

Austarc 12P

CLASSIFICATION:

- > AS/NZS 4855-B - E43 13 A
- > AWS A5.1: E6013

DESCRIPTION:

- > A popular, easy starting, smooth running, all positional mild steel general purpose electrode.
- > Austarc 12P has the extra arc force and fast freezing slag required for vertical down welds.

> With great operator appeal, it's the ideal general purpose choice for the 'one electrode' workshop.

TYPICAL APPLICATIONS:

Welding of general purpose structural steel, galvanised gates and fences, trailers, steel furniture and wrought iron.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Mn	Si	P	S	Fe
0.07	0.52	0.32	0.013	0.006	Bal

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Yield Stress	450 MPa
Tensile Strength	500 MPa
Elongation	26%
CVN Impact Values	70J @ 0°C

ORDERING INFORMATION

ELECTRODE SIZE (MM)	PACKAGING (KG)		APPROX NO OF RODS PER KG	PART NUMBER
	PACKET	CARTON		
2.0	2.5	12.5	100	12P20
2.5	2.5	12.5	64	12P25
3.2	5.0	15	31	12P32
4.0	5.0	15	21	12P40

FULL PALLET QUANTITY

ELECTRODE SIZE (MM)	WEIGHT (KG)
2.0 & 2.5	975
3.2 & 4.0	900

Austarc 13S

CLASSIFICATION:

- > AS/NZS 4855-B - E43 13A
- > AWS A5.1: E6013

DESCRIPTION:

- > Austarc 13S is a popular blue and white striped mild steel general purpose electrode for welding in down hand and vertical up positions.
- > It has a soft and stable arc and produces flat, uniform fillet welds with ease and a self-peeling slag action.
- > Easy to use for less experienced operators.

TYPICAL APPLICATIONS:

Structural welding of sheet and plate steel (galvanised or otherwise) and tubular sections, including trailers, duct work, hoppers and storage tanks iron.



TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Mn	Si	P	S	Fe
0.07	0.48	0.41	0.016	0.005	Bal

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Yield Stress	450 MPa
Tensile Strength	500 MPa
Elongation	26%
CVN Impact Values	60J @ 0°C

ORDERING INFORMATION

ELECTRODE SIZE (MM)	PACKAGING (KG)		APPROX NO OF RODS PER KG	PART NUMBER
	PACKET	CARTON		
2.0	2.5	12.5	99	13S20
2.5	2.5	12.5	64	13S25
3.2	5.0	15	31	13S32
4.0	5.0	15	20	13S40

FULL PALLET QUANTITY

ELECTRODE SIZE (MM)	WEIGHT (KG)
2.0 & 2.5	975
3.2 & 4.0	900

Austarc 16TC

CLASSIFICATION:

- > AS/NZS 4855-B - E49 16 A U H10
- > AWS A5.1: E7016 H8

DESCRIPTION:

- > Austarc 16TC is a smooth running, low hydrogen electrode, developed for all positional welding, using AC or DC power sources.
- > It has exceptional arc stability and weldability and delivers high quality weld deposits with reliable notch toughness to -40 °C.
- > Austarc 16TC is manufactured using a unique twin coating extrusion process, which means all the arc stabilising elements are concentrated in the inner coating. This delivers significantly improved arc stability and control for all applications.

TYPICAL APPLICATIONS:

- > The ideal hydrogen controlled electrode for welding carbon, carbon-manganese and low alloy high strength steels used in a multitude of critical and non-critical applications.
- > Typical applications include pipe welding, single sided weld joints, highly restrained joints, maintenance applications, buffer layer prior to hard surfacing build-up, structural steel and sub-zero temperature applications.

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Yield Stress	460 MPa
Tensile Strength	560 MPa
Elongation	28%
CVN Impact Values	130J @ -20°C & 110J @ -40°C

ORDERING INFORMATION

ELECTRODE SIZE (MM)	PACKAGING (KG)		APPROX NO OF RODS PER KG	PART NUMBER
	PACKET	CARTON		
2.5	2.5	12.5	60	16TC25
3.2	5	15	29	16TC32
4.0	5	15	18	16TC40
5.0	5	15	10	16TC50
6.0	5	15	7	16TC60

FULL PALLET QUANTITY

ELECTRODE SIZE (MM)	WEIGHT (KG)
2.5	975
3.2 & 4.0	900
5.0 & 6.0	810

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Mn	Si	P	S	Fe
0.05	1.16	0.42	0.013	0.006	Bal





Austarc 18TC

CLASSIFICATION:

- > AS/NZS 4855-B - E49 18-1 A U H5
- > AWS A5.1: E7018-1

DESCRIPTION:

> Austarc 18TC is an iron powder hydrogen controlled electrode used primarily on C-Mn and low alloy structural steels.

> The unique twin-coat design for 18 type low hydrogen electrode offers excellent AC arc stability and superb DC+ arc transfer, excellent re-strike,

reduced spatter level and extraordinary ease of use for out-of-position welding.

TYPICAL APPLICATIONS:

Oil and gas, pipe welding, structural steel construction, off-shore where Ni-alloying is prohibited, mining equipment, heavy girders and earth moving plant repair and maintenance.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Mn	Si	S	P	Fe
0.06	1.55	0.54	0.020	0.010	Bal

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Yield Stress	530 MPa
Tensile Strength	602 MPa
Elongation	24%
CVN Impact Values	87J @ -50 °C

ORDERING INFORMATION

ELECTRODE SIZE (MM)	PACKAGING (KG)		APPROX NO OF RODS PER KG	PART NUMBER
	PACKET	CARTON		
2.5	2.2	11	52	18TC25
3.2	5	15	26	18TC32
4.0	5	15	17	18TC40

FULL PALLET QUANTITY

ELECTRODE SIZE (MM)	WEIGHT (KG)
2.5	858
3.2 & 4.0	900



Austarc 77

CLASSIFICATION:

- > AS/NZS 4855-B - E49 18-1 A U H5
- > AWS A5.1: E7018-1 H8

DESCRIPTION:

> Smooth running basic type iron powder electrode used for all positional welding except vertical down.

> This electrode is used where the highest standards are required. Weld features include high ductility, x-ray quality and sub zero temperature impact to -50 °C.

TYPICAL APPLICATIONS:

For critical welding applications including repair and maintenance of heavy plate and highly restrained work pieces such as penstocks, turbines, pressure vessels, heavy girders, earth moving plants etc.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Mn	Si	P	S	Fe
0.06	1.40	0.36	0.015	0.006	Bal

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Yield Stress	455 MPa
Tensile Strength	534 MPa
Elongation	30%
CVN Impact Values	123J @ -50°C

ORDERING INFORMATION

ELECTRODE SIZE (MM)	PACKAGING (KG)		APPROX NO OF RODS PER KG	PART NUMBER
	PACKET	CARTON		
2.5	2.2	11	48	7725
3.2	5	15	25	7732
4.0	5	15	17	7740
5.0	5	15	9	7750

FULL PALLET QUANTITY

ELECTRODE SIZE (MM)	WEIGHT (KG)
2.5	858
3.2 & 4.0	900
5.0	810



Austarc 24

CLASSIFICATION:

- > AS/NZS 4855-B - E49 24 A
- > AWS A5.1: E7024

DESCRIPTION:

> Suited to long, heavy fillet and butt welding using the touch welding or 'short arc' technique and can be used on AC or DC power sources.

> It's instant arc initiation, high arc stability, and low spatter combines in an excellent fillet weld contour, edge washing and slag

release. It is recommended for high quality down hand welding of heavy sections where high deposition rates are required.

TYPICAL APPLICATIONS:

Tanks, structural frames, tractor, truck and trailer bodies, rolling stock, roof trusses etc.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Mn	Si	P	S	Fe
0.05	0.99	0.42	0.017	0.011	Bal

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Yield Stress	416 MPa
Tensile Strength	510 MPa
Elongation	32%
CVN Impact Values	60J @ 0°C

ORDERING INFORMATION

ELECTRODE SIZE (MM)	PACKAGING (KG)		APPROX NO OF RODS PER KG	PART NUMBER
	PACKET	CARTON		
3.2	5	15	17	2432
4.0	5	15	12	2440
5.0	5	15	6	2450

FULL PALLET QUANTITY

ELECTRODE SIZE (MM)	WEIGHT (KG)
3.2 & 4.0	900
5.0	810



Austarc 11

CLASSIFICATION:

- > AS/NZS 4855-B - E43 11 A
- > AWS A5.1: E6011

DESCRIPTION:

> High cellulose electrode developed for all positional welding on both AC and DC current. It is particularly suited for vertical and incline pipe welding where complete root penetration is required.

TYPICAL APPLICATIONS:

Recommended for pipeline welding and storage tank construction where either the 'Stove Pipe' or 'Flick' techniques can be used to obtain full-root penetration in critical structural joints.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Mn	Si	P	S	Fe
0.12	0.82	0.20	0.012	0.008	Bal

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Yield Stress	416 MPa
Tensile Strength	510 MPa
Elongation	32%
CVN Impact Values	70J @ -30°C

ORDERING INFORMATION

ELECTRODE SIZE (MM)	PACKAGING (KG)		APPROX NO OF RODS PER KG	PART NUMBER
	PACKET	CARTON		
2.5	2.5	12.5	66	1125
3.2	5	15	33	1132
4.0	5	15	21	1140
5.0	5	15	14	1150

FULL PALLET QUANTITY

ELECTRODE SIZE (MM)	WEIGHT (KG)
2.5	975
3.2 & 4.0	900
5.0	810

Staincord 309Mo-16

CLASSIFICATION:

- > AS/NZS 4854-B - ES309LMo-16
- > AWS A5.4: E309MoL-16

DESCRIPTION:

> Staincord 309Mo-16 is a Molybdenum bearing, highly alloyed 23Cr/12Ni/2.5Mo extra low carbon rutile type stainless steel electrode, exhibiting superior all positional (except vertical down) performance with an improved moisture resistant coating for weld metal of high radiographic integrity.

> The smooth arc action of Staincord 309Mo-16, together with low spatter and excellent slag control/detachability, promotes exceptional weld appearance and profile.

TYPICAL APPLICATIONS:

Suitable for welding of matching 309 and 309Mo base metals and a wide range of 300 and 400 series stainless steels to alloyed and non-alloyed dissimilar ferrous metal combinations.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Cr	Ni	Mo	Mn	Si	P	S	Cu
0.03	23.51	13.12	2.39	0.79	0.64	0.028	0.027	0.16

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Yield Stress	400 MPa
Tensile Strength	670 MPa
Elongation	38%

ORDERING INFORMATION

ELECTRODE SIZE (MM)	PACKAGING (KG)		APPROX NO OF RODS PER KG	PART NUMBER
	PACKET	CARTON		
2.5	2.5	12.5	56	SC309M025
3.2	2.5	12.5	30	SC309M032

FULL PALLET QUANTITY

ELECTRODE SIZE (MM)	WEIGHT (KG)
2.5 & 3.2	900

Staincord 316L-16

CLASSIFICATION:

- > AS/NZS 4854-B - ES316L-16
- > AWS A5.4: E316L-16

DESCRIPTION:

> Staincord 316L-16 is a Molybdenum bearing, 19Cr/12Ni/2.5Mo extra low carbon, rutile type electrode exhibiting superior all positional (except vertical down) performance with an improved moisture resistant "Pink" flux coating for weld metal of high radiographic integrity.

> The smooth arc action of Staincord 316L-16, together with low spatter and excellent slag control/detachability, promotes exceptional weld appearance and profile. Other features include high arc stability and easy restriking on low Voltage AC welding machines.

TYPICAL APPLICATIONS:

Recommended for welding 316, 316L and common 300 series stainless steels such as 301, 302, 304 and 304L. Also suitable for welding ferritic stainless steel alloys such as 3Cr12.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Mn	Si	Cr	Ni	Mo	Fe
0.02	0.74	0.71	17.97	12.48	2.37	Bal

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Yield Stress	380 MPa
Tensile Strength	600 MPa
Elongation	40%

ORDERING INFORMATION

ELECTRODE SIZE (MM)	PACKAGING (KG)		APPROX NO OF RODS PER KG	PART NUMBER
	PACKET	CARTON		
2.0	2.5	12.5	84	SC31620
2.5	2.5	12.5	55	SC31625
3.2	2.5	12.5	28	SC31632

FULL PALLET QUANTITY

ELECTRODE SIZE (MM)	WEIGHT (KG)
2.0, 2.5 & 3.2	900



Unicord 312

CLASSIFICATION:

- > AS/NZS 4854-B - ES312-16
- > AWS A5.4: E312-16

DESCRIPTION:

- > Unicord 312 is a basic, rutile type electrode depositing a 29%Cr/9%Ni stainless steel weld metal for the high strength welding of a wide range of alloy steels and dissimilar ferrous metals.
- > The high ferrite, austenitic stainless steel deposit has excellent resistance to hot cracking, even under dilution by high carbon, alloy and

tool steels. Unicord 312 is a universal maintenance electrode combining high strength, toughness, wear and corrosion resistance with compatibility to most ferrous metals.

TYPICAL APPLICATIONS:

For repair and maintenance of steels of unknown composition. Also suitable as a buffer or intermediate layer prior to the application of hard surfacing.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Cr	Ni	Mo	Mn	Si	P	S	Cu
0.03	28.61	8.99	0.11	1.04	0.71	0.023	0.024	0.12

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Yield Stress	500 MPa
Tensile Strength	770 MPa
Elongation	45%
Deposit Hardness	28-35 HRc

ORDERING INFORMATION

ELECTRODE SIZE (MM)	PACKAGING (KG)		APPROX NO OF RODS PER KG	PART NUMBER
	PACKET	CARTON		
2.5	2.5	12.5	53	UC31225
3.2	2.5	12.5	27	UC31232

FULL PALLET QUANTITY

ELECTRODE SIZE (MM)	WEIGHT (KG)
2.5 & 3.2	900



Supercast Ni

CLASSIFICATION:

- > AWS A5.15: ENi-CI

DESCRIPTION:

- > Supercast Ni is a basic, graphite coated AC/DC electrode for the lower strength welding of cast irons. It is characterised by a soft, smooth arc with low penetration and spatter levels on both AC and DC power sources.
- > Ease of striking is a feature of Supercast Ni and it also has a particularly good wetting action resulting in well bonded welds of regular contour and attractive appearance.

TYPICAL APPLICATIONS:

For repair and build-up of all standard grades of grey cast iron, malleable iron, austenitic cast iron and some grades of meehanite cast iron.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Mn	S	Fe	Ni
1.0	0.21	0.007	0.3	Bal

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Yield Stress	200 MPa
Tensile Strength	400 MPa
Deposit Hardness	150-170 HV (30)

ORDERING INFORMATION

ELECTRODE SIZE (MM)	PACKAGING (KG)		APPROX NO OF RODS PER KG	PART NUMBER
	PACKET	CARTON		
3.2	2.5	12.5	33	SNI32

FULL PALLET QUANTITY

ELECTRODE SIZE (MM)	WEIGHT (KG)
3.2	900

Supercast Ni/Fe

CLASSIFICATION:

> AWS A5.15: ENiFe-CI

DESCRIPTION:

> Supercast Ni/Fe is a basic, graphite coated AC/DC electrode for the higher strength welding of cast irons.

> It is characterised by a soft, smooth arc with low penetration and spatter levels on both AC and DC power sources.

> Ease of striking is a feature of Supercast Ni/Fe.

> This electrode is made from a Nickel-Iron core wire and produces a ductile, machineable weld deposit with the extra strength required for welding SG (Spheroidal Graphite) irons.

TYPICAL APPLICATIONS:

For repair and build-up of SG irons and all standard grades of grey cast iron, malleable iron, austenitic cast iron and some grades of meehanite cast iron. Also suited to welding these cast irons to steel.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Mn	Ni	S	Fe
1.0	0.42	58.0	0.009	Bal

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Yield Stress	300 MPa
Tensile Strength	500 MPa
Deposit Hardness	200-220 HV (30)

ORDERING INFORMATION

ELECTRODE SIZE (MM)	PACKAGING (KG)		APPROX NO OF RODS PER KG	PART NUMBER
	PACKET	CARTON		
3.2	2.5	12.5	36	SNIFE32

