

UHP GRAPHITE ELECTRODES



Designed primarily for use in electric arc furnaces and ladle furnaces, our UHP graphite electrodes are made of premium needle cokes in a process that includes strict grading, mixing, molding, double baking, high pressure impregnating and fine-matching.

As a result, all our UHP products have the properties our customers require to achieve greater productivity and cost effectiveness in EAF and ladle furnaces: low consumption rates, outstanding electrical conductivity, anti-oxidation and high flexible strength.

TECHNICAL PROPERTIES

Item	Unit	12" - 16"	18" - 20"	22" - 28"
Ash Content	%	≤ 0.2	≤ 0.2	≤ 0.2
Porosity	%	20 - 26	20 - 27	20 - 27
Specific Resistance	μΩm	4.2 - 6.0	4.2 - 6.0	4.2 - 6.0
Flexural Strength	Mpa	10.5 - 15	10 - 15	10 - 15
Elastic Modulus	Gpa	7 - 14	7 - 14	7 - 14
Bulk Density	g/cm ³	1.65 - 1.76	1.64 - 1.75	1.64 - 1.75
Real Density	g/cm ³	2.20 - 2.23	2.20 - 2.23	2.20 - 2.23
CTE	X10 ⁻⁶ /°C (20 - 600°C)	1.0 - 1.5	1.0 - 1.5	1.0 - 1.5

CURRENT-CARRYING CAPACITIES

Nominal Diameter (inch)	Furnace	Current (A)	Current Density (A/cm ²)
12	AC	18,000 - 32,000	24 - 43
14	AC	22,000 - 39,000	22 - 39
16	AC	28,000 - 47,000	21 - 36
18	AC	34,000 - 55,000	21 - 33
20	AC	41,000 - 63,000	20 - 31
22	AC	48,000 - 70,000	19 - 28
24	AC	55,000 - 80,000	19 - 27
26	AC	69,000 - 89,000	20 - 26
28	AC	80,000 - 100,000	20 - 25
24	DC	75,000 - 90,000	26 - 31
26	DC	87,000 - 104,000	25 - 30
28	DC	100,000 - 120,000	25 - 30



1880 W Winchester Rd.,
Suite 206
Libertyville, IL 60048

(847) 918-5555 PHONE
(847) 918-5556 FAX

info@starexinc.com
www.starexinc.com

UHP GRAPHITE ELECTRODES



AVAILABLE SIZES

Nominal Diameter	Actual Diameter		Standard Length	Actual Length	
	Min	Max		Min	Max
12	11.89	12.09	72	66.93	73.82
14	13.86	14.06	72	66.93	73.82
16	15.87	16.10	60	55.12	61.02
			72	66.93	73.82
			72	66.93	73.82
18	17.87	18.11	84	77.76	85.63
			96	89.57	97.44
			72	66.93	73.82
20	19.88	20.12	84	77.76	85.63
			96	89.57	97.44
			84	77.76	85.63
22	21.89	22.13	96	89.57	97.44
			84	77.76	85.63
			84	89.57	97.44
24	23.90	24.13	96	100.39	112.20
			96	89.57	97.44
26	25.87	26.10	110	100.39	112.20
			96	89.57	97.44
28	27.87	28.11	96	89.57	97.44
			110	100.39	112.20



STAREX INC

1880 W Winchester Rd.,
Suite 206
Libertyville, IL 60048

(847) 918-5555 PHONE
(847) 918-5556 FAX

info@starexinc.com
www.starexinc.com

Note: Units are in inches. Sizes can be customized.

REV. 04/12

UHP GRAPHITE ELECTRODES



AVAILABLE NIPPLE SIZES

Electrode Diameter (inch)	IEC Designation	Nipple Size (inch)	TPI (thread/inch)
12	155T3N	6.125 X 8.66	3
	177T3N	6.975 X 10.66	3
	177T4N	7 X 8.5	4
14	177T3N	6.975 X 10.66	3
	215T3N	8.5 X 12	3
	215T3L	8.5 X 14	3
	203T4N	8 X 10	4
	215T3N	8.5 X 12	3
	215T3L	8.5 X 14	3
16	241T3N	9.5 X 13.33	3
	241T3L	9.5 X 14	3
	222T4N	8.75 X 12	4
	222T4L	8.75 X 14	4
	241T4N	9.5 X 12	4
	241T4L	9.5 X 14	4
	241T3N	9.5 X 13.33	3
18	241T3L	9.5 X 14	3
	273T3N	10.75 X 14	3
	273T3L	10.75 X 18	3
	241T4N	9.5 X 12	4
	241T4L	9.5 X 14	4
	269T4L	10.625 X 18	4
20	273T3N	10.75 X 14	3
	273T3L	10.75 X 18	3
	298T3N	11.75 X 14.66	3
	269T4N	10.625 X 14	4
	269T4L	10.625 X 18	4
22	298T4N	11.75 X 14	4
	298T4L	11.75 X 18	4
24	317T4N	12.5 X 14	4
	317T4L	12.5 X 18	4
	317T4X	12.5 X 22	4
26	374T4N	14.75 X 18	4
	374T4L	14.75 X 22	4
28	374T4N	14.75 X 18	4
	374T4L	14.75 X 22	4



STAREX INC

1880 W Winchester Rd.,
Suite 206
Libertyville, IL 60048

(847) 918-5555 PHONE
(847) 918-5556 FAX

info@starexinc.com
www.starexinc.com

Note: Pin/sockets are machined to international standards.

REV. 04/12