







HOTION GRAPHITE ELECTRODE

HOTION



GRAPHITE ELECTRODE



The workshop of HOTION has advanced equipment, leading domestic production process, and realizes informatization and integration. It provides a guarantee for the high quality of products. Have 24 cans of counterflow type calcining furnace, 3500 tons, 2500 tons of hydraulic machine hydraulic machine, hydraulic press 1700 tons, room 18, room 30, ring type baking furnace ring type baking furnace, high pressure impregnation, 33 spaces of tunnel kiln, 10000kVA graphite furnace, 16000kVA DC DC graphitizing furnace, three sets of CNC machine tool electric and the joint automatic production line is the domestic industry with advanced equipment. An isotropic, fine structure, isostatic graphite production line, the main equipment supporting, 1250 x 3200 isostatic pressing machine and a car type furnace two.

HOTION GROUP
Dedicate to industrial solutions and products

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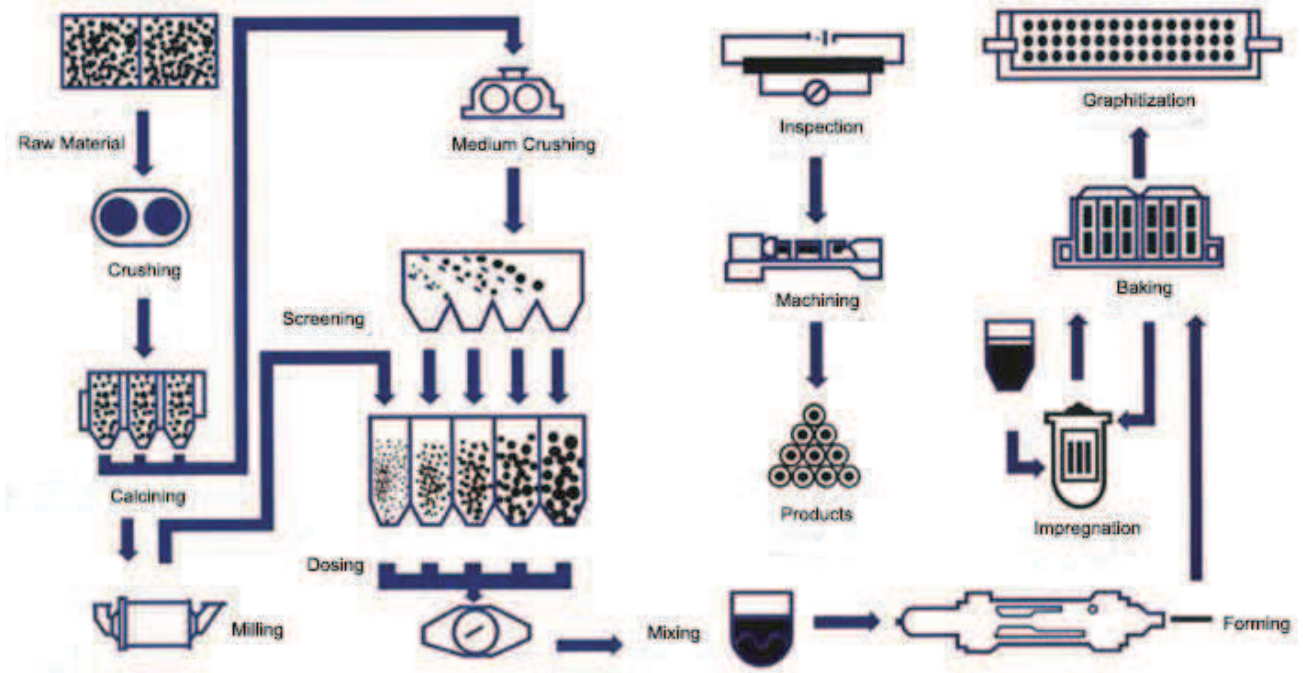




HOTION's various specifications graphite electrode production capacity of 40 thousand tons / year, isostatic graphite production capacity of 2000 tons / year. The main products cover the diameter of 200 ~ 700mm in diameter normal power graphite electrode, impregnation (high density) of graphite electrode, graphite electrode high power and ultra high power graphite electrode four series more than 30 varieties of different specifications of graphite electrode and graphite block, graphite and other carbon product specific special.

HOTION's products with high strength, good conductivity, good thermal shock resistance, low consumption and so on, it is widely used in metallurgy, chemical industry, machinery and other industries.

PRODUCTION PROCESS



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TECHNICAL SPECIFICATION OF GRAPHITE ELECTRODES

	PHYSICAL PROPERTIES	Unit	Item	RP	HP	UHP
1	Resistivity ≤	uΩm	Electrode	8.0	6.2	5.8
			Nipple	7.0	5.5	5.0
2	Bending Strength ≥	Mpa	Electrode	9.8	10.5	11.5
			Nipple	13.0	14.0	16.0
3	Elastic Modulus ≤	Gpa	Electrode	9.3	12.0	14.0
			Nipple	14.0	16.0	18.0
4	Bulk Density ≥	g/cm^3	Electrode	1.55	1.65	1.7
			Nipple	1.70	1.75	1.8
5	CTE ≤ (Coefficient of Thermal Expansion)	$10^{-6}/℃$ 100-600	Electrode	2.9	2.4	1.5
			Nipple	2.8	2.2	1.4
6	Ash Content ≤	%	ASH	0.4	0.3	0.3

SUGGESTED CURRENT-CARRYING CAPACITIES OF ELECTRODES

NOMINAL DIAMETER		SUGGESTED CURRENT-CARRYING CAPACITIES (A)		
mm	inch	RP	HP	UHP
75	3	1000-1400	1300-2000	
100	4	1500-3000	1800-3000	
130	5	2200-3400	2800-4200	
150	6	3500-4900	4000-5000	
200	8	5000-6900	5000-10000	
225	9	6000-10000	10000-12000	
250	10	7000-10000	10000-13000	
300	12	10000-13000	13000-17400	
350	14	13000-18000	17400-24000	22000-28000
400	16	18000-23500	24000-32000	28000-35000
450	18	22000-27000	32000-40000	35000-45000
500	20	25000-32000	40000-48000	45000-55000
550	22	32000-40000	37000-57000	48000-60000
600	24	38000-47000	44000-67000	52000-72000
700	28	45000-54000	54000-73000	62000-95000

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GRAPHITE ELECTRODES DIMENSIONS

NOMINAL DIAMETER		ACTUAL DIAMETER(mm)		NOMINAL DIAMETER (MM)
Inch	mm	Max	Min	
3”	75	78	73	1500/1600/1750
4”	100	103	98	1500/1600/1750
6”	150	154	149	1500/1600/1750
8”	200	205	200	1500/1600/1800
9”	225	230	225	1500/1600/1800
10”	250	256	251	1500/1600/1800
12”	300	307	302	1600/1800/1900/2000
14”	350	357	352	1600/1800/1900/2000/2200
16”	400	409	403	1600/1800/1900/2000/2200/2400
18”	450	460	454	1600/1800/1900/2000/2200/2400
20”	500	511	505	1600/1800/1900/2000/2200
22”	550	562	556	1800/2000/2200/2400
24”	600	613	607	2000/2200/2400/2700
26”	650	663	657	2400/2700/3000
28”	700	714	708	2400/2700/3000

DIMENSIONS OF THREADS AND SOCKETS OFTAPER NIPPLES (3TPI)

NOMINAL DIAMETER		SIZE OF NIPPLE (MM)		SIZE OF SOCKET (MM)		THREAD PITCH (mm)
mm	inch	D	L	d1	H	
225	9	139.70	203.20	131.27	107.60	8.47(3TPI)
250	10	155.57	220.00	147.14	116.00	
300	12	177.16	270.90	168.73	141.50	
350	14	215.90	304.80	207.47	158.40	
400	16	215.90	304.80	207.47	158.40	
400	16	241.30	338.70	232.87	175.30	
450	18	241.30	338.70	232.87	175.30	
450	18	273.05	338.70	264.62	183.80	
500	20	273.05	355.60	264.62	183.80	
500	20	298.45	372.60	290.02	192.20	
550	22	298.45	457.20	290.02	234.60	

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DIMENSIONS OF THREADS AND SOCKETS OFTAPER NIPPLES (4TPI)

NOMINAL DIAMETER		SIZE OF NIPPLE (MM)		SIZE OF SOCKET (MM)		THREAD PITCH (mm)
mm	inch	D	L	d1	H	
75	3	46.04	76.20	39.72	44.10	8.47(3TPI)
100	4	69.85	101.60	63.53	56.80	
130	5	79.38	127.00	73.06	69.50	
150	7	92.08	139.70	85.76	75.90	
175	8	107.95	165.10	101.63	85.55	
200	9	122.24	177.80	115.92	94.90	
225	10	139.70	177.80	133.38	94.90	
300	12	152.40	190.50	146.08	101.30	
350	14	177.80	215.90	171.48	114.00	
300	16	203.20	254.00	196.88	133.00	
400	16	222.25	304.80	215.93	158.40	
400	18	222.25	355.60	215.93	183.80	
450	18	241.30	304.80	234.98	158.40	
450	20	241.30	355.60	234.98	183.80	
500	20	269.88	355.60	263.56	183.80	
500	22	269.88	457.20	263.56	234.60	
550	22	298.45	457.20	234.60	292.13	
550	22	298.45	355.60	183.80	292.13	
600	24	317.50	457.20	234.60	311.18	
600	24	317.50	355.60	183.80	311.18	
650	26	358.60	558.80	285.40	352.28	
650	26	358.60	457.20	234.60	352.28	
700	28	374.65	558.80	285.40	368.33	
700	28	374.65	457.20	234.60	368.33	
750	30	406.40	609.60	310.80	400.08	
750	30	406.40	584.20	298.10	400.08	
800	32	431.80	635.00	323.50	425.48	

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Equipments



Baking



3500 tons of hydraulic press



24 cans of counterflow calcined furnace



33 parking tunnel kiln



18 chamber ring baking furnace



30 chamber ring baking furnace



Impregnation workshop



Stock



Packaging