



## Select 18CrCb-C

### Description:

**Select 18CrCb-C** is a stainless steel, composite metal cored electrode for gas metal arc and gas tungsten arc welding of specific ferritic stainless sheet materials. This electrode is intended to weld thin stock and sheet steel of similar composition, nominally 18 percent chromium, 0.6 percent columbium (niobium). The preferred shielding gas is argon with 2-5 percent oxygen.

### Classification:

- AWS A5.22, EC439Nb

### Characteristics:

**Select 18CrCb-C** was designed to weld exhaust system components of similar composition. These alloys (18% Cr) are higher in chromium than the 409 Series of alloys and exhibit better corrosion and oxidation resistance at higher operating temperatures. This alloy is dual stabilized with columbium (niobium) and titanium to prevent carbide precipitation and subsequent sensitization of the weld metal. **Select 18CrCb-C** welds with a stable arc transfer and low spatter. The fact that it's a metal cored wire provides better performance than solid wires when welding on poor fit up, bridging gaps, or traveling at high speeds on thin material. Proprietary manufacturing techniques and equipment produce precise filling of the core ingredients, which promotes excellent consistency of the deposit composition from one spool or drum of wire to the next.

### Applications:

**Select 18CrCb-C** is a superb choice to weld exhaust system components such as mufflers, catalytic converters, manifolds, and exhaust tubing of similar composition. It can also be used to weld thin stock and sheet steel of the same composition in other types of components.

### Typical Composition:

Wt. %	<u>C</u>	<u>Mn</u>	<u>P</u>	<u>S</u>	<u>Si</u>	<u>Cr</u>	<u>Cb(Nb)</u>	<u>Ti</u>
	.03	.66	.010	.010	.58	17.70	.56	.44

### Suggested Parameters:

<u>Diam. (in.)</u>	<u>Operating Range</u>				<u>Optimum</u>		
	<u>Amperage</u>	<u>WFS</u>	<u>Voltage</u>	<u>ESO</u>	<u>Amperage</u>	<u>WFS</u>	<u>Voltage</u>
.045"	190-330	240-600	22-28	½-1"	250	410	25-26
.052"	220-460	220-620	23-30	½-1"	300	350	24-25
1/16"	240-520	160-500	22-31	¾-1¼"	350	300	26

Notice: The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. Thus the results are not guarantees for use in the field.

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