

# UCAR® Grade LFX™ GRAPHITE ELECTRODES

A premium quality  
electrode for your ladle  
furnace



UCAR® Grade LFX™ Graphite Electrodes are specifically designed for ladle furnaces, with every aspect engineered to meet the demands of the application. Our stringent quality systems and attention to manufacturing detail produce electrodes that ladle operators can rely on.

UCAR® Grade LFX™ Graphite Electrodes benefit from the GrafTech Service and Solutions:

- Global experienced sales team located around the world that provides continuous support and advice to address customer-specific needs.
- Customer Technical Service multi-disciplinary engineers with extensive know-how in the steel and electrode industry who provide consultation services and solutions in furnace operations and efficiency.



## UCAR® Grade LFX™ Graphite Electrodes Properties<sup>1</sup>

ELECTRODES LFX™		Testing Method <sup>2</sup>	Diameter 250-350mm 10-14"	Diameter 400-500mm 16-20"
Bulk density	g/cm <sup>3</sup>	Full Piece	1.67 - 1.78	1.67 - 1.73
Specific resistance	μOhm.m	Full Piece	5.0 - 6.0	5.1 - 5.8
Flexural strength	MPa	4 Points Bending	10.0 - 13.0	9.0 - 12.0
Coefficient of thermal expansion	mm/mm/°K 10 <sup>-6</sup>	PATE <sup>3</sup> RT to 100°C	0.3 - 1.2	0.4 - 0.8

CONNECTING PINS		Testing Method <sup>2</sup>	All Sizes
Bulk density	g/cm <sup>3</sup>	Full Piece	1.72 - 1.84
Specific resistance	μOhm.m	Full Piece	3.4 - 4.5
Flexural strength	MPa	4 Points Bending	19.0 - 30.0
Coefficient of thermal expansion	mm/mm/°K 10 <sup>-6</sup>	PATE <sup>3</sup> RT to 100°C	0.0 - 0.3

1: Displayed property values are typical ranges per GrafTech testing methods and constitute neither a guarantee or specification for individual electrode properties, nor any form of warranty, express or implied.  
 2: GrafTech testing methods have been specifically developed for graphite electrode characterization. Properties are measured in the axial direction.  
 3: PATE is a GrafTech invention for accurately measuring the coefficient of thermal expansion.



**UCAR® Grade LFX™ Graphite Electrodes offer a total value solution for ladle furnace operations.**

Premium quality ladle furnace electrode	✓
Designed and engineered especially for ladle furnaces	✓
Global network of manufacturing locations	✓
Long lengths up to 2700 mm (110")	✓
Backed with value-added technical services, including <b>ArchiTech®</b>	✓
Dependable delivery worldwide	✓

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(1) While maintaining the capability to produce graphite electrodes and pins, production activities at St. Marys were indefinitely suspended in 2024, with the exception of graphite electrode and pin machining.