Mild Steel and Iron Powder Electrodes

Ferrocraft 22

45 OCV | DC AC

- Rutile Type High Iron Powder Electrode
- High Productivity Fillet and Butt Welding in All Downhand Positions
- Self Releasing Slag
- Recommended for high production welding where large standing fillet welds are required
- Ideal electrode for heavy structural welding – tanks, frames, girders, beams, ship structures, rolling stock and general fabrication in the workshop or "on-site"

Classifications:

AS/NZS 4855: (new)	B E4924 A
AS/NZS 1553.1: (old)	E4824-0
AWS/ASME-SFA A5.1:	E7024

Typical All Weld Metal Mechanical Properties:

Yield Stress	440 MPa
Tensile Strength	512 MPa
Elongation	25%
CVN Impact Values	60J av @ 0°C.

Typical All Weld Metal Analysis:
C: 0.05% Mn: 0.75% Si: 0.25%

Approvals:

Lloyds Register of Shipping	Grade 2Y
American Bureau of Shipping	Grade 2
Det Norske Veritas	Grade 2

Packaging and Operating Data:

Electrode Size mm	Length mm	Approx No. Rods/kg	Current Range (amps)	Packet	Carton	Part No
2.5	350	34	85 – 120	5kg	15kg – 3 x 5kg	611252
3.2	380	18	90 – 135	5kg	15kg – 3 x 5kg	611253
4.0	450	11	185 – 235	5kg	15kg – 3 x 5kg	611254
5.0	450	7	260 – 320	5kg	15kg – 3 x 5kg	611255

Ferrocraft 22 is formulated to operate with AC (miniumum 45 OCV) DC+ or DC- polarity.

The preferred polarity for DC fillet welding is DC+.

Pipearc 6010P

DC+

- User Friendly Pipe Welding Electrode
- Lower Spatter Levels and Easy Slag Removal
- Excellent Reverse Bead Formation on Butts
- Versatile "Out-of-Position" Capabilities
- Batch Numbered for On-the-Job Traceability
- Used to weld out (root, fill and cap) steel pipes such as API 5L, 5LX grades X42 to X52
- Welding of "V" butt (groove weld) joints in higher strength steels, including 5LX grades X60, X65 and X70. Recommended for root pass welding only.

Classifications:

AS/NZS 4855: (new)	B E4310 A
AS/NZS 1553.1: (old)	E4110-2
AWS/ASME-SFA A5.1:	E6010

Typical All Weld Metal Mechanical Properties:

Yield Stress	400 MPa
Tensile Strength	510 MPa
Elongation	30%
CVN Impact Values	65J av @ -20°C 40J av @ -30°C

Typical All Weld Metal Analysis:
C: 0.11% Mn: 0.46% Si: 0.15%
S: 0.011% P: 0.012%

Approvals:

Lloyds Register of Shipping	Grade 3
American Bureau of Shipping	Grade 3
Det Norske Veritas	Grade 3

The results quoted in this data sheet are obtained from the listed Shipping Societies (ABS, DNV, LRS) Conformance Tests and Procedures. Actual weld metal mechanical properties achieved with PipeArc 6010P are influenced by many factors including, base metal analysis, welding parameters / heat input used, number of weld passes and run placement etc. On the job mechanical tests may produce different results. Please consult your CIGWELD Area Manager or Customer Service for welding procedure recommendations.

Packaging and Operating Data:

Electrode Size mm	Length mm	Approx No. Rods/kg	Current Range (amps)	Packet	Carton	Part No
2.5	300	66	45 – 85	5kg	15kg – 3 x 5kg	615602
3.2	350	39	90 – 135	5kg	15kg – 3 x 5kg	615603
4.0	350	25	135 – 180	5kg	15kg – 3 x 5kg	615604

DC+ (Direct Current Electrode Positive) polarity

Ferrocraft 11

65 OCV | DC AC

- Cellulose Pipe Welding Electrode
- All Positional, AC / DC Capabilities
- High Penetration, Root Pass Applications
- WHITE flux colour for easy ID
- Recommended for root pass welding where the "stovepipe" or "flick" techniques can be used to achieve full root penetration
- The root, hot fill and capping pass welding of pipelines, pressure vessels, storage tanks, workshop and field construction

Classifications:

AS/NZS 4855: (new)	B E4311 A
AS/NZS 1553.1: (old)	E4111-2
AWS/ASME-SFA A5.1:	E6011

Typical All Weld Metal Mechanical Properties:

Yield Stress	415 MPa
Tensile Strength	500 MPa
Elongation	28%
CVN Impact Values	90J av @ -20°C

Typical All Weld Metal Analysis:
C: 0.12% Mn: 0.47% Si: 0.10%
S: 0.007% P: 0.011%

Approvals:

Lloyds Register of Shipping	Grade 3, 3Y
American Bureau of Shipping	Grade 3
Det Norske Veritas	Grade 3

Packaging and Operating Data:

Electrode Size mm	Length mm	Approx No. Rods/kg	Current Range (amps)	Packet	Carton	Part No
2.5	300	62	65 – 85	5kg	15kg – 3 x 5kg	611132
3.2	380	33	95 – 125	5kg	15kg – 3 x 5kg	611133
4.0	380	22	130 – 160	5kg	15kg – 3 x 5kg	611134

AC (miniumum 65 OCV) DC+ or DC- polarity.