

SHP GRAPHITE ELECTRODES



Our SHP graphite electrodes are manufactured using the same high quality processes as our UHP products. To provide a product that can be used more cost effectively in LMF applications, some of the raw materials in SHP graphite electrodes are of a slightly lower grade. While the consumption rate is a bit higher than that of UHP graphite electrodes, their lower cost tends to offset the difference without an impact on operational functionality.

TECHNICAL PROPERTIES

| Item | Unit | 10" - 20" | |
|---------------------|------------------------|-----------|--------|
| | | Electrode | Nipple |
| Ash Content | % | ≤ 0.2 | ≤ 0.2 |
| Specific Resistance | μΩm | ≤ 6.0 | ≤ 4.8 |
| Flexural Strength | Mpa | ≥ 13.0 | ≥ 19.0 |
| Elastic Modulus | Gpa | ≤ 14.0 | ≤ 18.0 |
| Bulk Density | g/cm ³ | ≥ 1.65 | ≥ 1.75 |
| CTE | X10-6 /°C (20 – 600°C) | ≤ 2.0 | ≤ 1.7 |

CURRENT-CARRYING CAPACITIES

| Nominal Diameter (inch) | Current (A) | Current Density (A/cm ³) |
|-------------------------|-----------------|--------------------------------------|
| 10 | 9,000 – 14,800 | 22 - 31 |
| 12 | 15,000 – 21,300 | 21 - 30 |
| 14 | 20,000 – 28,800 | 21 - 30 |
| 16 | 25,300 – 38,000 | 20 - 30 |
| 18 | 31,400 – 45,500 | 19 - 28 |
| 20 | 37,000 – 54,500 | 18 - 28 |

AVAILABLE SIZES

| Nominal Diameter | Actual Diameter | | Standard Length | Pitch |
|------------------|-----------------|-------|-----------------|------------|
| | Min | Max | | |
| 10 | 9.84 | 10.08 | 64/72 | 3 or 4 TPI |
| 12 | 11.89 | 12.09 | 64/72/80 | |
| 14 | 13.86 | 14.06 | 64/72/80/84 | |
| 16 | 15.87 | 16.10 | 64/72/80/84/96 | |
| 18 | 17.87 | 18.11 | 64/72/80/84/96 | |
| 20 | 19.88 | 20.12 | 72/80/84/96 | |

* Units are in inches. Pin/sockets are machined to international standards. Sizes can be customized.



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

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

info@starexinc.com
www.starexinc.com