

Graphite Electrodes



TRASTEEL
REFRACTORY SOLUTIONS



TRASTEEL

Trasteel International Group is a Swiss based Company, established in September 2009, active in trading of steel related products such as flat and long products, steel making raw materials such as coking coal, coke and iron ore, steel making consumables, non-ferrous metals and solid fuel such as steam coal and pet-coke.

The Trasteel idea comes from the entrepreneurship of a group of Executives active in the steel market for more than 20 years.

The principal strategy of Trasteel is to invest in industrial assets with a clear sustainability and competitive advantage in the long term in order to support the trading activities of the Group and to develop a multitasking and flexible Company able, in this way, to mitigate the high volatility and uncertainties of the markets. Trasteel, further to its trading activities, offers to its Customers a complete range of services, from shipping and logistic to financing, thereby forming an entire business chain.

Trasteel is positioning itself as a multi-geographical player with major focus on China, Middle East, Europe, CIS countries and South America. The Head Office of the Group is based in Lugano, Switzerland, while representative offices are active in South America, UAE, China, India and Indonesia; furthermore Trasteel is covering other important markets such as North America, Russia, Ukraine, Turkey and Egypt through its network of agents.

During the fiscal year of 2010 the Company generated a consolidated turnover in excess of half a billion US dollars employing almost 50 Professionals.



TRASTEEL GRAPHITE ELECTRODES

In the past few years, Trasteel has quickly become one of the most respected suppliers of graphite electrodes worldwide.

Trasteel has established solid partnerships with some of the world's leading graphite producers and works only with ISO9001:2008 certified suppliers. Their production facilities use modern technology and equipments, with lengthwise graphitization furnaces. The combination of the corrugated shell and cast refractory liner contributes to faster heat transfer by both convection and radiation, and to greater mechanical and thermal stability. Trasteel Graphite Electrodes have been continuously improved, and are produced with top quality needle coke. They are subjected to rigorous testing and control procedures, in order to guarantee a high and consistent quality to the end users.

In addition Trasteel can also guarantee, through its technical staff, a quick and effective pre and post sales service.

Optimized for maximum performance and minimal consumption and offered at competitive prices, Trasteel graphite electrodes have the proven ability to maximize steel capacity while reducing power and production costs: our products are designed for increased productivity and customer value. Available with diameters from 250-700 mm (10-28 inches), in lengths from 1,500-2,700 mm (60-108 inches), and in various quality grades.

Trasteel maintains surplus inventory in order to grant a consistent flow of materials, in a variety of sizes and qualities. Trasteel stocks graphite electrodes in different locations, thanks to its worldwide sales network, in order to ensure quick deliveries and a constant supply at all times.



HEADQUARTER

● Switzerland

OFFICES

- Argentina
- Chile
- China
- Dubai
- Germany
- Italy
- Luxembourg
- Mexico

NETWORK

- Brazil
- Canada
- Egypt
- India
- Indonesia
- Russia
- Taiwan
- Turkey
- USA

PRODUCTION FACILITY

● China

Liaoning Fenghua
Trasteel Industry Co., Ltd.

SPECIFICATIONS

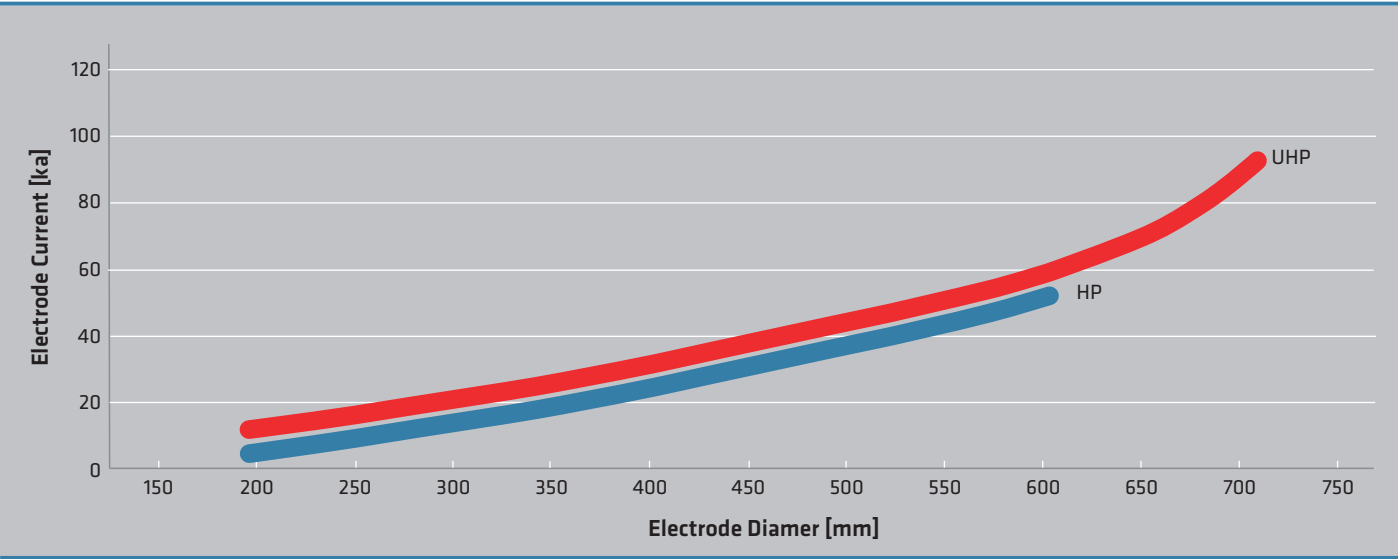
ELECTRODES					NIPPLES		
Nominal Diameter		Minimal Diameter	Maximum Diameter	Available Lengths	iEC Designation	Diameter x Length	Threads per 25.4 mm
[In]	[mm]			[mm]			
10	250	251	256	1500 1800	155T3N 152T4N	155.57 x 220.00 152.40 x 190.50	3 4
12	300	303	307	1500 1800	155T3N	155.57 x 220.00	3
					177T3N	177.16 x 270.90	3
					177T4N	177.80 x 215.90	4
					177T4L	177.80 x 254.00	4
14	350	352	357	1500 1800 2100	177T3N	177.16 x 270.90	3
					215T3N	215.90 x 304.80	3
					203T4N	203.20 x 254.00	4
					203T4L	203.20 x 304.80	4
16	400	403	409	1500 1800 2100	215T3N	215.90 x 304.80	3
					241T3N	241.30 x 338.70	3
					241T3L	241.30 x 355.60	3
					222T4N	222.25 x 304.80	4
					222T4L	222.25 x 355.60	4
18	450	454	460	1500 1800 2100 2400	241T3N	241.30 x 338.70	3
					241T3L	241.30 x 355.60	3
					273T3L	273.05 x 457.20	3
					241T4L	241.30 x 355.60	4
					269T4L	269.88 x 457.20	4
20	500	505	511	1800 2100 2400	273T3N	273.05 x 355.60	3
					273T3L	273.05 x 457.20	3
					269T4N	269.88 x 355.60	4
					269T4N	269.88 x 457.20	4
22	550	556	562	2100 2400 2700	298T3N	298.45 x 372.50	3
					298T4N	298.45 x 355.60	4
					298T4L	298.45 x 457.20	4
24	600	607	613	2100 2400 2700	317T4N	317.50 x 355.60	4
					317T4L	317.50 x 457.20	4
26	650	657	663	2700	355T4N	355.60 x 457.20	4
					355T4L	355.60 x 558.80	4
28	700	708	714	2700	374T4N	374.65 x 457.20	4
					374T4L	374.65 x 558.80	4

TYPICAL PROPERTIES

GRAPHITE ELECTRODES						
Grade	Apparent Density	Flexural Strength	Coefficient of Thermal Expansion	Specific Electrical Resistance	Elastic Modulus	Ash Content
	[g/cm³]	[Mpa]	[µm/K·m]	[µΩm]	[GPa]	[%]
HP	1,66	10,0	1,5	6,0	12,0	0,2
SHP	1,67	10,5	1,3	5,7	13,0	0,2
UHP	1,68	11,0	1,2	5,5	14,0	0,2

NIPPLES						
Grade	Apparent Density	Flexural Strength	Coefficient of Thermal Expansion	Specific Electrical Resistance	Elastic Modulus	Ash Content
	[g/cm³]	[Mpa]	[µm/K·m]	[µΩm]	[GPa]	[%]
HP	1,76	18,0	1,3	4,2	16,0	0,2
SHP	1,77	19,0	1,2	4,0	17,0	0,2
UHP	1,79	20,0	1,0	3,6	18,0	0,2

CURRENT-CARRYING CAPACITY







Trasteel International SA

Via Sorengo, 1
6900 Lugano
Switzerland

T +41 (0)91 910 5300
F +41 (0)91 910 5353
W www.trasteel.com