

# PRIMALLOY™ T-439TI

Stainless ▪ AWS EC439

## KEY FEATURES

- Minimal spatter and slag
- Great deposition rates
- High travel speed welding on thin material

## WELDING POSITIONS

All Positions

## CONFORMANCES

AWS A5.9/A5.9M: 2012 EC439

## TYPICAL APPLICATIONS

- Designed for joining components of automotive exhaust systems, such as catalytic converters
- Single pass welding

## SHIELDING GAS

98% Ar / 2% O<sub>2</sub>,  
40-45 CFH

## DIAMETERS / PACKAGING

Diameter mm (in)	33 lb (15 kg) Plastic Spool	500 lb (227 kg) Bulk Drum
0.045 (1.2)	ED034293	ED034294

## DEPOSIT COMPOSITION<sup>(1)</sup> – As Required per AWS A5.9/5.9M: 2012

	%C	%Cr	%Ni	%Mo	%Mn
<b>Requirements</b> AWS EC439	0.04	17.0-19.0	0.6	0.5	0.8
<b>Typical Results<sup>(2)</sup></b> 98% Argon / 2% O <sub>2</sub>	0.03	17.5	0.02	0.02	0.47
	%Si	%P	%S	%Ti	
<b>Requirements</b> AWS EC439	0.8	0.03	0.03	10xC min 1.1 max	
<b>Typical Results<sup>(2)</sup></b> 98% Argon / 2% O <sub>2</sub>	0.4	0.01	0.01	0.4	

## TYPICAL OPERATING PROCEDURES

Diameter, Polarity, Shielding Gas	CTWD in (mm)	Wire Feed Speed in/min (m/min)	Voltage (Volts)	Approx. Current (Amps)
0.045 (1.2), DC+ 98% Argon / 2% CO <sub>2</sub>	5/8 (15.8)	200 (5.08)	22	200
		250 (6.35)	23	230
		300 (7.62)	25	260
		450 (11.43)	28	335

<sup>(1)</sup>Typical all weld metal. <sup>(2)</sup>See test results disclaimer

IMPORTANT: SPECIAL VENTILATION AND/OR EXHAUST REQUIRED

Fumes from the normal use of some welding products can contain significant quantities of components - such as chromium and manganese - which can lower the 5.0 mg/m<sup>3</sup> maximum exposure guideline for general welding fume.

BEFORE USE, READ AND UNDERSTAND THE MATERIAL SAFETY DATA SHEET (MSDS) FOR THIS PRODUCT AND SPECIFIC INFORMATION PRINTED ON THE PRODUCT CONTAINER.

*Material Safety Data Sheets (MSDS) and Certificates of Conformance are available on our website at [www.lincolnelectric.com](http://www.lincolnelectric.com)*

#### TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application.

#### CUSTOMER ASSISTANCE POLICY

The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

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