

## Qualified Products List of Electrodes and Electrode/Flux Combinations

This list will be effective Thursday, January 1, 2009 and supersedes all previous lists. Welding consumables on this list may be used without further evidence of certification. The consumables are considered pre-approved for use when welding pre-approved base metals listed in the AASHTO/AWS D1.5 Bridge Welding Code.

SMAW Electrodes with the classification of E6010 and E6011 listed are pre-approved only for use where allowed by Specification.

Contractors may use welding consumables not listed by providing copies of the Certificate(s) of Conformance dated within twelve months of the beginning of the project. The Certificates of Conformance shall be submitted to the Welding Engineer for approval. If no shielding gas or combination of shielding gases is listed in the "Remarks" column, the shielding gas shall be 100% CO<sub>2</sub>.

"AF" in the "Remarks" column indicates Active Flux.

It is the Contractor's responsibility to ensure that the "Buy America" clause (Maine Standard Specifications, Section A-14) is adhered to.

### **SHIELDED METAL ARC WELDING ELECTRODES - 6010 and 6011** *Only As Allowed By Maine Standard Specifications*

<b>Manufacturer</b>	<b>AWS Classification</b>	<b>Trade Name</b>	<b>Remarks</b>
Hobart	E6010	Pipemaster 60	1/4" Not prequalified
Hobart	E6011	Hobart 335C	1/4" Not prequalified
Hobart	E6011	Hobart 335A	1/4" Not prequalified
Hobart	E6010	Pipemaster Pro-60	
Lincoln	E6010	Fleetweld 5P	
Lincoln	E6010	Fleetweld 5P+	1/4" Not prequalified
Lincoln	E6011	Fleetweld 180	1/4" Not prequalified
Lincoln	E6011	Fleetweld 35LS	1/4" Not prequalified

### **SHIELDED METAL ARC WELDING ELECTRODES**

<b>Manufacturer</b>	<b>AWS Classification</b>	<b>Trade Name</b>	<b>Remarks</b>
AIRCO	E7018-H8	Easy-Arc ® 7018AC	
AIRCO	E7018, E7018-H4R	Easy-Arc ® 7018MR	
AIRCO	E7018, E7018-H4R	Code-Arc ® 7018MR	
ESAB	E7018-H4R	Atom Arc 7018	
ESAB	E7018-1 H4R	Atom Arc 7018-1	
ESAB	E8018-C3-H4R	Atom Arc 8018	
ESAB	E9018-MH4R	Atom Arc 9018	
Hobart	E7018-1 H4R	7018 XLM	

## Qualified Products List of Electrodes and Electrode/Flux Combinations

### SHIELDED METAL ARC WELDING ELECTRODES - continued

<b>Manufacturer</b>	<b>AWS Classification</b>	<b>Trade Name</b>	<b>Remarks</b>
Lincoln Electric	E7018, E7018-H4R	Jetweld LH-70	
Lincoln Electric	E7018, E7018-H4R	Jet-LH ® 78MR ™	
Lincoln Electric	E7018-H4R	Excalibur ® 7018	
Lincoln Electric	E7018-1 H4R	Excalibur ® 7018 MR	
Lincoln Electric	E7018-H8	Lincoln ® 7018AC	5/32" Not Prequalified
MUREX	E7018, E7018-H4R	Murex ® 7018MR	
MUREX	E7018, E7018-H4R	Murex ® B7018MR	
MUREX	E7018-H8	Murex ® 7018AC	

### GAS METAL ARC WELDING ELECTRODES

<b>Manufacturer</b>	<b>AWS Classification</b>	<b>Trade Name</b>	<b>Remarks</b>
ESAB	ER70C-6M	Coreweld 70	75Ar/CO <sub>2</sub>
ESAB	E70C-6M	Coreweld C6	75Ar/CO <sub>2</sub>
ESAB	ER70S-6-H4	Spoolarc 86-A1	
Lincoln	ER70S-3	Super Arc L-50	
Lincoln	ER70S-6	Super Arc L-56	
National Std	ER70S-3	NS-101	
National Std	ER70S-6	NS-115	
National Std	ER70S-7	NS-116	
Select Arc	ER70C-3M	Select ER70C-3	75Ar/CO <sub>2</sub>
Select Arc	ER70S-3	Select ER70S-3	
Select Arc	ER70S-6	Select ER70S-6	
Select Arc	E70C-6M	Select 70C-6	75Ar/CO <sub>2</sub>
Select Arc	E70C-6M	Select 70C-T	75Ar/CO <sub>2</sub>
Tri-Mark	E70C-6M-H4	Metalloy 76	75Ar/CO <sub>2</sub>
Tri-Mark	E70C-6M-H4	Metalloy 70X	75Ar/CO <sub>2</sub>
Tri-Mark	E70C-6M-H4	Metalloy Vantage	75Ar/CO <sub>2</sub>

### FLUX CORED ARC WELDING ELECTRODES-SELF SHIELDED

<b>Manufacturer</b>	<b>AWS Classification</b>	<b>Trade Name</b>	<b>Remarks</b>
Lincoln	E71T-8-H16	Innershield NR-232	
Lincoln	E71T-8J/T-8J-H16	Innershield NR-203MP	

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### FLUX CORED ARC WELDING ELECTRODES-GAS SHIELDED

Manufacturer	AWS Classification	Trade Name	Remarks
Corex	E70T-1C-H4/T-9C-H4	Super-Cor	
ESAB	E70T-5CJ-H4	Dual Shield-T75	
ESAB	E70T-1M/T-9M	Dual Shield R70 Ultra	75Ar/CO <sub>2</sub>
ESAB	E70T-1C-H8/T-9C-H8	Dual Shield R70 Ultra	
ESAB	E71T-1M/T-9M	Dual Shield 70 Ultra Plus	75Ar/CO <sub>2</sub>
ESAB	E71T-1C/T-9C	Dual Shield 7100 LC	
ESAB	E71T-1M/T-9M	Dual Shield 7100 LC	75Ar/CO <sub>2</sub>
ESAB	E71T-1M/T-12M	Dual Shield II 70 Ultra	75Ar/CO <sub>2</sub>
ESAB	E71T-1MJ-H4/T-12MJ-H4	Dual Shield II 70T-12H4	75Ar/CO <sub>2</sub>
ESAB	E71T-1M	Dual Shield 7000	75Ar/CO <sub>2</sub>
ESAB	E71T-1C	Dual Shield 7000	
ESAB	E71T-1C/T-12C	Dual Shield II 71 Ultra	
ESAB	E71T-1M-H8/T-9M-H8	Dual Shield 7100 Ultra	75Ar/CO <sub>2</sub>
ESAB	E71T-1C-H8/T-9C-H8	Dual Shield 7100 Ultra	
ESAB	E71T-1CJ/T-12CJ	Dual Shield II 711X	
ESAB	E71T-1M/T-9M	Dual Shield 710X	75Ar/CO <sub>2</sub>
ESAB	E71T-1C/T-9C	Dual Shield 710X	
ESAB	E70T-1C	Dual Shield 700X	
Hobart	E71T-1M/T-12MJ-H8	Formula XL 525	80Ar/20CO <sub>2</sub>
Hobart	E71T-1C/T-12CJ-H8	Formula XL 550	
Hobart	E70T-1C-H8/T-9C-H8	Fabco TR70	
Hobart	E71T-1M/T-9M	Excel-Arc 71	75Ar/CO <sub>2</sub>
Hobart	E71T-1C/T-9C	Excel-Arc 71	
Hobart	E70T-1C/T-9C	Fabco RXR	
Lincoln	E70T-1C-H16/T-9C-H16	Outershield 70	
Lincoln	E71T-1C-H8, E71T-9C-H8	UltraCore™ 71A75 Dual	
Lincoln	E71T-1M-H8, E71T-9M-H8	UltraCore™ 71A75 Dual	75Ar/CO <sub>2</sub>
Lincoln	E71T-1C-H8/T-9C-H8	UltraCore™ 71C	
Lincoln	E71T-1CJ-H8/T-9CJ-H8/T-12CJ-H8	UltraCore™ 712C	
Select Arc	E71T-1M/T-9M	Select 727	75Ar/CO <sub>2</sub>
Select Arc	E71T-1C/T-9C/T-12C	Select 727	
Select Arc	E71T-1M/T-9M/T-1MJ/T-9MJ	Select 720	75Ar/CO <sub>2</sub>
Select Arc	E71T-1C/T-1CJ/T-9C/T-9CJ/T-12C/T-12CJ	Select 720	
Select Arc	E70T-1C/T-9C	Select 97	
Select Arc	E70T-1C/T-9C	Select 71	

## Qualified Products List of Electrodes and Electrode/Flux Combinations

### FLUX CORED ARC WELDING ELECTRODES-GAS SHIELDED - continued

Manufacturer	AWS Classification	Trade Name	Remarks
Tri-Mark	E70T-1C	TM 11	
Tri-Mark	E70T-5MJ-H4	TM 55	80Ar/20CO <sub>2</sub>
Tri-Mark	E70T-5CJ-H4	TM 55	
Tri-Mark	E70T-1C/T-9C	TM 72	
Tri-Mark	E71T-1M/T-12MJ-H8	TM 770	80Ar/20CO <sub>2</sub>
Tri-Mark	E71T-1C/T-12CJ-H8	TM 771	
Tri-Mark	E71T-1M-H8	Triple 7	75Ar/CO <sub>2</sub>
Tri-Mark	E71T-1C-H8	Triple 7	
Tri-Mark	E90T5-K2M-H4	TM 95K2	75Ar/CO <sub>2</sub>
Tri-Mark	E90T5-K2C-H4	TM 95K2	
Tri-Mark	E91T-1M-K2M-H8	TM 991K2	75Ar/CO <sub>2</sub>
Tri-Mark	E91T-1M-K2C-H8	TM 991K2	

### SUBMERGED ARC WELDING ELECTRODES

Manufacturer	AWS Classification	Trade Name	Remarks
ESAB	F7A2-EM13K-H8	Spoolarc 29S/OK Flux 429	
ESAB	F7A2-EM13K-H8	Spoolarc 29S/OK Flux 350	AF
ESAB	F7A2-EL12-H8	Spoolarc 80/OK Flux 350	AF
ESAB	F7A2-EM12K-H8	Spoolarc 81/OK Flux 231	AF
ESAB	F7A2-EM12K-H8	Spoolarc 81/OK Flux 350	AF
ESAB	F7A2-EM12K-H8	Spoolarc 81/OK Flux 429	
ESAB	F7A5-EM12K-H8	Spoolarc 81/OK Flux 10.71	
ESAB	F7A6-EM12K-H8	Spoolarc 81/OK Flux 10.72	
ESAB	F7A8-EM12K-H8	Spoolarc 81/OK Flux 10.62	
ESAB	F7A4-EH12K-H8	Spoolarc 53/OK Flux 429	
ESAB	F7A8-EH12K-H8	Spoolarc 53/OK Flux 10.62	
ESAB	F7A4-EM13K-H8	Spoolarc 29S/OK Flux 10.71	
ESAB	F7A5-EH12K-H8	Spoolarc 53/OK Flux 10.71	
Lincoln	F7A4-EM12K-H8/F7A2-EM12K-H8	L-61/Lincolnweld 860	

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### WEATHERING STEEL/ALL PROCESSES

Manufacturer	AWS Classification	Trade Name	Remarks
ESAB	E8018-C3-H4R	Atom Arc 8018	
ESAB	E81T1-Ni1M-H4	Dual Shield II 80 Ni1-H4	75Ar/CO <sub>2</sub>
ESAB	E81T1-W2	Dual Shield 8100W	
ESAB	E81T1-W2M	Dual Shield 8100W	75Ar/CO <sub>2</sub>
Hobart	E81T1-Ni1 MJ-H8	Formula XL 8Ni1	75Ar/CO <sub>2</sub>
Lincoln	E71T8-Ni1-H16	Innershield NR 203 Nickel (1%)	FCAW-S
Lincoln	F7A2-ENi1K-Ni1-H8	LA-75/Lincolnweld 860	
Lincoln	F7A4-EM12K-Ni1-H8	L-61/Lincolnweld AXXX10	
Select Arc	E81T1-W2C	Select 810W	
Select Arc	E81T1-Ni2M	Select 810-Ni2	75Ar/CO <sub>2</sub>
Select Arc	E81T1-Ni2C	Select 810-Ni2	
Select Arc	E81T1-Ni1M	Select 820-Ni1	75Ar/CO <sub>2</sub>
Select Arc	E81T1-Ni1C	Select 820-Ni1	
Select Arc	E81T1-Ni1M	Select 810-Ni1	75Ar/CO <sub>2</sub>
Select Arc	E81T1-Ni1C	Select 810-Ni1	
Tri-Mark	E81T1-Ni1MJ-H8	TM 811N1	75Ar/CO <sub>2</sub>
Tri-Mark	E81T1-Ni1CJ-H8	TM 811N1	
Tri-Mark	E80T1-Ni1M-H8	TM 81N1	75Ar/CO <sub>2</sub>
Tri-Mark	E80T1-NiC-H8	TM 81N1	
Tri-Mark	E81T1-Ni2M-H8	TM 811N2	75Ar/CO <sub>2</sub>
Tri-Mark	E81T1-Ni2C-H8	TM 811N2	
Tri-Mark	E80C-Ni1-H4	Metalloy Vantage Ni1	95Ar/5O <sub>2</sub>

Please contact Deanna Crosby Turner at 207-624-3583 or Denis Dubois at 207-624-3406 with any questions about this list.

PLEASE NOTE: Products often times may have multiple uses. Products appearing on this particular list are expressly pre-qualified for this category of usage only. Do not use these products for any other application unless this product is noted on other lists.

Sales Representatives seeking approval of a new product should submit their product's Materials Technical Data Sheet, Instructions for Installation, Material Safety Data Sheet, and a completed copy of the [MaineDOT Preliminary Information for Product Evaluation Form](#).