Quality Result Matters, Hobart Delivers!

Hobart flux-cored wires offer high quality, repeatable performance for every job. The Hobart range includes high performance wires for both the workshop and on-site environments.

Every product meets the stringent ISO 9001 certification standards for quality and consistency, as well as the strict mechanical property requirements of AS/NZ and AWS standards.



# Trusted by the best

WIA IS A PART OF THE GLOBAL ITW
WELDING GROUP, A GLOBAL LEADER IN THE
DEVELOPMENT OF WELDING TECHNOLOGY
& DELIVERY OF CUSTOMER SOLUTIONS.

Our brands are selected by welding professionals and companies who demand the most cost-effective welding outcomes, innovative and reliable products and superior technical knowledge and support. This is why we are trusted by the best.









# **Hobart Benefits**

# **1.** FORMULATED TO OFFER QUALITY RESULTS

Every Hobart wire has been carefully formulated to offer the highest quality results for both on-site and workshop applications.

# 2. REDUCED COSTS & INCREASED PRODUCTIVITY

We work collaboratively with customers to develop and deliver successful and innovative solutions that contribute to reduced costs and increased productivity.

# 3. LEADING MANUFACTURER

Hobart have been manufacturing flux-cored wires for over 90 years, giving them the experience to develop products that deliver.

# 4. QUALITY ASSURED

To ensure product quality and reliability, every Hobart product is tested and certified, and complies with the stringent ISO 9001 certification standards, and the strict mechanical requirements of AS/NZ and AWS guidelines.

# 5. USED BY THE BEST

Like all WIA brands, Hobart products are preferred and relied on by welding professionals and companies who demand the most cost effective and high performing solutions.

# **6.** GLOBAL PARTNERSHIPS

Hobart offers an impressive track record of success, recognised right across the globe on major projects and various industry sectors.





# FabCO Excel-Arc 71

# A RUTILE FLUX-CORED WIRE WITH GOOD IMPACT TOUGHNESS, FAST FREEZING SLAG, LOW FUMES & SPATTER.

# **CLASSIFICATIONS**

- > AWS A5.20: E71T-1C H8 > E71T-1M H8
- > E71T-9C H8 > E71T-9M H8
- > EN17632-B-T493T1/9-1 A C/M UH10

### **BENEFITS**

- Excellent out of position capability
- Resists cracking in severe applications

### **PRODUCTIVITY GAIN**

- Reduces part re-work / rejection
- > Reduces clean up time
- Minimises risk of inclusions
- Increases welder appeal

# IDEAL FOR SINGLE & MULTI-PASS APPLICATIONS

The FabCO Excel-Arc 71 provides easy slag removal, good impact toughness, fast freezing slag, low fumes and spatter.

The FabCO Excel-Arc 71 is also able to bridge poor fit-up without burn-through.

# **TYPICAL APPLICATIONS**

Suitable for structural fabrication, heavy equipment, general fabrication and non-alloyed and fine grain steels.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS					
SHIELDING GAS	С	Mn	Si	S	Р
100% CO <sub>2</sub>	0.021	1.30	0.69	0.011	0.015
75% Ar/ 25% CO <sub>2</sub>	0.022	1.60	0.82	0.010	0.014

TYPICAL DIFFUSIBLE HYDROGEN				
Hydrogen Equipment	100% CO <sub>2</sub>	75% Ar/25% CO <sub>2</sub>		
Gas Chromatography	3.8ml/100g	4.8ml/100g		

TYPICAL ALL WELD N	METAL MECHANICA	AL ANALYSIS
Gas Type	100% CO <sub>2</sub>	75% Ar/25% CO <sub>2</sub>
Yield Stress	531 MPa	571 MPa
Tensile Strength	579 MPa	619 MPa
Elongation	28%	26%
CVN Impact Values	137J @ -20°C 108J @ -30°C	123@ -20°C 94@ -30°C

ORDERING INFORMATION				
WIRE SIZE (MM)	PACKET SIZE AND TYPE	PART NO.		
1.2	15kg Spool	S247112-029		
1.6	15kg Spool	S247119-029		
2.0	15kg Spool	S247125-029		
FULL PALLET QUANTITY				
WIRE SIZE (MM)	WEIGHT (KG)			
1.2, 1.6 & 2.0		1,080		





# FabCO XL-525

# A RUTILE FLUX-CORED ALL POSITION WIRE FOR WELDING MILD & CARBON STEELS, ESPECIALLY WHEN GOOD IMPACT TOUGHNESS IS REQUIRED AT SUB ZERO TEMPERATURES.

### **CLASSIFICATIONS**

- > AS/NZS ISO 17632-B T494T1-1MA-U H5
- > AS/NZS ISO 17632-B T494T12-1MA-U H5
- > AWS A5.20: E71T-1M, E71T-12MJ H8

# IDEAL FOR SINGLE & MULTI-PASS APPLICATIONS

It delivers outstanding welding performance and produces high quality X-ray clear weld deposit with a bead contour that is flat to slightly convex.

It performs exceptionally well over rust, mill scale and some primers with no pre-cleaning of the steel necessary.

# HIGH OPERATOR APPEAL

FabCO XL-525
has outstanding
mechanical properties
that resemble those
of E7018 MMAW
(SMAW) electrodes,
plus high operator
appeal with low fume
levels, low spatter and
easy slag removal.

# **TYPICAL APPLICATIONS**

Suitable for ship building, earth moving equipment, off-shore structures, storage vessels and pipe welding.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS						
SHIELDING GAS	С	Mn	Si	Р	S	Ni
80% Ar/20% CO <sub>2</sub>	0.04	1.01	0.30	0.007	0.004	0.34
75% Ar/25% CO <sub>2</sub>	0.04	1.01	0.27	0.010	0.006	0.32

TYPICAL DIFFUSIBLE HYDROGEN				
Hydrogen Equipment	80% Ar/20% CO <sub>2</sub>	75% Ar/25% CO <sub>2</sub>		
Gas Chromatography	3.6ml/100g	3.0ml/100g		

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS				
Gas Type	80% Ar/20% CO <sub>2</sub>	75% Ar/25% CO <sub>2</sub>		
Yield Stress	558 MPa	552 MPa		
Tensile Strength	517 MPa	503 MPa		
Elongation	28%	29%		
CVN Impact Values	163J @ -20°C 102J @ -40°C	136J @ -20°C 115J @ -30°C 95J @ -40°C		

ORDERING INFORMATION				
WIRE SIZE (MM)	WIRE SIZE (MM) PACKET SIZE AND TYPE			
1.2	15kg Spool	S283212-029		
1.6	15kg Spool	S283219-029		
FULL PALLET QUANTITY				
WIRE SIZE (MM)	WEIGHT (KG)			
1.2 & 1.6		1,080		





# **FabCO 811N1**

# A 1% NI RUTILE FLUX CORED ALL POSITIONAL WIRE FOR WELDING HSLA & Q&T STEELS.

# **CLASSIFICATIONS**

- > AS/NZS ISO 17632-B T554T1-1C/MA-N2-UH5
- > AWS A5.29: E81T1-Ni1CJ H4, E81T1-Ni1MJ H4

# DESIGNED FOR FABRICATION

Designed for mining and earthmoving equipment and other fabrication where low temperature impact values are needed.

# FOR DEMANDING APPLICATIONS

Weld metal diffusible hydrogen levels are kept low, making this an excellent choice for more demanding applications.

# SUPERIOR WELDER APPEAL

The improved slag system of this wire provides the superior welder appeal of acid slag (-T1) products and the mechanical properties normally associated with basic slag wires.

# TYPICAL APPLICATIONS

Suitable for high strength low-alloy steels, structural fabrication, heavy equipment fabrication, bridge fabrication, ship building and weathering steels.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS						
SHIELDING GAS	С	Mn	P	S	Si	Ni
100% CO <sub>2</sub>	0.03	1.09	0.007	0.005	0.32	1.01
75% Ar/25% CO <sub>2</sub>	0.06	1.39	0.009	0.008	0.53	1.00

TYPICAL DIFFUSIBLE HYDROGEN				
Hydrogen Equipment	100% CO <sub>2</sub>	75% Ar/25% CO <sub>2</sub>		
Gas Chromatography	2.4ml/100g	3.0ml/100g		

TYPICAL ALL WELD	METAL MECHAN	ICAL ANALYSIS
Gas Type	100% CO <sub>2</sub>	75% Ar/25% CO <sub>2</sub>
Tensile Stress	572 MPa	641 MPa
Yield Strength	503 MPa	586 MPa
Elongation	27%	23%
CVN Impact Values	88J @ -40°C	54J @ -40°C

ORDERING INFORMATION				
WIRE SIZE (MM)	PACKET SIZE AND TYPE	PART NO.		
1.2	15kg Spool	S283612-053		
1.6	15kg Spool	S283619-053		
FULL PALLET QUANTITY				
WIRE SIZE (MM)	WEIGHT (KG)			
1.2 & 1.6		1,080		





# **FabCO 803**

# A RUTILE FLUX-CORED ALL POSITIONAL WIRE FOR WELDING HSLA & Q&T STEELS.

# **CLASSIFICATIONS**

- > AS/NZS ISO 17632-B T555T1-1C/MA-N5-UH5
- > AWS A5.29: E81T1-Ni2C/MJ H4

### **EXCELLENT ARC STABILITY & LOW SPATTER**

Offers excellent arc stability and low spatter using either CO<sub>2</sub> or Ar/CO<sub>2</sub> mixtures with up to 80% Argon.

### **MULTIPLE PASS WELDING**

hydrogen levels and good impact values makes the wire a good choice for single and multiple pass welding in all positions.

Low diffusible

# TYPICAL APPLICATIONS

Suitable for ship building, earth moving vessels and pipe welding.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS						
SHIELDING GAS	С	Mn	Si	Р	S	Ni
100% CO <sub>2</sub>	0.04	1.00	0.29	0.010	0.012	1.84
75% Ar/25% CO <sub>2</sub>	0.05	1.25	0.40	0.010	0.010	2.00

TYPICAL DIFFUSIBLE HYDROGEN						
Hydrogen Equipment	100% CO <sub>2</sub>	75% Ar/25% CO <sub>2</sub>				
Gas Chromatography	2.6ml/100g	2.7ml/100g				

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS					
Gas Type	100% CO <sub>2</sub>	75% Ar/25% CO <sub>2</sub>			
Yield Stress	535 MPa	598 MPa			
Tensile Strength	609 MPa	660 MPa			
Elongation	27.5%	24%			
CVN Impact Values	98J @ -40°C 92J @ -51°C	74J @ -40°C 60J @ -51°C			

ORDERING INFORMATION					
WIRE SIZE (MM)	PACKET SIZE AND TYPE	PART NO.			
1.2	15kg Spool	S283712-029			
1.6	15kg Spool	S283719-029			
FULL PALLET QUANTITY					
WIRE SIZE (MM)	WEIGHT (KG)				
1.2 & 1.6		1,080			





# Megafil® 713R

# A SEAMLESS FLUX-CORED WIRE WITH EXCELLENT OUT OF POSITION PERFORMANCE.

### **CLASSIFICATIONS**

- > AS/NZS ISO: 17632-B T494T12-1M/C A-U H5
- > AWS A5.20: E71T-1MJ H4, E71T-1C H4

### **PRODUCTIVITY GAIN**

- Very low moisture re-absorption after extended exposure
- Minimises risk of hydrogen-induced cracking
- > Excellent out-of-position performance
- Assists producing welds of consistent appearance and quality
- Reduces clean-up time, minimizes risk of inclusions
- Minimises risk of cracking in critical applications

### SEAMLESS FLUX-CORED WIRE

The Megafil 713R has a low hydrogen weld deposit, fast-freezing slag, smooth arc characteristics, easy slag removal and good impact toughness, especially when used with an Argon-CO<sub>2</sub> shielding gas mixture.

# **TYPICAL APPLICATIONS**

Suitable for single or multi-pass welding, non alloyed and fine grain steel, heavy equipment, pressure vessels, equipment repairs and modifications, offshore, general fabrication, pipelines and structural fabrication.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS							
SHIELD. GAS	С	Mn	Si	Р	S	Ni	Cu
100% CO <sub>2</sub>	0.02	0.90	0.29	0.012	0.011	0.31	0.14
80% Ar/ 20% CO <sub>2</sub>	0.02	1.18	0.46	0.012	0.011	0.30	0.14

TYPICAL DIFFUSIBLE HYDROGEN						
Hydrogen Equipment	100% CO <sub>2</sub>	80% Ar/20% CO <sub>2</sub>				
Gas Chromatography	1.5ml/100g	1.6ml/100g				

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS						
MECHANICAL TESTS	<b>100% CO</b> <sub>2</sub>	80% Ar/20% CO <sub>2</sub>				
Tensile Strength	593 MPa	607 MPa				
Yield Strength	545 MPa	558 MPa				
Elongation	26%	26%				
CVN Impact Values	34J @ -30°C	89J @ -30°C 81 @ -40°C 77J @ -46°C				

ORDERING INFORMATION						
WIRE SIZE (MM)	PACKET SIZE AND TYPE	PART NO.				
1.2	16kg Spool	71315				
1.6	16kg Spool	71333				
FULL PALLET QUANTITY						
WIRE SIZE (MM)		WEIGHT (KG)				
1.2	1024					
1.6	1024					





# FabCOR 86R

# A METAL CORED WIRE WITH HIGHER DEOXIDIZATION ELEMENTS.

### **CLASSIFICATIONS**

- > AS/NZS ISO 17632-B T494T15-0MA-UH5
- > AWS A5.18: E70C-6M H4

# METAL CORED WIRE

A metal cored wire with higher deoxidization elements allow this wire to have greater tolerance for mill scale welding applications. Single and multiple pass applications.

# HIGH DEPOSITION RATES & EFFICIENCIES

- Virtually no slag coverage
- Outstanding high-production performance
- Smooth arc characteristics
- Low diffusible hydrogen weld deposit
- Low smoke and spatter levels
- Excellent for both CV and pulsed welding

### **PRODUCTIVITY GAIN**

- Improves productivity compared to solid wire or flux-cored electrodes
- Reduces clean-up time, improves productivity
- Excellent for robotic welding
- Improved operator appeal, assists in maintaining consistent weld quality
- Minimises risk of hydrogen-induced cracking
- Improves operator appeal and productivity
- Promotes versatility in procedure development

# **TYPICAL APPLICATIONS**

Suitable for automatic and mechanised welding, storage vessles, non-alloyed and fine grain steels, steel structures, earth moving equipment, general fabrication, ship building, rail cars.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS						
SHIELDING GAS	С	Mn	Si	S	P	
95% Ar / 5% O <sub>2</sub>	0.04	1.48	0.64	0.010	0.008	
95% Ar / 5% CO <sub>2</sub>	0.03	1.68	1.78	0.009	0.002	
75% Ar / 25% CO <sub>2</sub>	0.03	1.44	0.67	0.015	0.008	

TYPICAL DIFFUSABLE	HYDROGEN		
Hydrogen Equipment	95% Ar /	95% Ar /	75% Ar /
	5% O <sub>2</sub>	5% CO <sub>2</sub>	25% CO <sub>2</sub>
Gas Chromatography	3.3ml /	2.7ml /	2.0ml /
	100g	100g	100g

MECHANICAL TESTS	95% Ar/ 5% O <sub>2</sub>	95% Ar/ 5% CO <sub>2</sub>	75% Ar/ 25% CO <sub>2</sub>
Tensile Strength	524 MPa	586 MPa	558 MPa
Yield Strength	421 MPa	517 MPa	476 MPa
Elongation	29%	27%	30%
CVN Impact Values	161J @ -30°C 57J @ -40°C	68J @ -30°C 43J @ -40°C	101J@-30°C 54J@-40°C

ORDERING INFORMATION					
WIRE SIZE (MM)	PACKET SIZE AND TYPE	PART NO.			
1.2	15kg Spool	S249412-029			
1.2	227kg X-pak	S249412-050			
1.6	15kg Spool	S249419-029			
FULL PALLET OUANTITY					

FULL PALLET QUANTITY				
WIRE SIZE (MM)	WEIGHT (KG)			
1.2 & 1.6 (15kg)	1080			
1.2 (227kg)	908			



# FabCOR Edge Ni1

# METAL CORED WIRE WITH HIGHER DEPOSITION RATES & TRAVEL SPEEDS THAN SOLID WIRE.

### **CLASSIFICATIONS**

- > AS/NZS ISO 17632-B T554T15-0MA-N1-UH5
- > AWS A5.28: E80C-Ni1 H4

# LOW ALLOY METAL CORED WIRE

- Virtually no silicon deposits at weld bead toe lines
- > Excellent gap bridging capabilities
- Higher deposition rates and travel speeds than solid wire
- Good impact toughness at low temperature

# **PRODUCTIVITY GAIN**

- Reduces clean-up time, minimises risk of inclusions
- Minimises burnthrough, reduces part rejection
- Increases productivity, more parts per hour
- > Resists cracking in severe applications

# **TYPICAL APPLICATIONS**

Suitable for high strength low-alloy steels, single or multi-pass welding, structural fabrications, nickel-molybdenum steels, heavy equipment and weathering steels.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS						
SHIELD. GAS	С	Mn	Si	S	Р	Ni
95% Ar/5% CO <sub>2</sub>	0.04	1.24	0.65	0.009	0.008	1.01
75% Ar/25% CO <sub>2</sub>	0.05	1.10	0.57	0.011	0.013	1.0

TYPICAL DIFFUSIBLE HYDROGEN						
Hydrogen Equipment	95% Ar/5% O <sub>2</sub>	75% Ar/25% CO <sub>2</sub>				
Gas Chromatography	3.4ml/100g	2.1 ml/100g				

MECHANICAL TESTS	95% Ar/5% O <sub>2</sub>	75% Ar/25% CO <sub>2</sub>
Tensile Strength	634 MPa	586 MPa
Yield Strength	554 MPa	503 MPa
Elongation	26%	25%
CVN Impact Values	56J @ -45°C	60J @ -45°C

ORDERING INFORMATION					
WIRE SIZE (MM)	PACKET SI	ZE AND TYPE	PART NO		
1.2	15kg Spoo	l	S279512-029		
1.6	15kg Spoo	l	S279519-029		
FULL PALLET QUANTITY					
WIRE SIZE (MM)		WEIGHT (KG)			
1.2 & 1.6		1080			





# **FabCOR 1100**

# A METAL CORED WIRE WITH A HIGH TENSILE STRENGTH & HIGH DEPOSITION RATES.

### **CLASSIFICATIONS**

- > AWS A5.28: E110C-K4
- > AS/NZS 18276 B-T765T15-OMA-N4C1M2-U H5

# IDEAL FOR SINGLE OR MULTI-PASS APPLICATIONS

The FabCOR 1100 is a high tensile strength wire that delivers excellent wetting characteristics, high deposition rates and has an all position capability when using pulsed spray transfer.

Can be used with standard CV equipment.

### **BENEFITS**

- Assists in producing smooth weld beads and uniform fusion
- > Promotes versatility
- Reduces equipment costs

### **PRODUCTIVITY GAIN**

- Minimises heat affected zone (HAZ)
- > Reduces clean up time

### TYPICAL APPLICATIONS

Suitable for heavy equipment, ship building, quench and temper steels, high strength low alloy steels, and castings.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS								
SHIELD. GAS	С	Mn	Si	S	Р	Ni	Cr	Мо
90% Ar/ 10% CO <sub>2</sub>	0.08	1.50	0.50	0.005	0.003	1.84	0.24	0.46
75% Ar/ 25% CO <sub>2</sub>	0.07	1.52	0.52	0.007	0.004	1.92	0.18	0.47

TYPICAL DIFFUSIBLE HYDROGEN						
Hydrogen Equipment	90% Ar/10% CO <sub>2</sub>	75% Ar/25% CO <sub>2</sub>				
Gas Chromatography	1.6ml/100g	1.5ml/100g				

MECHANICAL TESTS	90% Ar/10%CO <sub>2</sub>	75% Ar/25% CO <sub>2</sub>
Tensile Strength	883 MPa	810 MPa
Yield Strength	800 MPa	725 MPa
Elongation	17%	19%
CVN Impact Values	38J@-50°C	58J @ -50°C

ORDERING INFORMATION					
WIRE SIZE (MM)	PACKET SI	ZE AND TYPE	PART NO.		
1.2	15kg Spoo	ol	S280212-029		
1.6	15kg Spoo	ol	S280219-029		
FULL PALLET QUANTITY					
WIRE SIZE (MM)		WEIGHT (KG)			
1.2 & 1.6		1080			



# **Vertiwear 600**

# GAS-SHIELDED, ALL POSITION, HARD SURFACING FLUX-CORED WIRE.

### **CLASSIFICATIONS**

- > AS 2576: 1855-B5\*
- \* Nearest Classification

# HARD SURFACING FLUX-CORED WIRE

Gas shielded, all position, hard surfacing flux-cored wire depositing a multi-purpose martensitic steel alloy.

# MEDIUM TO HIGH IMPACT

Can be used to hard surface mild and low alloy steel components subject to moderate abrasion coupled with medium to high impact.

# EXCELLENT OPERATOR APPEAL

Exhibits excellent compressive strength and metal to metal wear resistance.

Excellent operator appeal in all positions.

RECOMMENDED SHIELDING GAS IS 75% ARGON - 25% CO<sub>2</sub>



### **TYPICAL APPLICATIONS**

Suitable for dragline chains, dozer blades, ripper teeth, facing of agricultural points and equipment, and sliding metal parts and kiln trunnions.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS					
С	Mn	Si	Cr	Mo	Fe
0.40	0.75	0.60	6.50	1.00	Bal

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS				
	NUMBER	AS DEPOSITED		
	OF LAYERS	<b>1020 STEEL</b>		
HARDNESS	1	52 HRc		
	2	56 HRc		
	3-8	57 HRc		
HARDNESS TIME AT TEMP		HARDNESS AFTER TEMPING		
AS DEPOSITED		535°C	620°C	
	10 Hours	54 HRc	46 HRc	
55 HRc	20 Hours	49 HRc	40 HRc	
	80 Hours	47 HRc	40 HRc	
Alauraian Danista		0!		
Abrasion Resistance:		Good		
Impact Resistance:		Good		
Machinability:		Good		
Flame Cutting:		Difficult		
Magnetic				

ORDERING INFORMATION					
WIRE SIZE (MM) PACKET SIZE AND TYPE PART NO.					
1.2	11.3kg Spool	S607112-029			





# **Fabshield XLR-8**

# LOW HYDROGEN T-8 SELF-SHIELDED, ALL POSITIONAL FLUX-CORED WIRE.

# **CLASSIFICATIONS**

- > AS/NZS ISO 17632-B T494T8-1NA-H10
- > AWS A5.20: E71T-8JD H8

# SUITED FOR VERTICAL-UP WELDS

Produces a stable arc and flat bead profile, especially suited for vertical-up welds at high currents with excellent mechanical properties and a tensile strength of 490 MPa.

### SINGLE & MULTI-PASS WELDING

XLR-8 has been designed for single and multi-pass welding applications with improved productivity in out-of-position welding, offering high impact strength of (42J) at sub zero temperatures to -40°C.

# X-RAY QUALITY WELDS

Capable of depositing X-ray quality welds, making it highly suitable for critical welding applications requiring a high degree of crack resistance due to its low diffusible hydrogen levels, less than 6.7ml per 100g of weld metal deposited.

# **TYPICAL APPLICATIONS**

Suitable for heavy equipment repair, mining equipment, bucket repairs, storage tanks, pipe spooling, ship construction and site work.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS						
С	Mn	Si	P	S	Al	Fe
0.19	0.51	0.17	0.009	0.006	0.51	Bal

9 MPa
VIVIFA
) MPa
6
@ -40°C, 54J@ -30°C, 68J @ -20°C

ORDERING INFORMATION					
WIRE SIZE (MM)	PACKET SIZE AND TYPE	PART NO.			
1.6	15kg VCI Spool	S225719-053			
1.8	15kg VCI Spool	S225724-053			
2.0	15kg VCI Spool	S225725-053			
2.0	22.7kg Coil	S225725-014			
FULL PALLET QUANTITY					
WIRE SIZE (MM) WEIGHT (KG)					
1.6, 1.8 & 2.0 (15	1,080				
2.0 (22.7kg)		726.4			





# Fabshield 21B

# AN ALL POSITIONAL GENERAL PURPOSE, SELF-SHIELDING, FLUX-CORED WIRE.

### **CLASSIFICATIONS**

- > AS/NZS ISO 17632-B T49ZT11-1NA-H15
- > AWS A5.20: E71T-11

### SINGLE & MULTI-PASS WELDING

Designed specifically for single and multipass welding of mild steel and galvanised steel up to a maximum of 20mm in thickness.

IDEAL FOR OUTDOOR, ON-SITE CONDITIONS ALL POSITIONAL CAPABILITY

SAVE ON GAS BOTTLE RENTAL

EASY TO REMOVE SLAG, MAKING CLEAN-UP QUICK & EASY

EXCELLENT WELD APPEARANCE



### TYPICAL APPLICATIONS

Suitable for fences, frames and sheds, prefabricated steel frame construction, galvanised tank fabrication, repair of trucks, tractors and earth moving equipment.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS						
С	Mn	Si	S	P	Al	Fe
0.28	0.34	0.15	0.008	0.003	1.72	Bal

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS				
Yield Stress	427 MPa			
Tensile Strength	627 MPa			
Elongation	22%			
CVN Impact Values	Not Required			

ORDERING INFORMATION					
WIRE SIZE (MM)	PACKET SIZE AND TYPE	PART NO.			
0.8	4.5kg Spool	S222106-022			
0.9	4.5kg Spool	S222108-022			
0.9	15kg Spool	S222108-029			
1.2	4.5kg Spool	S222112-022			
1.2	15kg Spool	S222112-029			
1.6	15kg Spool	S222119-029			
2.0	15kg Spool	S222125-029			
FULL PALLET QUANTITY					
WIRE SIZE (MM)	WEIGHT (KG)				
0.8, 0.9 & 1.2 (4.5)	864				
0.9, 1.2, 1.6 & 2.0	1,080				



# Fabshield 4

# VERY HIGH DEPOSITION RATE, FOR DOWN HAND SINGLE OR MULTI-PASS.

### **CLASSIFICATIONS**

- > AS/NZS ISO 17632-B T49ZT4-0NA-H15
- > AWS A5.20: E70T-4

# SELF-SHIELDING FLUX-CORED WIRE

Specifically designed to desulphurise the weld deposit to reduce risk of weld cracking.

### **BENEFITS**

- > Low Spatter Levels
- > Excellent Bead Appearance
- Crack Resistant Weld Deposits

# **VERY HIGH DEPOSITION RATE**

The Fabshield 4 self-shielding flux cored wire has a very high deposition rate for down hand single or multi-pass welding applications.



### TYPICAL APPLICATIONS

Suitable for on-site field construction including repair of structural members and machinery.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS						
С	Mn	Si	P	S	Al	Fe
0.27	0.73	0.30	0.011	0.005	1.42	Bal

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS				
Yield Stress	432 MPa			
Tensile Strength	652 MPa			
Elongation	25%			
CVN Impact Values	Not Required			

ORDERING INFORMATION					
WIRE SIZE (MM)	PACKET SIZE AND TYPE	PART NO.			
2.0	15kg Spool	S224525-029			
2.4	22.7kg Coil	S224529-014			
3.0	22.7kg Coil	S224541-014			
FULL PALLET QUANTITY					
WIRE SIZE (MM) WEIGHT (KG)					
2.0	1080				
2.4 & 3.0	726.4				





# **Roller Arc**

# A SELF-SHIELDED HARD SURFACING FLUX-CORED WIRE FOR SUPERIOR WIRE FEEDING.

# **CLASSIFICATIONS**

- > AS/NZS 2576: 2145-B7
- > WIA TECH NOTE 4 2145-B7

### **UNIQUE SEAMLESS TUBE CONSTRUCTION**

Allows the wire to be copper coated for enhanced wire feeding and improved current transfer from gun contact tip to wire. This feature of Roller Arc is particularly important for difficult out-of-position applications where long gun cables and awkward gun angles are often unavoidable.

Roller Arc is also suitable for conventional open arc hard surfacing applications where resistance to both heavy abrasion and high impact are required. Such applications include the surfacing of crushing and earth moving equipment.



### TYPICAL APPLICATIONS

The Roller Arc is a trademark protected copper coated flux cored wire primarily suited for the "open arc" surfacing of cast iron sugar mill rolls. Often used "in situ" during cane crushing, the chromium carbide/austenitic iron deposit of Roller Arc gives mill roll teeth an enhanced gripping action and superior resistance to abrasive wear.

### **BENEFITS**

- Tough, wear resistant, high chromium austenitic iron deposit
- Unique seamless construction for superior wire feeding
- Copper coated for improved current transfer

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS					
С	Mn	Cr	Si	Ni	Fe
2.05	1.37	13.2	0.90	0.002	Bal

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS				
HARDNESS	NUMBER OF LAYERS	AS-DEPOSITED ON		
	1	40 - 50 HRc		
Abrasion Res	istance	Excellent		
Impact Resistance		Good		
Non Machinable		Grinding Only		
Flame Cutting		Difficult		
Deposit will Relief Check Crack				

ORDERING INFORMATION					
WIRE SIZE (MM)	PACKET SIZE AND TYPE	PART NO.			
2.8	25kg Coil	RA28C-1			



# Tube-Alloy 240-0

# CHROMIUM CARBIDE SURFACING ALLOY SELF-SHIELDED HARD SURFACING WIRE.

# **CLASSIFICATIONS**

> AS/NZS 2576: 2155-B7

# TOUGHER THAN CONVENTIONAL CHROMIUM CARBIDE

Can be used on components subject to severe abrasive wear and heavy impact.



### TYPICAL APPLICATIONS

Suitable for ammonia knives, hammer mill hammers, augers, impactor crusher bars, bucket teeth and lips, manganese pump shells, bulldozer end bits and blades, mill guides, conveyer screws, muller tires, crusher jaws and cones, pipeline ball joints, crusher rolls, pulverizer hammers, cultivator chisels and sweeps, scraper blades, dragline buckets, screw conveyors, dredge pump impellers and side plates, sheepsfoot tampers and sizing screens.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS					
С	Mn	Cr	Si	Fe	
3.20	1.80	15.50	1.90	Bal	

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS				
	NUMBER	AS DEPOSITED		
	OF LAYERS	<b>1020 STEEL</b>	Mn STEEL	
HARDNESS	1	40 HRc	35 HRc	
	2	48 HRc	42 HRc	
	3-5	52 HRc	50 HRc	
Abrasion Resistance Very Good				
Impact Resistance Fair				
Non Machina	able	Grinding is Difficult		
Cannot be Flame Cut				
Deposit will Relief Check Crack				
Thickness Should be Limited to Five Layers Maximum				

ORDERING INFORMATION				
WIRE SIZE (MM)	PACKET SIZE AND TYPE	PART NO.		
1.2	11.3kg Spool	S604012-029		



# Tube-Alloy 258-0

# SELF-SHIELDED, ALL POSITION, HARD SURFACING FLUX-CORED WIRE.

# **CLASSIFICATIONS**

> AS/NZS 2576: 1550-B7\*
\*Nearest Classification

### DESIGNED FOR SURFACING MILD & LOW ALLOY STEEL COMPONENTS

Designed for surfacing mild and low alloy steel components subject to moderate abrasive wear and impact under high compressive stresses and/or at temperatures up to 530 °C.

# OPEN ARC TUBULAR WIRE

A fabricated type, open arc tubular flux-cored wire depositing a Cr-Mo-W Martensitic steel alloy.

### **TYPICAL APPLICATIONS**

Suitable for machine components, tools and sliding metal to metal parts, dragline chains, kiln trunnions, mill guides, spindles and wobbler ends.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS						
С	Mn	Si	Cr	Мо	W	Fe
0.45	1.40	0.80	6.00	1.50	1.50	Bal

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS					
	NUMBER OF LAYERS	AS DEPOSITED			
		<b>1020 STEEL</b>	Mn STEEL		
HARDNESS	1	49 HRc	51 HRc		
	2	53 HRc	54 HRc		
	3 - 5	57 HRc	57 HRc		
Abrasion Resistance		Good			
Impact Resistance		Good			
Non Machinable		Grinding Only			
Flame Cutting		Difficult			
Heat Treatable and Forgettable					
Maintains Hot Hardness up to 530°C					

ORDERING INFORMATION				
WIRE SIZE (MM) PACKET SIZE AND TYPE PART NO.				
1.2	11.3kg Spool	S605812-029		



# Tube-Alloy A43-0

# SELF-SHIELDED WIRE DEPOSITING A HIGH CR/NB SURFACING ALLOY.

# **CLASSIFICATIONS**

> AS/NZS 2576: 2460-B7

# SELF-SHIEDING WIRE

Self-shielding wire depositing a high Cr/Nb surfacing alloy which resists severe high and low stress abrasion and low to moderate impact.

### HIGH TEMPERATURE WEAR

The weld deposit will check crack readily and can be used where high temperature wear resistance is required.

# Tube - Alloy A43 - 0 56077 19 - 029 Tube - Alloy A43 - 0 56077 19 - 029 Tube - Alloy A43 - 0 57 11 L. E. R. M. E. T. A. L. S. Tube - Alloy A43 - 0 56077 19 - 029 Tube - Alloy A43 - 0 56077 19 - 029 Tube - Alloy A43 - 0 56077 19 - 029 Tube - Alloy A43 - 0 56077 19 - 029 Tube - Alloy A43 - 0 56077 19 - 029 Tube - Alloy A43 - 0 56077 19 - 029 Tube - Alloy A43 - 0 56077 19 - 029 Tube - Alloy A43 - 0 56077 19 - 029 Tube - Alloy A43 - 0 56077 19 - 029 Tube - Alloy A43 - 0 Tube - All

### **TYPICAL APPLICATIONS**

Suitable for augers, bucket lips and teeth, coal feeder screws, coal pulverizer rolls and tables, coke chutes, coke pusher shoes, conveyer screws, dredge cutter heads and teeth, dredge pump inlet nozzle and side plates, fan blades, grizzly bars and fingers, muller tires, paving agitator screws, pipeline ball joints, pub mill paddles, scraper blades, sheepsfoot tampers and sizing screws.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS					
С	Mn	Si	Cr	Nb	Fe
5.50	0.20	1.00	22.00	6.50	Bal

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS				
	NUMBER OF LAYERS	AS DEPOSITED		
HARDNESS		<b>1020 STEEL</b>	Mn STEEL	
HARDNESS	1	56-60 HRc	45-50 HRc	
	2-3	60-64 HRc	54-58 HRc	
Abrasion Resistance		Excellent		
Impact Resistance		Poor		
Non Machinable		Grinding Only		
Cannot be Flame Cut				
Deposit will Relief Check Crack				
Thickness 2-3 Layers Maximum				

ORDERING INFORMATION					
WIRE SIZE (MM)	PACKET SIZE AND TYPE	PART NO.			
1.6	11.3kg Spool	S607719-029			



# How to Videos

# Learn how to get the best out of your weld!

Our End Market Specialist team demonstrate how you can get the best out of flux-cored wire, by considering the correct welding techniques, settings, preparation and product selection.

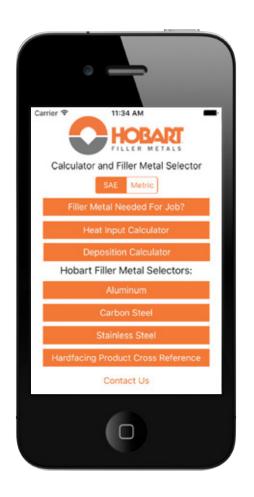




HOW DO I USE FLUX-CORED SELF-SHIELDED WIRE?

**HOW DO I MINIMISE SPATTER?** 





# The Filler Metal Selector & Calculator is Available NOW!

DOWNLOAD YOUR COPY FOR IPHONE OR IPAD VIA THE APP STORE TODAY!



# **HOBART PRODUCT DATA SHEETS**

Visit **welding.com.au** and download all of the Hobart product data sheets today!



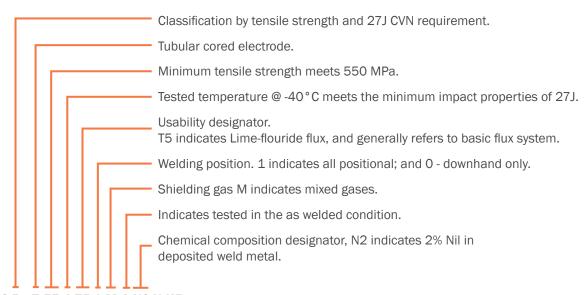
# The New AS/NZS ISO 17632 Standard

# A SERIES OF ADOPTED ISO STANDARDS TO COVER FLUX-CORED ARC WELDING (FCAW) ELECTRODES FOR NON-ALLOY & FINE GRAIN STEELS.

The following provides a brief introduction into the classification systems, and the standard series cover different electrode range.

- > AS/NZS ISO 18276: High strength steels > AS/NZS ISO 17634: Creep resisting steels
- > AS/NZS ISO 17633: Stainless steels

# **COMPULSORY CLASSIFICATION DESIGNATORS**



AS/NZS ISO 17632-B - T 55 4 T5-1 M A-N2-U H5

# **OPTIONAL SUPPLEMENTAL DESIGNATORS**

47J impact energy at the normal 27J test temperature has also been met.

Diffusible hydrogen. "H5,H10,H15" is used to indicate a maximum diffusible hydrogen content of "5, 10 and 15 ml/100g of deposited metal, respectively.



# The American Welding Society Classification

# THE ANSI/AWS A5.20 (PLAIN CARBON) AND A5.29 (LOW ALLOY) ELECTRODE SPECIFICATIONS HAVE SIMILAR CLASSIFICATION SYSTEMS.

They are shown in a combined form to acquaint the user with the information provided by the classification. For full details of all test requirements, radiographic standards, manufacturing tolerances, packaging, weld metal compositions etc., please consult the latest edition of the appropriate specification.

### **WELD METAL STRENGTH DIGITS**

The strength digits '6' and '7' in A5.20 and '6', '7', '8', '9', '10', '11' and '12' in A5.29 represent 0.1 of the min. tensile strength in ksi, eg. '8'=80ksi (550MPa) '11'=110ksi (760MPa)

Each strength group has a min. yield strength, 12ksi (10ksi for '6' in A5.29) below the min. tensile strength and a min. elongation requirement.

### **WELD METAL COMPOSITION**

Electrodes to A5.20 have a weld metal composition requirement that ensures they are plain carbon steels and do not employ an alloy suffix. Electrodes to A5.29 have specific compositions and employ the designations these include the A1, B2, B3, Ni1, Ni2, D1, D2, D3, K1 to K7 & W types.

### **TUBULAR**

Flux-Cored Electrode

AWS A5.20 E X X T - X
AWS A5.29 E X X T X - X

# **ELECTRODE**

# POSITIONAL CAPABILITIES

"0" = Flat and Horizontal "1" = All Positions

# USABILITY AND PERFORMANCE

Note: A5.20 Classifications shown here are T-X, A5.29 as TX

# **IMPACT STRENGTH**

The A5.20 classification EXXT-1, T-5, T-6 & T-8 have min. impact requirements shown in the usability table. In A5.29 the requirement for impact testing on as-welded or PWHT specimens and the test temperature for min. 20ft-lb (27J) is specified against a set of different classifications eg. E81T1-Ni2 AW-40°F (40°C) E80T5-Ni2 PWHT - 75°F (-60°C).

