

# *Eagle-Arc*

**Cored Welding Wire**

**Stainless & Mild Steel**



# Eagle-Arc Cored Wires

## Stainless Steel Flux-core

AWS A5.22

*Eagle-Arc E308LT1-1/4* is an *all-position* flux cored stainless wire designed for single and multi-pass welds on stainless plate, bars, pipe and other stainless applications. This alloy is suitable for welding stainless grades 201, 202, 301, 302, 302B, 303, 303Se, 304, 304L, 305 and 308 and can be used in some cases as an alternate alloy for welding 321, 347 and many 400 series stainlesses. This wire is noted for its low spatter, excellent bead shape, superior tie-in and easy slag removal. Our extra-low carbon formulation provides weld deposits with optimum ferrite with an austenitic structure resulting in low susceptibility to intergranular corrosion. Also resists stress corrosion cracking and carbide precipitation.

*Eagle-Arc E308LT0-1/4* is also available for flat and horizontal welding where higher travel speeds and deposition rates are desired, along with improved tie-in.

### Typical Chemistry

C - 0.03  
Cr - 19.30  
Ni - 10.00  
Mn - 1.32  
Si - 0.65

### Typical Mechanical Properties

Tensile strength - 84,000 psi  
Yield point - 62,000 psi  
Elongation - 36%

### Typical Welding Parameters

Shielding gas Argon/CO<sub>2</sub> (75/25 or 80/20)  
or 100% CO<sub>2</sub>  
Amps Flat Horizontal Vertical  
.045 130-300 150-300 130-240  
1/16 170-300 200-300 150-280  
Electrical stick out: 1/2 - 3/4" DC+

Actual Chemical Certification available on request.

*Eagle-Arc E309LT1-1/4* is an *all-position* flux cored stainless wire can be used on a variety of alloys, both stainless and combinations of stainless and mild, carbon and low alloy steels. The higher chromium and nickel content provides good weld deposits with increased resistance to scaling, corrosion and heat, over E308LT1-1/4. This wire is noted for its easy operator appeal, featuring low spatter, excellent bead appearance, penetration and tie-in, along with a crisp easy slag removal. Welds most 400 series stainless steels.

### Typical Chemistry

C - 0.03  
Cr - 22.70  
Ni - 12.75  
Mn - 1.46  
Si - 0.68

### Typical Mechanical Properties

Tensile strength - 84,000 psi  
Yield point - 62,000 psi  
Elongation - 36%

### Typical Welding Parameters

Shielding gas Argon/CO<sub>2</sub> (75/25 or 80/20)  
or 100% CO<sub>2</sub>  
Amps Flat Horizontal Vertical  
.045 130-300 150-300 130-240  
1/16 170-300 200-300 150-280  
Electrical stick out: 1/2 - 3/4" DC+

*E309LT0-1/4* is also available for flat and horizontal welding positions.

Actual Chemical Certification available on request

*Eagle-Arc E316LT1-1/4* is an *all-position* flux cored stainless wire with elevated levels of Molybdenum, giving the E316LT1-1/4 higher heat and corrosion resistance over E308LT1-1/4. This alloy has improved pitting resistance induced by sulfuric and sulfurous acids, chlorides and cellulose solutions. 316L is commonly used in food preparation equipment, dairy, pulp, rayon, dye industries and hot chemical equipment.

### Typical Chemistry

C - 0.03  
Cr - 18.90  
Ni - 12.20  
Mn - 1.45  
Si - 0.65  
Mo - 2.23

### Typical Mechanical Properties

Tensile strength - 84,000 psi  
Yield point - 62,000 psi  
Elongation - 36%

### Typical Welding Parameters

Shielding gas: 100% CO<sub>2</sub> or Argon/CO<sub>2</sub>  
(75/25 or 80/20)  
Amps Flat Horizontal Vertical  
.045 130-300 150-300 130-240  
1/16 170-300 200-300 150-280

*E316LT0-1/4* is also available for flat and horizontal welding positions. Electrical stick out: 1/2 - 3/4" DC+

Actual Chemical Certification is available on request



# Eagle-Arc Cored Wires

## Eagle-Arc 71

AWS A5.20, E71T-1C/1M

**Eagle-Arc 71 Flux Core** is an *all-position*, single or multi-pass wire for welding on mild and carbon steel. Features excellent feedability and operator appeal including; stable arc, low fume emissions and low spatter levels. Weld deposit exhibits good tie-in and geometry with self-peeling slag. This wire is designed for use with 100% CO<sub>2</sub> or 75-80% Argon, balance CO<sub>2</sub> mixed gases. Yields good penetration on light, medium or heavy gauge plate. 71 is a great choice for bridge structures, ship building, earth moving equipment and all general fabrication requirements.

### Typical Chemistry

C - 0.03  
Mn - 1.45  
Si - 0.30  
P - 0.015  
S - 0.010

### Typical Mechanical Properties

Tensile Strength - 86,000 psi  
Yield Strength - 81,000 psi  
% elongation - 26  
CVN 55 ft-lbs @ 0°F

### Recommended Parameters

Shielding gas Ar/CO<sub>2</sub> (75-80% Ar)  
or 100% CO<sub>2</sub>

Amps	Flat	Horizontal	vertical
.045	120-320	120-250	120-260
1/16	150-400	200-400	160-280

Electrical stick-out 1/2 - 3/4" DC+

Actual Chemical Certification available on Request

## Eagle-Arc 70C

AWS A5.18, E70C-6M

**Eagle-Arc 70C Metal Core** is a gas shielded wire for single or multi-pass welding in the flat or horizontal position on mild steel. This alloy is virtually free of spatter and slag, drastically reducing clean-up time. The smooth, stable arc leaves an excellent bead appearance with superior tie-in. This alloy is formulated for high deposition and weld efficiency and will operate on shielding gas with 75-80% argon/balance CO<sub>2</sub>. Common uses include; Construction, erection and fabrication of heavy equipment, construction machinery and general fabrication of mild steel.

### Typical Chemistry

C - 0.04  
Mn - 1.55  
Si - 0.54  
P - 0.014  
S - 0.015

### Typical Mechanical Properties

Tensile Strength - 89,000 psi  
Yield Strength - 77,000 psi  
% elongation - 27  
CVN 29 ft-lbs @ 0°F to  
35 ft-lbs @ -20°F

### Recommended Parameters

Shielding gas Ar/CO<sub>2</sub> (75-80% Ar)

Amps	Flat	Horizontal
.045	160-350	180-360
1/16	220-450	280-450

Electrical stick-out 1/2 - 3/4" DC+

Actual Chemical Certification available on request

## Packaging

*Eagle-Arc* Cored Wires come in the following spool sizes:

.045 x 10, 33 & 44 lb spool

.052 x 33 & 44 lb spool

1/16 x 33 & 44 lb spool

**33 and 44 lb spools are hermetically sealed in vacuum packaging.**

For spools, coils and drums not shown  
please contact your Washington Alloy representative for quotation.



Washington Alloy maintains an  
**ISO 9001**  
certified quality management system

## **WASHINGTON ALLOY DISTRIBUTION CENTERS**

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