Carbon Steel Flux Cored Wires

Gas-shielded Flat and Horizontal Flux Cored Wires

Select 70TR	E70T-1C, E70T-1M, E70T-9C, E70T-9M per AWS A5.20, ASME SFA 5.20	Select 70TR has a unique slag system which allows multiple weld beads to be stacked in a horizontal fillet with a minimum of "roll" or convexity.
Select Super 70	E70T-1C per AWS A5.20, ASME SFA 5.20	Select Super 70 is a good choice for deep groove weldments such as J-grooves, where slag removal between each pass can be a problem.
Select 71	E70T-1C, E70T-9C per AWS A5.20, ASME SFA 5.20	Select 71 has higher level of deoxidation and it facilitates welding over mill scale, rust and other contaminants.
Select 71A	E70T-1C, E70T-9C per AWS A5.20, ASME SFA 5.20	Select 71A has excellent wetting characteristics, resulting in superior bead shape and the slag is typically self peeling
Select 71P	E70T-1C, E70T-1M per AWS A5.20, ASME SFA 5.20, MIL 70T- 1C per MIL-E-24403/1	Select 71P is specially designed to weld over zinc-based and organic primers in the shipbuilding industry.
Select 72	E70T-2C per AWS A5.20, ASME SFA 5.20	Select 72 contains a high level of deoxidizers that allow it to weld over heavier levels of rust and mill scale.
Select Super 72	E70T-2C per AWS A5.20, ASME SFA 5.20	Select Super 72 is a superb selection for high speed welds on thin gauge carbon steels, particularly lap and butt welds.
Select 75	E70T-5C, E70T-5M per ANSI/AWS A5.20, ASME SFA 5.20	Select 75 is a flux cored wire designed with a basic slag system which provides better mechanical properties and lower diffusible hydrogen levels in the weld deposit than E70T-1 wires.
Select 97	E70T-1C, E70T-1M, E70T-9C, E70T-9M per AWS A5.20, ASME SFA 5.20	Select 97 is intended for welding of carbon steels where a minimum tensile strength of 70,000 psi is required.

Gas-shielded All Position Flux Cored Wires

Select 71 Supreme	E71T-1C, E71T-1M, E71T-9C, E71T-9M per AWS A5.20, ASME SFA 5.20	Select 71 Supreme is a flux cored, gas shielded wire designed to provide improved CVN toughness at lower temperatures.
Select 710	E71T-1C, E71T-1M per AWS A5.20, ASME SFA 5.20	Select 710 is an all position, flux cored wire which is intended for welding of carbon and certain low alloy steels where a minimum tensile strength of 70,000 psi is required.
Select 711	E71T-1C, E71T-1M, E71T-9C, E71T-9M per AWS A5.20, ASME SFA 5.20	Select 711 is a carbon steel wire intended for welding of carbon steel and certain low alloy steels where a minimum tensile strength of 70,000 psi is required.
Select 712	E71T-1C, E71T-1M, E71T-9C, E71T-9M per AWS A5.20, ASME SFA 5.20	Select 712 is an improved E71T-1C, featuring lower spatter and fume emissions than conventional products in this class.
Select 717	E71T-1M, E71T-9M per AWS A5.20, ASME SFA 5.20	Select 717 is best suited for situations where lower fume levels are required or higher out of position productivity is desired.
Select 720	E71T-1C, E71T-1M, E71T-9C, E71T-9M, E71T-12C, E71T-12M per AWS A5.20, ASME SFA 5.20, MIL-7IT-1 HYC, MIL-7IT-1 HYM and MIL-71T-1C per MIL-E-24403/1	Select 720 is an ideal choice for those weldments requiring good CVN toughness.
Select 720A	E71T-1C, E71T-1M, E71T-9C, E71T-9M per AWS A5.20, SFA 5.20	Select 720A is an ideal choice for those weldments requiring good CVN toughness and high welder appeal.
Select 720HP	E71T-1C, E71T-1M, E71T-9C, E71T-9M, E71T-12CJ, E71T-12MJ per AWS A5.20, ASME SFA 5.20	Select 720HP excels in welding where requirements are stringent, such as offshore platforms and pipe systems, pressure vessels, oil and gas pipelines, petrochemical pipelines, structural steel, bridge fabrication and many others.
Select 721	E71T-1M, E71T-9M per AWS A5.20, ASME SFA 5.20, MIL-71T-1 HYM per MIL-E-24403/1	Select 721 is designed with Naval shipbuilding in mind.
Select 727	E71T-1C, E71T-1M, E71T-9C, E71T-9M per AWS A5.20, ASME SFA 5.20	Select 727 was developed to provide improved deposition rates and enhanced welder appeal, compared to conventional wires.
Select 737	E71T-1M, E71T-9M, E71T-12MJ per AWS A5.20, ASME SFA 5.20	Select 737 is a carbon steel wire for welding of carbon and certain low alloy steels, utilized where a minimum of 70,000 psi is required

Gas-shielded Metal Cored wires

Select 70C-3	E70C-3M per AWS A5.18, ASME SFA 5.18	70C-3 makes it an ideal choice for those applications where solid wire is inadequate or the slag from flux cored wire is unwanted.
Select 70C-6	E70C-6M per AWS A5.18, ASME SFA 5.18	Select 70C-6 is well suited to applications where higher manganese and silicon levels are essential.
Select 70C-6LS	E70C-6M per AWS A5.18, ASME SFA 5.18	Select 70C-6LS is a carbon steel, gas shielded, composite metal cored wire which produces substantially fewer slag islands than typical metal cored wires.
Select 70C-7	E70C-6M per AWS A5.18, ASME SFA 5.18	Select 70C-7 exceptionally smooth arc and low spatter level and minimize postweld cleanup, making it ideal for weldments that are to be painted.
Select 70C-8	E70C-6M per AWS A5.18, ASME SFA 5.18	Select 70C-8 is ideal for those difficult-to-weld items such as heavily rusted or scaled surfaces or when steel is coated with oil or paint.
Select 70C-10	E70C-6M per AWS A5.18, ASME SFA 5.18	Select 70C-10 is ideally suited for those applications which require higher travel speeds on thin gauge carbon steels.
Select 70C-T	E70C-6M per AWS A5.18, ASME SFA 5.18	Select 70C-T has excellent toughness and it an ideal selection for welding fine grained steels and many low alloy steels
Select EH12KS	EC1 per AWS A5.17, ASME SFA 5.17	Select EH12KS is to be used for submerged arc welding only. It is a metal cored, carbon steel wire intended for the welding of carbon and certain low alloy steels.
Select EM12KS	EC1 per AWS A5.17, ASME SFA 5.17	Select EM12KS is a metal cored, carbon steel wire designed for submerged arc welding only.

Carbon Steel Flux Cored Wires

Flux Cored Self-Shielded Flat and Horizontal wires

Select 73	E70T-3 per AWS A5.20, ASME SFA 5.20	Select 73 is a self-shielded, flux cored wire, make it perfect for applications involving high travel speeds (60-120 ipm) and lower penetration such as lap and butt welds on thin gauge steel plate.
Select 73R	E70T-3 per AWS A5.20, ASME SFA 5.20	Select 73R is a self-shielded, flux cored wire and has a special slag system allowing it to be used in circumferential, or roundabout, welds on thin gauge steels at relatively high travel speeds.
Select 74	E70T-4 per AWS A5.20, ASME SFA 5.20	Select 74 is a self-shielded, flux cored wire ideally suited for welding applications where gas-shielded wires may have problems, such as outdoors or in windy conditions. These would typically be light gauge steel plate fabrication or general purpose fabrication of carbon steels.

Flux Cored Self-Shielded All Position wires

Select 78	E71T-8J per AWS A5.20, SFA 5.20	Select 78 is intended for use in critical structural fabrication. This wire is suitable for Demand Critical Welds under AWS D1.8.
Select 701	E71T-11 per AWS A5.20, ASME SFA 5.20	Select 701 is designed for those applications where the use of shielding gas is inappropriate and where CVN toughness is not of prime concern.
Select 700GS	E71T-GS, E71T-14 per AWS A5.20, ASME SFA 5.20	Select 700GS make it the smart choice for the “hobbyist” welder, as it works very well on the small 110 volt power source/ feeders which have become so popular. Select 700GS is designed for welding of thin-gauge carbon steel.

Solid Copper wire

Select 70S-3	ER70S-3 per AWS/ ANSI A5.18. ASME SFA 5.18	Select 70S-3 is a premium copper-coated, solid wire, or MIG wire, designed for gas metal arc welding of a wide selection of carbon steels.
Select 70S-6	ER70S-6 per AWS/ ANSI A5.18, ASME SFA 5.18	Select 70S-6 is well suited for steels containing medium to high levels of mill scale and mild amounts of contaminants. The wire’s copper coating promotes excellent feeding characteristics.

Copper –Free wire

Select 70S-3NC	ER70S-3 per AWS/ ANSI A5.18, ASME SFA 5.18	Select 70S-3NC is free of copper coating, hence the “NC” designator signifying “no copper”. This truly premium solid wire, or “MIG” wire, is intended for gas metal arc welding of carbon steels which require minimum yield strength of 50,000 psi. There is no copper to vaporize into the welding fume other than the trace amounts within the wire itself.
Select 70S-6NC	ER70S-6 per AWS/ ANSI A5.18, ASME SFA 5.18	Select 70S-6NC contains higher amounts of manganese and silicon than a 70S- 3 wire, making it more tolerant to mill scale and mild contaminants.

Nickel Bearing Flat and Horizontal Flux Cored wires

Select 81-Ni1	E80T1-Ni1C per AWS A5.29, ASME SFA 5.29	Select 81-Ni1 is a gas-shielded wire intended for horizontal fillet and flat position welding of carbon and low alloy steels requiring a minimum tensile strength of 80,000 psi and good CVN toughness at subzero temperatures.
Select 81-Ni2	E80T1-Ni2C per AWS A5.29, ASME SFA 5.29	Select 81-Ni2 is a low alloy steel, gas shielded, flux cored wire intended for the welding of carbon and low alloy steels requiring a minimum tensile strength of 80,000 psi and good CVN toughness at subzero temperatures.
Select 85-Ni3	E80T5-Ni3M per AWS A5.29, ASME SFA 5.29	Select 85-Ni3 is a low alloy, gas shielded, flux cored wire for welding of certain HSLA steels. It provides a weld deposit that contains about 3.5% nickel to enhance low temperature toughness

Nickel Bearing All Position Flux Cored wires

Select 810-Ni1	E81T1-Ni1C, E81T1- Ni1M per AWS A5.29, ASME SFA 5.29	Select 810-Ni1 is intended for , all position welding on carbon and low alloy steels requiring good CVN toughness at subzero temperatures and tensile strength in excess of 80,000 psi.
Select 820-Ni1	E81T1-Ni1C, E81TNi1M per AWS A5.29, ASME SFA 5.29, MIL-8IT1-Ni1C and 8IT1-Ni1M per MILE- 24403/1	Select 820-Ni1 is a gas-shielded, flux cored wire designed for the all position, welding of carbon and low alloy steels which require moderate tensile strength and good CVN toughness at subzero temperatures.
Select 810-Ni2	E81T1-Ni2C, E81T1- Ni2M per AWS A5.29, ASME SFA 5.29, MIL-81T1-Ni2C and MIL-81T1-Ni2M per MIL-E-24403/1	Select 810-Ni2 is an excellent selection for welding steels which require good CVN toughness and tensile strength in the range of 80,000-100,000 psi. Select 810- Ni2 is designed for welding of carbon and certain low alloy steels in all positions.
Select 820-Ni2	E81T1-Ni2C, E81T1- Ni2M per AWS A5.29, ASME SFA 5.29	Select 820-Ni2 is a premium low alloy steel, flux cored wire which produces a weld deposit with 2.2-2.5% nickel. This wire is intended for the all position welding of carbon and certain low alloy steels which require good v-notch toughness and tensile strength in the 80,000-100,000 psi range.
Select 910-Ni2	E91T1-Ni2C, E91T1- Ni2M per AWS A5.29, ASME SFA 5.29	Select 910-Ni2 is designed for welding, in all positions, of certain low alloy steels and steels with low temperature CVN properties

Carbon Steel Flux Cored Wires

Nickel Bearing Metal Cored wires

Select 80C-Ni1	E80C-Ni1 per AWS A5.28, ASME SFA 5.28	Select 80C-Ni1 is well suited for fine grained or low alloy steels requiring moderate tensile strength and good subzero CVN toughness.
Select 80C-Ni2	E80C-Ni2 per AWS A5.28, ASME SFA 5.28	Select 80C-Ni2 is a composite metal cored wire utilized for welding carbon and low alloy steels requiring 80,000 psi minimum tensile strength and good CVN toughness at subzero temperatures.
Select Ni1S	ECNi1 per AWS A5.23, ASME SFA 5.23. (Meets AWS A5.23, class F7A6-ECNi1-Ni1 when used with OP121TT Flux)	Select Ni1S is a metal cored, low alloy wire, intended for the welding of carbon and low alloy steels, is used for submerged arc welding only. It contains 1% nickel to produce good low temperature toughness.

Nickel-Molybdenum Bearing Flat and Horizontal Flux Cored wires

Select 91-K2	E90T1-K2C per AWS A5.29, ASME SFA 5.29	Select 91-K2 is a premium low alloy, gas shielded, flux cored wire designed for those applications requiring 90,000 psi minimum tensile strength and good low temperature toughness.
Select 95-K2	E90T5-K2C per AWS A5.29, ASME SFA 5.29	Select 95-K2has outstanding mechanical properties, particularly the low temperature CVN values, make this an excellent choice for welding steels requiring a minimum of 90,000 psi tensile strength and good subzero CVN toughness.
Select 100-K3	E100T1-K3C per AWS A5.29, ASME SFA 5.29	Select 100-K3, with a minimum tensile strength of 100 ksi and good CVN toughness levels, is a gas-shielded wire for flux cored arc welding of certain high strength, low alloy steels.
Select 110-K3	E110T1-K3C per AWS A5.29, ASME SFA 5.29	Select 110-K3 is a low alloy steel, gas shielded, flux cored wire intended for high strength steels in horizontal fillets and the flat position. Arc transfer is a smooth spray and the weld bead exhibits clean slag removal with a finely rippled surface.
Select 115-K3	E110T5-K3C per AWS A5.29, ASME SFA 5.29	Select 115-K3 is a basic low alloy steel, gas-shielded, flux cored wire for horizontal fillet and flat position welding of certain HSLA steels. The arc transfer is globular with a convex bead profile due to the nature of a basic slag system.

Nickel-Molybdenum Bearing All Position Flux Cored wires

Select 812-K2	E81T1-K2M per AWS A5.29, ASME SFA 5.29	Select 812-K2 is intended for welding of low alloy steels, in all positions, where moderate tensile strength and exceptional low temperature CVN values are required.
Select 910-K2	E91T1-K2C, E91T1- K2M per AWS A5.29, ASME SFA 5.29	Select 910-K2 proves an ideal selection for weldments requiring 90,000 psi minimum tensile strength and good CVN toughness values. These wires are intended for, all position welding of low alloy steels.
Select 101-K3C, -K3M	E101T1-K3C, E101T1-K3M per AWS A5.29, ASME SFA 5.29	Select 101-K3C and Select 101-K3M are superb choices for those applications requiring 100 ksi minimum tensile strength and good CVN toughness. These wires are intended for all position welding of low alloy steels.
Select 111-K3C, -K3M	E111T1-K3C, E111T1-K3M per AWS A5.29, ASME SFA 5.29	Select 111-K3C and Select 111-K3M are designed for welding, in all positions, of specific high strength, low alloy steels wherein a minimum tensile strength of 110,000 psi is important.
Select 101 SR	E101T1-G per AWS/ ANSI A5.29, ASME SFA 5.29	Select 101 SR is designed to weld oilfield components that require a postweld stress relief.

Nickel-Molybdenum Bearing Metal Cored wires

Select 90C-M2	E90C-G per AWS A5.28, ASME SFA 5.28	Select 90C-M2 is an ideal choice for weldments where distortion must be minimized and de-slagging is not desirable.
Select 100C	E100C-G per AWS A5.28, ASME SFA 5.28	Select 100C is a composite metal cored wire designed for the flat and horizontal positions, where a minimum tensile strength of 100,000 psi is required in the deposited weld metal.
Select 120C	E120C-G per AWS A5.28, ASME SFA 5.28	Select 120C is a low alloy steel, composite metal cored wire which achieves its strength without the use of chromium, greatly reducing the concern over chromium in the welding fume. This wire is utilized to weld certain carbon and low alloy steels where a minimum tensile strength of 120,000 psi is required in the deposited weld metal.

Carbon Steel Flux Cored Wires

Nickel-Chromium-Molybdenum Bearing Flat and Horizontal Flux Cored wires

Select 115-K4	E110T5-K4C per AWS A5.29, ASME SFA 5.29	Select 115-K4 produces a tough, high strength weld metal that is resistant to cracking in highly restrained joints. These characteristics make it an ideal selection to weld high strength, low alloy steels.
Select 125-K4	E120T5-K4C per AWS A5.29, ASME SFA 5.29	Select 125-K4 is a basic low alloy steel, flux cored, gas-shielded wire for welding of HSLA steels requiring a minimum of 120 ksi tensile strength. This wire is intended for welding in horizontal fillets and the flat position using 100% carbon dioxide shielding gas. The arc transfer is globular and the bead shape is convex.
Select 4130LN	No AWS class.	Select 4130LN is a basic flux cored wire designed to closely match the properties of certain low alloy, quench and tempered steels following post weld heat treatment. It is not recommended for as-welded applications. The basic slag system assures low weld metal hydrogen in the weld area, which is critical in preventing cracking in sensitive steels such as 4130.

Nickel-Chromium-Molybdenum Bearing Metal Cored wires

Select 110C-M2	E110C-G per AWS A5.28, ASME SFA 5.28	Select 110C-M2 is designed for those applications where the slag residue and fume emissions of flux cored wires are unwanted. This composite metal cored wire is designed for welding of low alloy steels, in the flat and horizontal positions, where a minimum tensile strength of 110,000 psi is required in the deposited weld metal.
Select 105-D2	E100T5-D2M per AWS A5.29, ASME SFA 5.29	Select 105-D2 is a low alloy steel wire with a basic slag system used to weld certain manganese-molybdenum steels and castings.
Select 91-D3	E90T1-D3C per AWS A5.29, ASME SFA 5.29	Select 91-D3 is a gas-shielded, low alloy steel wire intended to match the mechanical properties and corrosion resistance of certain pressure vessel steels.

Manganese-Molybdenum Bearing Metal Cored wires

Select 80C-D2	E90C-D2 per AWS A5.28, ASME SFA 5.28	Select 80C-D2 is a composite metal cored wire for welding of certain high strength, low alloy steels where a minimum tensile strength of 90,000 psi is required in the deposited metal. This premium wire provides a productivity-enhancing welding alternative to ER80S-D2 solid wires.

Carbon-Manganese Bearing Flat and Horizontal Flux Cored wires

Select 80	E80T-G per AWS A5.29, ASME SFA 5.29.	Select 80 is a low alloy steel wire for flux cored arc welding. It is intended for the welding of carbon and certain low alloy steels.
Select 81-A1	E80T1-A1C per AWS A5.29, ASME SFA 5.29	Select 81-A1 is a low alloy steel wire intended for welding of certain carbon-molybdenum steels where the addition of 1/2% molybdenum is required in the deposited weld metal.

Carbon-Molybdenum Bearing All Position Flux Cored wires

Select 810-A1	E81T1-A1C, E81T1- A1M per AWS A5.29, ASME SFA 5.29	Select 810-A1 is a low alloy steel wire for flux cored arc welding. It is intended for welding, in all positions, of certain carbon-molybdenum steels where the addition of 1/2% molybdenum is required in the deposited weld metal.

Chromium-Molybdenum Bearing Flat and Horizontal Flux Cored wires

Select 81-B2	E80T1-B2C per AWS A5.29, ASME SFA 5.29	Select 81-B2 is a low alloy steel wire for flux cored arc welding. This wire is designed for welding in the flat and horizontal positions of certain chromium-molybdenum steel and pipe grades, where 11/4% Cr and 1/2% Mo are required in the weld deposit.
Select 85-B2	E80T5-B2C per AWS A5.29, ASME SFA 5.29	Select 85-B2 is intended for welding of certain chromium-molybdenum steels, plate and pipe requiring 11/4% chrome and 1/2% molybdenum in the weld deposit. The basic slag limits welding to horizontal fillets and the flat position.
Select 85-B2L	E80T5-B2LC per AWS A5.29, ASME SFA 5.29	Select 85-B2L is designed for welding of certain chromium- molybdenum steels, plate and pipe requiring 11/4% chromium and 1/2% molybdenum in the weld deposit.
Select 91-B3	E90T1-B3C, E90T1- B3M per AWS A5.29, ASME SFA 5.29	Select 91-B3 is a low alloy steel wire for welding of certain high temperature, creep resistant materials in horizontal fillets and the flat position. The rutile slag system provides high welder appeal and good weld bead geometry.

Carbon Steel Flux Cored Wires

Chromium-Molybdenum Bearing All Position Flux Cored wires

Select 810-B2	E81T1-B2C, E81T1- B2M per AWS A5.29, ASME SFA 5.29	Select 810-B2 is a low alloy steel wire designed for welding, in all positions, of certain chromium-molybdenum steel plate and pipe where 11/4% Cr and 1/2% Mo are required in the weld deposit.
Select 810-B2L	E81T1-B2LC per AWS A5.29, ASME SFA 5.29	Select 810-B2L is a premium low alloy steel wire intended for all position welding of certain 11/4% chromium and 1/2% molybdenum steel plate and pipe, where lower carbon levels are required in the weld deposit.
Select 910-B3	E91T1-B3C, E91T1- B3M per AWS A5.29, ASME SFA 5.29	Specifically designed for welding materials subjected to high temperature service, Select 910-B3 provides all position welding of certain chromium-molybdenum steels.
Select 910-B3L	E91T1-B3LC per AWS A5.29, ASME SFA 5.29	Select 910-B3L is a low alloy steel wire intended for all position welding of certain 21/4% chromium and 1% molybdenum steel plate and pipe, where lower carbon levels are required in the weld deposit.
Select 810-B6	E81T1-B6M per AWS A5.29, ASME SFA 5.29	Select 810-B6 is a low alloy steel wire intended for all position welding of certain chromium-molybdenum steels where a weld deposit of 5% chromium and 1/2% molybdenum is required.
Select 810-B8	E81T1-B8M per AWS A5.29, ASME SFA 5.29	Select 810-B8 is an all position, flux cored wire intended for welding of 9% chromium and 1% molybdenum steels.

Chromium-Molybdenum Bearing All Position Flux Cored wires

Select 910-B9	E91T1-B9M per AWS A5.29, ASME SFA 5.29	Select 910-B9 is designed welding of 9 chromium and 1 molybdenum steels in all position. Flux cored wire contains small additions of niobium, vanadium and nitrogen to improve long term creep properties.

Chromium-Molybdenum Bearing Metal Cored wires

Select 80C-B2	E80C-B2 per AWS/ ANSI A5.28, ASME SFA 5.28	Select 80C-B2 is designed for welding of certain chromium and molybdenum steels.
Select 90C-B3	E90C-B3 per AWS A5.28, ASME SFA 5.28	Select 90C-B3 is alloyed with approximately 21/4% chromium and 1% molybdenum. This composite metal cored wire produces a high strength weld deposit which is generally post weld treated.
Select 90C-B9	E90C-G per AWS A5.28, ASME SFA 5.28	Select 90C-B9 is a premium composite metal cored wire intended for welding of 9% chromium and 1% molybdenum steels. Select 90C-B9 contains small additions of niobium, vanadium and nitrogen to improve long term creep properties.

Weathering Steel All Position Flux Cored wires

Select 810-W	E81T1-W2C, E81T1- W2M per AWS A5.29, ASME SFA 5.29	Select 810-W is a gas-shielded, flux cored, low alloy steel wire for all position welding of weathering steels. Welder appeal is excellent with a spray transfer, thin slag which removes easily and cleanly and a smooth bead profile.

Weathering Steel Metal Cored wires

Select 80C-W	E80C-W2 per AWS A5.28, ASME SFA 5.28	Select 80C-W is designed for those applications requiring the coloration and corrosion resistance of the weathering type of structural steels.

Stainless Steel Flux Cored Wires

Austenitic Flat and Horizontal Flux Cored wires

SelectAlloy 308L	E308LTO-1, E308LTO-4 per AWS A5.22. (Also meets E308TO-1, E308TO-4 per AWS A5.22)	SelectAlloy 308L is used in welded components in the chemical, paper, pharmaceutical and textile industries.
SelectAlloy 309L	E309LTO-1, E309LTO-4 per AWS A5.22. (Also meets E309TO-1, E309TO-4 per AWS A5.22)	SelectAlloy 309L is used to weld Type 309 stainless steel, to join carbon and low alloy steels to austenitic stainless steels, to weld 304 clad sheets and for the first layer cladding of carbon steel.
SelectAlloy 316L	E316LTO-1, E316LTO-4 per AWS A5.22. (Also meets E316TO-1, E316TO-4 per AWS A5.22)	SelectAlloy 316L finds wide usage in the pulp and paper industry, chemical and textile processing equipment, furnace parts and parts exposed to marine environments.
SelectAlloy 317L	E317LTO-1, E317LTO-4 per AWS A5.22 (Also meets E317TO-1, E317TO-4 per AWS A5.22)	SelectAlloy 317L improves resistance to pitting and provides increased creep resistance. Its low carbon content minimizes carbide precipitation and makes it more resistant to intergrannular corrosion.
SelectAlloy 347	E347T0-1, E347T0-4 per AWS A5.22	SelectAlloy 347 is a gas-shielded, flux cored, stainless steel wire's columbium content forms a stable carbide, which reduces chromium carbide precipitation and makes the weld metal more resistant to intergranular corrosion.

Austenitic All Position Flux Cored wires

SelectAlloy 307-AP	E307T1-1, E307T1-4 per AWS A5.22	SelectAlloy 307-AP is an excellent choice for joining difficult-to-weld steels, such as armor plate and hardenable steels, and for dissimilar metal joints, such as austenitic manganese steels to carbon steel forgings and castings.
SelectAlloy 308H-AP	E308HT1-1, E308HT1-4 per AWS A5.22 (Also meets E308T1-1, E308T1-4 per AWS A5.22)	SelectAlloy 308H-AP is a gas-shielded, flux cored, all position, stainless steel wire with a higher carbon in this alloy makes it well suited for higher temperature use.
SelectAlloy 308L-AP	E308LT1-1, E308LT1-4 per AWS A5.22. (Also meets E308T1-1, E308T1-4 per AWS A5.22)	SelectAlloy 308L-AP is a gas-shielded, flux cored, stainless steel wire with low carbon in this alloy minimizes carbide precipitation and makes it more resistant to intergranular corrosion.
SelectAlloy 309H-AP	E309T1-1, E309T1-4 per AWS A5.22	SelectAlloy 309H-AP is utilized to weld type 309 stainless steel where higher temperature strength is required.
SelectAlloy 309L-AP	E309LT1-1, E309LT1-4 per AWS A5.22. (Also meets E309T1-1, E309T1-4 per AWS A5.22)	SelectAlloy 309L-AP is a all position wire, minimizes carbide precipitation and makes the weld metal more resistant to intergranular corrosion because of its low carbon content.
SelectAlloy 309LCb-AP	E309LCbT1-1, E309LCbT1-4 per AWS A5.22	SelectAlloy 309LCb-AP is a all position, gas-shielded, flux cored wire with the columbium in forms a stable carbide and makes the weld metal more resistant to intergranular corrosion.
SelectAlloy 309LMo-AP	E309LMoT1-1, E309LMoT1-4 per AWS A5.22.	SelectAlloy 309LMo-AP is used to join carbon and low alloy steels to molybdenum-containing austenitic stainless steels, for root passes in cladding applications and to join difficult-to-weld or dissimilar steels.
SelectAlloy 312-AP	E312T1-1, E312T1-4 per AWS A5.22	SelectAlloy 312-AP is used for the welding of dissimilar metals, such as the joining of carbon steels to stainless steels high in nickel.
SelectAlloy 316H-AP	E316T1-1, E316T1-4 per AWS A5.22	SelectAlloy 316H-AP is a flux cored, stainless steel wire with higher carbon content improves the elevated temperature strength. The presence of molybdenum augments resistance to pitting while providing increased creep resistance.

Austenitic All Position Flux Cored wires

SelectAlloy 316L-AP	E316LT1-1, E316LT1-4 per AWS A5.22. (Also meets E316T1-1, E316T1-4 per AWS 5.22)	SelectAlloy 316L-AP is an all position wire. The molybdenum improves pitting resistance and provides increased creep resistance. The low carbon minimizes carbide precipitation which helps resists intergranular corrosion.
SelectAlloy 317L-AP	E317LT1-1. E317LT1-4 per AWS A5.22 (Also meets E317T1-1, E317T1-4 per AWS A5.22)	SelectAlloy 317L-AP is a all position, stainless steel wire with higher level of molybdenum improves resistance to pitting and provides increased creep resistance.
SelectAlloy 347-AP	E347T1-1, E347T1-4 per AWS A5.22.	SelectAlloy 347-AP is a gas-shielded, flux cored, all position stainless steel wire. The columbium forms a stable carbide which reduces chromium carbide precipitation and makes weld metal more resistant to intergranular corrosion.

Stainless Steel Flux Cored Wires

Austenitic Self Shielded, Flux Cored wires

SelectAlloy 307T0-3	E307T0-3 per AWS A5.22	SelectAlloy 307T0-3 is a self-shielded, flux cored, stainless steel wire with relatively high manganese content helps reduce the chances of weld metal cracking in dissimilar metal welding.
SelectAlloy 308LT0-3	E308LT0-3 per AWS A5.22 (Also meets E308T0-3 per AWS A5.22)	SelectAlloy 308LT0-3 minimizes carbide precipitation and makes the weld metal more resistant to intergranular corrosion.
SelectAlloy 309LT0-3	E309LT0-3 per AWS A5.22 (Also meets E309T0-3 per AWS A5.22)	SelectAlloy 309LT0-3 with low carbon maximizes carbide precipitation and makes the weld metal more resistant to intergranular corrosion.
SelectAlloy 316LT0-3	E316LT0-3 per AWS A5.22 (Also meets E316T0-3 per AWS A5.22)	SelectAlloy 316LT0-3 is a self-shielded, flux cored, stainless steel wire. The presence of molybdenum improves resistance to pitting and provides increased creep resistance. In addition, the low carbon content minimizes carbide precipitation and makes it more resistant to intergranular corrosion.
SelectAlloy 347T0-3	E347T0-3 per AWS A5.22	SelectAlloy 347T0-3 is a self-shielded, flux cored, stainless steel wire. The columbium forms a stable carbide which reduces chromium carbide precipitation and makes the weld metal more resistant to intergranular corrosion.

Austenitic Metal Cored wires

SelectAlloy 307-C	EC307 per AWS A5.9	SelectAlloy 307-C is a composite, metal cored wire for gas metal arc welding of stainless and certain types of other austenitic steels. The composite nature of this metal cored wire provides higher deposition rates and faster travel speeds than those achieved by solid wires.
SelectAlloy 307EU-C	No AWS class. Conforms to European Standard EN12073, Class T 18 8 Mn M M.	SelectAlloy 307EU-C is designed to provide higher deposition rates and faster travel speeds than solid wires. The composite, metal cored is intended for the gas metal arc welding of stainless and certain types of other austenitic steels. This wire may also be used to weld armor steels and ferritic stainless steels in certain applications.
SelectAlloy 308L-C	EC308L per AWS A5.9 (Also meets EC308 per AWS A5.9)	SelectAlloy 308L-C is ideally suited for making small butt, lap and fillet welds on thin material at elevated travel speeds.

Austenitic Metal Cored wires

SelectAlloy 308LSi-C	EC308LSi per AWS A5.9	SelectAlloy 308LSi-C features higher silicon content level improves bead wetting and its low carbon content minimizes carbide precipitation, making it more resistant to intergranular corrosion.
SelectAlloy 309L-C	EC309L per AWS A5.9. (Also meets EC309 per AWS A5.9)	SelectAlloy 309L-C is used to weld Type 309 stainless steel, to join carbon and low alloy steels, to weld 304 and for the first layer cladding of carbon steel.
SelectAlloy 309LSi-C	EC309LSi per AWS A5.9	SelectAlloy 309LSi-C.with higher silicon level improves bead wetting while the lower carbon content minimizes carbide precipitation and makes the weld metal more resistant to intergranular corrosion.
SelectAlloy 310G-C	No AWS class	SelectAlloy 310G-C has a modified 310 chemistry with a nominal composition of 26% chromium, 20% nickel and 5% manganese. The addition of manganese in this gas-shielded, metal cored, stainless steel wire reduces the tendency for hot cracking of this highly austenitic alloy.
SelectAlloy 312-C	EC312 per AWS A5.9	SelectAlloy 312-C is well suited for making small butt, lap and fillet welds on thin material at elevated speeds.
SelectAlloy 316L-C	EC316L per AWS A5.9. (Also meets EC316 per AWS A5.9)	SelectAlloy 316LC provides increased creep resistance and improves resistance to pitting, carbide precipitation and intergranular corrosion.
SelectAlloy 316LSi-C	EC316LSi per AWS A5.9	SelectAlloy 316LSi-C is a gas-shielded, metal cored, stainless steel wire with the presence of molybdenum improves resistance to pitting and provides increased creep resistance. The low carbon content minimizes carbide precipitation and makes it more resistant to intergranular corrosion. In addition, the augmented silicon content improves bead wetting and produces a cosmetically appealing weld.
SelectAlloy 317L-C	EC317L per AWS A5.9 (Also meets EC317 per AWS A5.9)	SelectAlloy 317L-C is designed with to delivers a higher level of molybdenum to improve resistance to pitting and provides increased creep resistance. The low carbon content of SelectAlloy 317L-C minimizes carbide precipitation and makes it more resistant to intergranular corrosion.
SelectAlloy 347-C	EC347 per AWS A5.9	SelectAlloy 347-C is a gas-shielded, metal cored, stainless steel wire with the columbium in forms a stable carbide, which reduces chromium carbide precipitation and increases resistance to intergranular corrosion.

Stainless Steel Flux Cored Wires

Duplex All Position, Flux Core wires

SelectAlloy 2209-AP	E2209T1-4 per AWS A5.22, ASME SFA 5.22	SelectAlloy 2209-AP is a flux cored wire designed to weld duplex stainless steels of the 22Cr-9Ni-2Mo-N type. The weld deposit has a "duplex" microstructure of austenite and ferrite.
SelectAlloy 2553-AP	E2553T1-4 per AWS A5.22, ASME SFA 5.22	SelectAlloy 2553-AP is used to weld duplex stainless steels which contain approximately 25% chromium. It offers greater resistance to intergranular corrosion, pitting and stress corrosion cracking than 2209

Duplex Metal Cored wires

Select 2209-C	EC2209 per AWS A5.9	SelectAlloy 2209-C is a metal cored wire designed to weld deposit has a "duplex" microstructure of austenite and ferrite. This wire delivers very good resistance to intergranular corrosion, pitting and to stress corrosion cracking in environments containing H2S and chlorides.

Martensitic Flat and Horizontal, Flux Cored wires

Select 410	E410T0-4 per AWS A5.22.	Select 410, is a flux cored wire designed for weld deposit to be air harden and is normally heat-treated after welding.
Select 410NiMo	E410NiMoT0-1 per AWS A5.22.	Select 410NiMo is a flux cored, gas-shielded wire for welding martensitic stainless steel with a maximum carbon content of 0.06%.

Martensitic All Position, Flux Cored wires

Select 410-AP	E410T1-1, E410T1-4 per AWS A5.22	Select 410-AP designed for weld deposit is air harden and is normally heat-treated after welding.
Select 410NiMo-AP	E410NiMoT1-1, E410NiMoT1-4 per AWS A5.22.	Select 410NiMo-AP is a gas-shielded, flux cored, stainless steel wire designed to weld martensitic stainless steels in all positions.

Martensitic Metal Cored wires

Select 410-C	EC410 per AWS A5.9.	Select 410-C is a composite metal cored, martensitic stainless steel wire designed to weld 410 stainless steel.

Ferritic Metal Cored Wires

Select 409Cb	EC409Cb per AWS A5.9, ASME SFA 5.9	Select 409Cb produces a ferritic stainless steel deposit which is ideal for welding thin gauge ferritic stainless in the fabrication of automotive exhaust systems.
Select 409Ti	EC409 per AWS/ANSI A5.9, ASME SFA 5.9.	Select 409Ti is a composite metal cored electrode for gas-shielded arc welding of ferritic stainless steels. This wire is formulated to produce improved bead wetting, faster travel speeds and a superb ability to bridge gaps and joints with poor fit up.
Select 439Ti	EC439 per AWS/ANSI A5.9, ASME SFA 5.9	Select 439Ti is a composite metal cored, stainless steel electrode for gas-shielded arc welding. This product is designed for welding ferritic stainless thin stock or sheet steel in the fabrication of automotive exhaust system components. The 439 alloys are higher in chromium than the 409 series in order to provide better heat and corrosion resistance. This particular grade is titanium stabilized.
Select 18CrCb-C	No AWS class	Select 18CrCb-C is a composite metal cored, stainless steel electrode, is intended for welding thin stock and sheet steel of similar ferritic stainless composition. Stabilization of the weld deposit is with columbium (niobium) instead of titanium.
Select 430L-Cb	No AWS Class	Select 430L-Cb is normally used for single pass applications on thin sheet metal materials, is a metal cored electrode designed for the welding of ferritic stainless materials. The higher chromium content combined with the columbium (niobium) stabilization provides similar heat and corrosion resistance to the base metals which are welded.

Nickel Alloys, All Position Flux Cored wires

SelectAlloy 625-AP	ENiCrMo3T1-1, ENi- CrMo3T1-4 per AWS A5.34	SelectAlloy 625-AP, with its nickel-chromium-molybdenum weld deposit, makes it a smart choice for surfacing, producing a corrosion resistant deposit for harsh environments.

Nickel Alloys, Metal Cored wires

Select Alloy 625-C	ERNiCrMo-3 per AWS A5.14	SelectAlloy 625-C is an excellent choice for welding piping systems.
SelectAlloy 2216-C	Conforms to ECNiFeMn- CI per AWS A5.15	SelectAlloy 2216-C is a metal cored electrode designed for welding high strength cast irons. This wire is preferred for use with high strength nodular or spheroidal graphite cast irons, although it can generally be used with all other cast irons, and dissimilar joints between cast irons to steels.

Stainless Steel Flux Cored Wires

Build –up and Joining wires

SelectWear BU		SelectWear BU is a low alloy wire designed for buildup on carbon steels. Slag removal is very good. BU has excellent compressive strength and resistance to cracking. Machinability is very good. Buildup thickness is generally unlimited with proper heat treatment procedures. Suitable for Steel mill rolls, shafts, steel hammers, gear teeth, shovel pads
SelectWear MN		SelectWear MN is an austenitic manganese alloy designed for severe impact with moderate abrasion. MN yields a very tough, impact-resistant deposit which work hardens in use. Primarily utilized for buildup and repair of manganese steel components. Deposit thickness is generally unlimited and does not crack. Suitable for Manganese rock crushing hammers and rolls, impactor bars, gyratory mantles, dredge components
SelectWear GP		SelectWear GP is a premium grade austenitic manganese wire with a modified high chromium level. Utilized in the joining, repair and buildup of manganese steel parts. Weld deposits exhibit very good impact resistance. Sometimes used as a final layer of hardfacing in high impact applications with moderate wear. Buildup depth is generally unlimited. Suitable for Manganese rock crushing hammers and rolls, impactor bars, gyratory mantles, dredge components

Metal to Metal Wear wires

SelectWear 42		SelectWear 42 yields a low alloy, martensitic steel of mid-range hardness. 42 has very good metal-to-metal wear resistance. Multiple layers can be welded crack free. Suitable for Earthmoving idlers and rollers, mine car wheels
SelectWear 52W		SelectWear 52W is designed to deposit a martensitic alloy similar to an H12 tool steel. 52W provides excellent abrasion resistance and high hardness without stress relief crack checking. Good resistance to high compressive loads. Can be machined with some difficulty. Suitable for Steel mill edger rolls, work rolls, leveler rolls, blast furnace bell seat areas
SelectWear 420-S		SelectWear 420-S* is a submerged arc electrode. The deposit has good resistance to hot wear, fire cracking and corrosion. Suitable for Steel mill caster rolls, idler rolls
SelectWear 423-S		SelectWear 423-S* is a submerged arc electrode with improved resistance to thermal fatigue and corrosion as well as excellent wear resistance and high hot hardness. Suitable for Steel mill caster rolls, table rolls

Metal to Earth Wear wires

SelectWear 44		SelectWear 44 is an open arc wire designed to deposit chromium carbides in a semi-austenitic matrix. Alloy has good impact and abrasion properties. Weld deposit will stress relief cross crack. Suitable for Dredge pump shells and components, crusher rolls, gyratory cones and mantles
SelectWear 50		SelectWear 50 is an open arc, medium chromium carbide alloy. Weld deposit exhibits resistance to both moderate wear and impact. Multiple pass applications are possible dependant on application. Deposit stress relieves itself by cross cracking. Suitable for Rock crushing hammers and rolls, impactor bars, gyratory mantles, dredge components, augers, pug mill paddles

Stainless Steel Flux Cored Wires

Metal to Earth Wear wires

SelectWear 58		SelectWear 58 is a martensitic alloy designed as a general purpose hardfacing wire. It is available in gasshielded or open-arc versions. 58 offers high hardness with good balance between abrasion and impact resistance. It is an excellent choice for components that are required to maintain a sharp edge. SelectWear 58-GV is a gas-shielded, all-position, flux cored wire version that may be used with either CO2 or 75%Ar/25%CO2 shielding. The specially designed slag system allows for easy use in vertical or overhead welding, with low spatter and fume. Suitable for Debarking knives, agricultural tillage tools, chisel plows, dredge components, earthmoving bucket lips
SelectWear 60HC		SelectWear 60HC is designed to deposit an alloy composed of a high density of primary chromium carbides in an iron matrix. Most economical of hardfacing alloys in high wear applications. Deposit has high abrasion resistance with moderate resistance to impact. Deposit stress relieves itself by cross cracking. Can be utilized in hot wear applications up to 1,100˚F. Suitable for Grinding/Pulverizing rolls and table segments, wear plates, clad pipe, dredge pump shells and related components, hammers.
SelectWear 60PW		SelectWear 60PW wire is similar to the 60HC but deposits an alloy composed of a higher density of primary chromium carbides and higher hardness than 60HC. Designed specifically for single and double pass overlay plate applications. Suitable for Wear plate
SelectWear 63		SelectWear 63 is an open arc wire used to yield a deposit of primary chromium carbides and secondary columbium carbides in a martensitic matrix. Weld deposit gives high abrasion resistance with moderate impact. Typical wear life increase of 33% over standard chromium carbide alloys. Designed for single and double pass overlay applications. Deposit will stress relief cross crack. Maintains hardness and wear resistance into 1200˚- 1400˚F range. Suitable for Clad wear plate, slurry pipe, grinding rolls and table segments, aggregate screens, fan blades
SelectWear 65		SelectWear 65 is an open arc wire composed of a high density of primary chromium carbides with multiple secondary carbides. Designed specifically for single and double pass applications in high temperature environments. Weld deposit will stress relief cross crack . Maintains hardness and wear resistance into 1400˚ - 1500˚F range. Suitable for Clad wear plate, slurry pipe, cement furnace components, sinter plant parts, fan blades, mixer blades, screws
Select 600TIC-O		SelectWear 600TIC-O is designed as a tubular, self-shielded wire for hardfacing applications. Deposit is composed of a martensitic steel matrix containing a high volume fraction of titanium carbides. 600TIC-O is best suited for applications involving extreme wear under high pressure. Suitable for Roller presses, grinding/ pulverizing rolls, dredge pump shells, rock crushing hammers
SelectWear Zucar-O		SelectWear Zucar-O is a self-shielded electrode designed specifically to arc sugar cane crusher rolls. Suitable for Sugar cane crusher rolls

Agency Approvals

Select Electrode	AWS	CWB	ABS	Lloyd's	DnV	Military
Gas-Shielded Flux Cored						
70	E70T-1, T-9	E492T-9, 9M-H16 (CO_2/C25)	—	—	—	—
71	E70T-1, T-9	E492T-9-H16 (CO_2)	E70T-1 (CO_2)	—	—	—
71F	E70T-1	—	3Y (CO_2/C8)	—	—	—
97	E70T-1, T-9	E492T-9-H16 (CO_2)	AWS A5.20, E70T-1	—	—	—
710	E71T-1, T-1M	E491T-9, 9M-H8 (CO_2/C20)	—	—	—	—
712	E71T-1, T-1M, T-9, T-9M	—	3SA, 3YSA, All (CO_2/C25)	—	—	—
714	E71T-1, T-1M, T-9, T-9M	—	3, 3Y, All (CO_2/C25)	—	—	—
716	E71T-1, T-9	—	3SA, 3YSA, All (CO_2)	—	—	—
720	E71T-1, T-1M, T-9, T-9M	E491T-9, 9M-H8 (CO_2/C20)	3SA, 3YSA, All (CO_2/C25)	3S, 3YS, All (CO_2/C25)	3YMS, All (CO_2/C25)	MIL-71T-1HYC,HYM
721	E71T-1M, T-9M	—	—	—	—	MIL-71T-1HYM
727	E71T-1M, T-9M	E491T-9, 9M-H8 (CO_2/C20)	3SA, 3YSA, All (CO_2/C25)	—	—	—
810-B2	E81T1-B2	E81T1-B2-H4 (CO_2)	—	—	—	—
812-K2	E81T1-K2M	—	4, 4Y, All (C25)	—	4YMS, All (C25)	—
820-Ni1	E81T1-Ni1,1M	E81T1-Ni1,Ni1M-H8 (CO_2/C20)	4, 4Y, All (CO_2/C25)	3S, 3YS, All (CO_2/C25)	4YMS, All (CO_2/C25)	MIL-81T1-Ni1C,Ni1M
810-Ni2	E81T1-Ni2,2M	E81T1-Ni2,Ni2M-H8 (CO_2/C20)	3SA, 3YSA, All (CO_2/C25)	—	—	MIL-81T1-Ni2C,Ni2M
810W	E81T1-W2	E81T1-W2, W2M-H8 (CO_2/C20)	—	—	—	—
910-K2	E91T1-K2, K2M	E91T1-K2, K2M-H8 (CO_2/C25)	—	—	—	—
910-Ni2	E91T1-Ni2, Ni2M	E91T1-Ni2, Ni2M-H8 (CO_2/C25)	—	—	—	—
111-K3C	E111T1-K3	—	AWS A5.29, E111T1-K3C	—	—	—
111-K3M	E111T1-K3M	E111T1-K3M-H8 (C20/C25)	—	—	—	—