



# 河北琛锴石化产品贸易有限公司

Hebei Chenkai Petrochemical Products Trade Co., Ltd

Contact person: Mr. Wang      TEL:+86 13731181777

**公司简介**  
company profile;

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**针状焦**  
needle coke;

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**石墨电极**  
graphite electrode;

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**等静压石墨**  
isostatic pressing  
formed graphite;

04

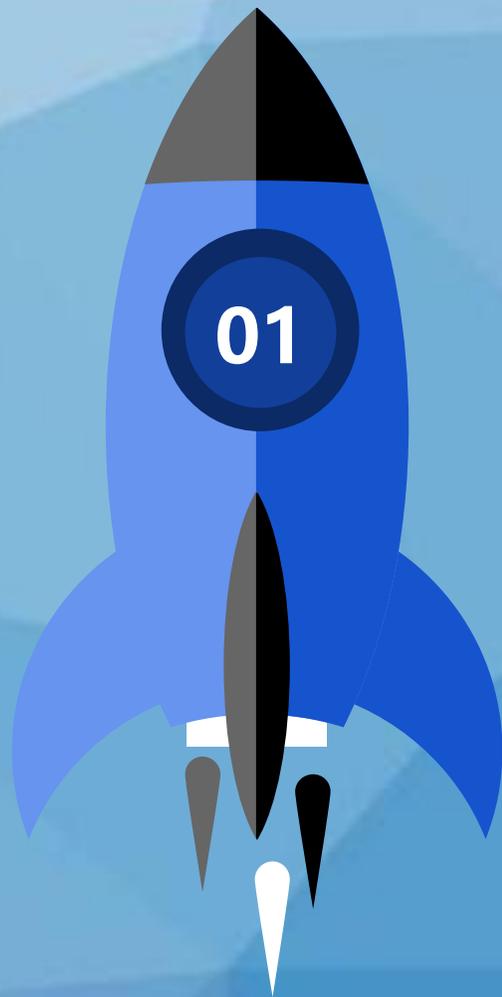
**催化油浆**  
catalytic slurry oil

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## 公司简介

河北琛楷石化产品贸易有限公司、是集原油供应；成品油石油制品（柴油、燃料油等）经营；非成品油石油制品（油系针状焦、海绵焦、弹丸焦、船用燃料油、催化柴油、轻质循环油等）经营；石油残渣产品（渣油、蜡油、船用沥青、道路沥青等）经营；煤炭及制品经营；煤化工产品（煤焦油、煤制油、煤系针状焦、提质煤、甲醇、乙烯、煤制乙醇等）经营；压缩气体及液化气体（石油液化气、石油天然气）的经营和建筑材料及工程材料类经营的多样化公司。

目前，公司主要经营产品为：进口针状焦，石墨电极和等静压石墨产品出口，进口催化油浆（针状焦原料），轻质循环油。



## company profile

Hebei Chenkai Petrochemical Products Trading Co., Ltd. is a collection of crude oil supply; refined oil petroleum products (diesel oil, fuel oil, etc.) operation; non-refined oil petroleum products (oil series needle coke, sponge coke, projectile coke, marine fuel oil, catalytic diesel oil, light recycling oil, etc.) operation; petroleum residue products (residue, wax oil, marine asphalt, road asphalt, etc.) operation; Products management; coal chemical products (coal tar, coal to oil, coal-based needle coke, upgrading coal, methanol, ethylene, coal to ethanol, etc.) management; compressed gas and liquefied gas (petroleum liquefied gas, petroleum natural gas) operation and diversified companies operating construction materials and engineering materials.

At present, the company mainly deals in the export of imported needle coke, graphite electrodes and isostatic graphite products, and imported catalytic slurry.

02

# 针状焦 (needle coke)



产品分类  
Product  
classification



产品指标  
Product index

# 针状焦产品分类

油系针状焦由石油炼制过程中经过延迟焦化过程中加入催化裂化油浆而生产的一种优质低硫石油焦。油系针状焦分为生焦和煨后焦（熟焦）。生焦广泛用于生产负极材料。煨后针状焦共泛用于高功率和超高功率的石墨电极生产原料，而石墨电极又是电弧炼钢的必须品。油系针状焦目前90%来源于进口，国产企业仅有三家，分别是中石油的锦州石化、京阳石化和益大新材。我公司的油系针状焦主要来源于美国、英国、韩国和我国的三家公司。

01

油系针状焦  
Pet

01

Oil needle coke is a kind of high quality and low sulfur petroleum coke produced by adding catalytic cracking slurry into delayed coking process in petroleum refining. Oil needle coke is divided into raw coke and calcined coke (cooked coke). Coke is widely used in the production of anode materials. Calcinated needle coke is widely used as raw material for high power and ultra high power graphite electrodes, which are essential for arc steelmaking. At present, 90% of oil-based needle coke comes from imports. There are only three domestic enterprises, namely, Jinzhou Petrochemical Company of PetroChina, Jingyang Petrochemical Company and Yida New Material Company. Our company's oil needle coke mainly comes from the United States, Britain, Korea and China's three companies.

煤系针状焦由煤化工加工过程中生产的一种优质低硫石油焦。煨后针状焦共泛用于高功率和超高功率的石墨电极生产原料，没有经过煨烧的生焦共泛用于生产负极材料。煤系针状焦目前80%来源于进口，分别为日本的新日铁和日本三菱公司，国产企业仅有几家，分别是鞍山开炭新材、上海宝钢化工、宝泰隆新材、方大喜科墨、山西宏特煤化工。由于国内几家的煤系针焦基本是企业内消化，不进行外售，我公司的煤系针状焦主要来源于日本新日铁公司和日本三菱公司。

02

煤系针状焦  
Coal

02

Needle coke of coal measures is a kind of high quality and low sulfur petroleum coke produced in the process of coal chemical processing. Calcinated needle coke is widely used as raw material for high power and ultra high power graphite electrode production, while uncalcined coke is widely used for negative electrode production. At present, 80% of needle coke in coal measures comes from imports. They are Japan's Nippon Iron and Mitsubishi Company. There are only a few domestic enterprises. They are Anshan Coke New Material, Shanghai Baosteel Chemical Industry, Baotailong New Material, Fangda Hicco Mould and Shanxi Hongte Coal Chemical Industry. Since several domestic coal-series needle cokes are basically digested in enterprises and are not sold out, our company's coal-series needle cokes mainly come from Japan Nippon Iron Corporation and Japan Mitsubishi Company.

# 针状焦产品理化指标

针状焦理化指标							
		灰分 %	挥发 分%	水分 %	真密度 g/cm <sup>3</sup>	硫分%	振实密度- 2+1mm g/cm <sup>3</sup>
CGG 美	电极用焦	0.17	0.81	0.03	2.14	0.48	0.852
	接头用焦	0.14	0.84	0.04	2.13	0.56	0.868
Conoco 英	HSP	0.04	0.92	0.06	2.14	0.42	0.900
	HNP	0.07	0.85	0.07	2.15	0.38	0.878
	HIP-S	0.03	0.83	0.09	2.14	0.41	0.886
日本水 岛	X级	0.11	0.82	0.02	2.14	0.34	0.885
	M级	0.11	0.80	0.02	2.14	0.22	0.847
日本新日化LPC-U		0.20	0.32	0.06	2.13	0.19	0.835
日本三菱SPCN-L		0.04	0.50	0.10	2.13	0.24	0.903
日本兴亚S-JA		0.08	0.78	0.06	2.14	0.23	0.851

注：挥发分偏高为喷入防尘油所致。

# 针状焦产品粒度指标

		针状焦粒度分布%			
		+8mm	-8+4mm	-4+1mm	-1mm
CGG 美	电极用焦	23.78	16.14	28.11	32.97
	接头用焦	35.68		30.84	33.48
Conoco 英	HSP	32.60	12.72	26.78	27.90
	HNP	34.75	8.47	23.73	33.05
	HIP	13.62	17.71	34.61	34.06
日本新日化		32.03	17.71	25.97	24.24
日本水岛	X级	22.78	13.89	25.56	37.78
	M级				
日本兴亚		40.5	15.2	14.6	
日本三菱		16.5	17.4	4-2mm 29.5	-2mm 36.6

03

# 石墨电极 (Graphite electrode)



简介

Introduction



工作流程

Workflow



产品指标

Product indexon

# 简介

## 石墨电极

石墨电极主要以石油焦、针状焦为原料，煤沥青做结合剂，经煅烧、配料、混捏、压型、焙烧、石墨化、机加工而制成，是在电弧炉中以电弧形式释放电能对炉料进行加热熔化的导体，根据其质量指标高低，可分为普通功率石墨电极、高功率石墨电极和超高功率石墨电极。石墨电极生产的主要原料为石油焦，普通功率石墨电极可加入少量沥青焦，石油焦和沥青焦含硫量都不能超过0.5%。生产高功率或超高功率石墨电极时还需要加针状焦。铝用阳极生产的主要原料为石油焦，并控制硫分不大于1.5%~2%，石油焦和沥青焦应符合国家有关质量标准。



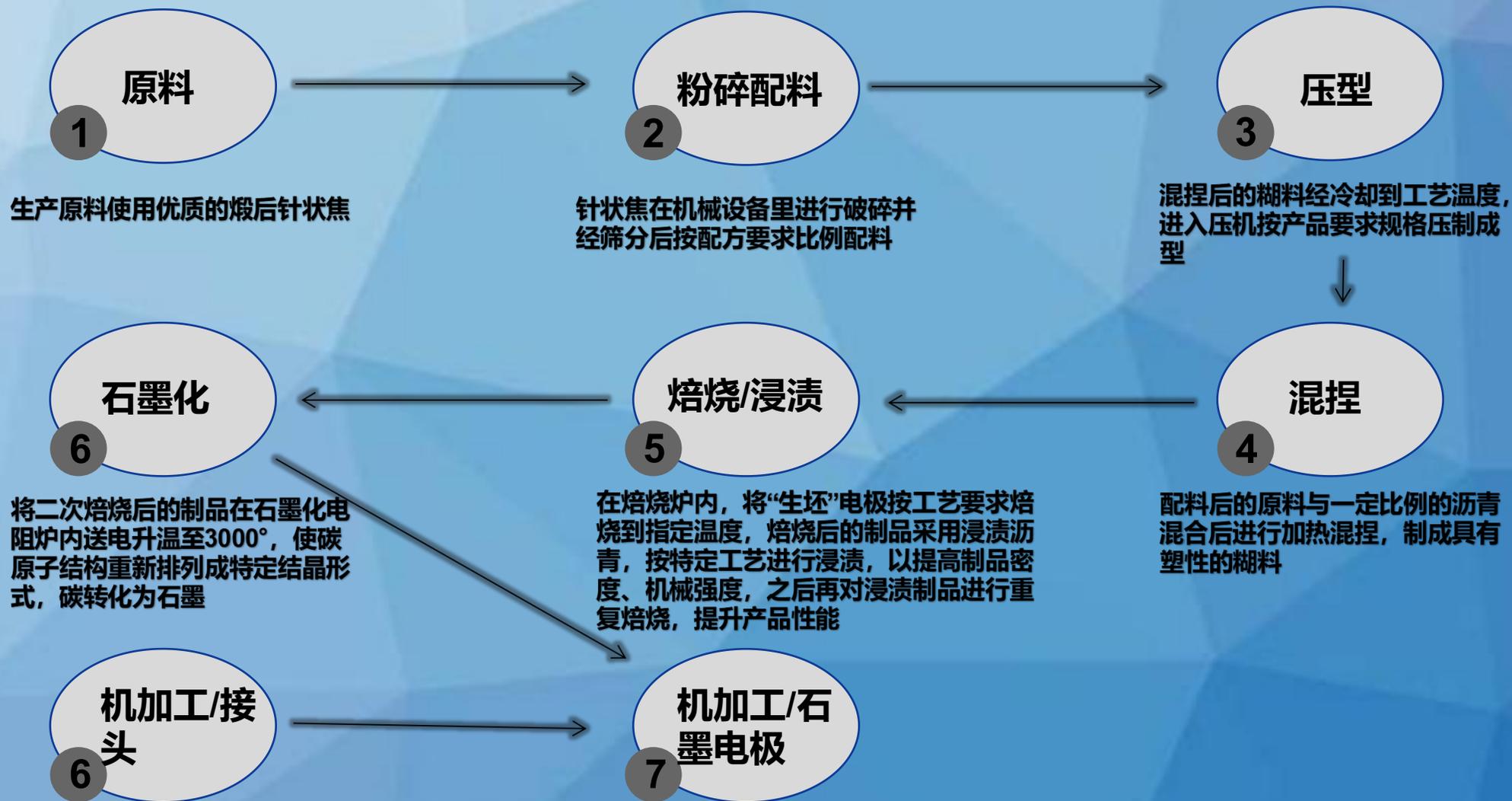
# Brief introduction

## Graphite electrode

Graphite electrodes are mainly made from petroleum coke and needle coke, coal tar pitch as binder, through calcination, proportioning, kneading, pressing, roasting, graphitization and machining. They are conductors that release electric energy in the form of arc to heat and melt furnace materials. According to their quality index, they can be divided into ordinary graphite electrodes, high power graphite electrodes and ultra-high power stone. Ink electrode.

The main raw material for graphite electrode production is petroleum coke. A small amount of pitch coke can be added to ordinary power graphite electrode. The sulfur content of petroleum coke and pitch coke can not exceed 0.5%. Needle coke is also needed in the production of high power or ultra-high power graphite electrodes. The main raw material for aluminium anode production is petroleum coke, and the sulphur content is controlled not more than 1.5%-2%. Petroleum coke and pitch coke should meet the relevant national quality standards.

# 石墨电极工作流程



# 石墨电极产品指标

## 石墨电极标准尺寸

规格 (英寸) Specifications(in ch)	直径允许范围 (mm) Allowable Diameter(mm)			长度允许范围 (mm) Allowable Length(mm)		
	公称直径 Nominal Diameter	最大 Max	最小 Min	公称长度 Nominal Length	最小 Min	最小 Min
12	300	307	302	1800	1875	1700
14	350	357	352	1600	1700	1500
				1800	1875	1700
14	350	357	352	1600	1500	1500
				1800	1875	1700
				2100	2175	1975
18	450	460	454	1800	1875	1700
				2100	2175	1975
				2400	2475	2275
20	500	511	505	1800	1875	1700
				2100	2175	1945
				2400	2475	2275
22	550	562	556	2100	2175	1975
				2400	2475	2275
24	600	613	607	2100	2175	1975
				2400	2475	2245
				2800	2850	2550
26	650	663	657	2400	2475	2275

如有特殊规格要求, 供需双方协商。 If there are special specification requirements, both sides consult supply and demand.

# 石墨电极产品指标

UHP石墨电极特性指标					
适用炉Applicable Furnace		AC炉 AC Furnace			DC炉 DC Furnace
指标Property	直径Diameter	300-400mm 12" ~ 16"	450-500mm 18" ~ 20"	550-600mm 22" ~ 24"	650-700mm 24" ~ 28"
体积密度 Bulk Density	g/cm <sup>3</sup>	1.65 ~ 1.76	1.64 ~ 1.75	1.64 ~ 1.75	1.64 ~ 1.75
电阻率 Specific Resistance	μΩM	4.2 ~ 6.0	4.2 ~ 6.0	4.2 ~ 6.0	4.2 ~ 5.5
弹性模量 Elastic Modulus	Gpa	7 ~ 14	7 ~ 14	7 ~ 14	7 ~ 14
	kgf/mm <sup>2</sup>	700 ~ 1,400	700 ~ 1,400	700 ~ 1,400	700 ~ 1,400
抗折强度 Flexural Strength	10.5 ~ 15	10 ~ 15	10 ~ 15	10 ~ 15	10 ~ 15
	kgf/cm <sup>2</sup>	105 ~ 150	100 ~ 150	100-150	100 ~ 150
	N/cm <sup>2</sup>	1,050 ~ 1,500	1,050 ~ 1,500	1,050 ~ 1,500	1,050 ~ 1,500
热膨胀系数 (R.T.≤6001) Coefficient Of Thermal Expansion (R.T.≤600°C)	X10-6/°C	1.0 ~ 1.5	1.0 ~ 1.5	1.0 ~ 1.5	1.0 ~ 1.4
真密度 Real Density	g/cm <sup>3</sup>	2.20 ~ 2.23	2.20 ~ 2.23	2.20 ~ 2.23	2.20 ~ 2.23
气孔率 Porosity	%	20 ~ 26	20 ~ 27	20 ~ 27	20 ~ 27
灰份 Ash Content	%	≤0.2	≤0.2	≤0.2	≤0.2

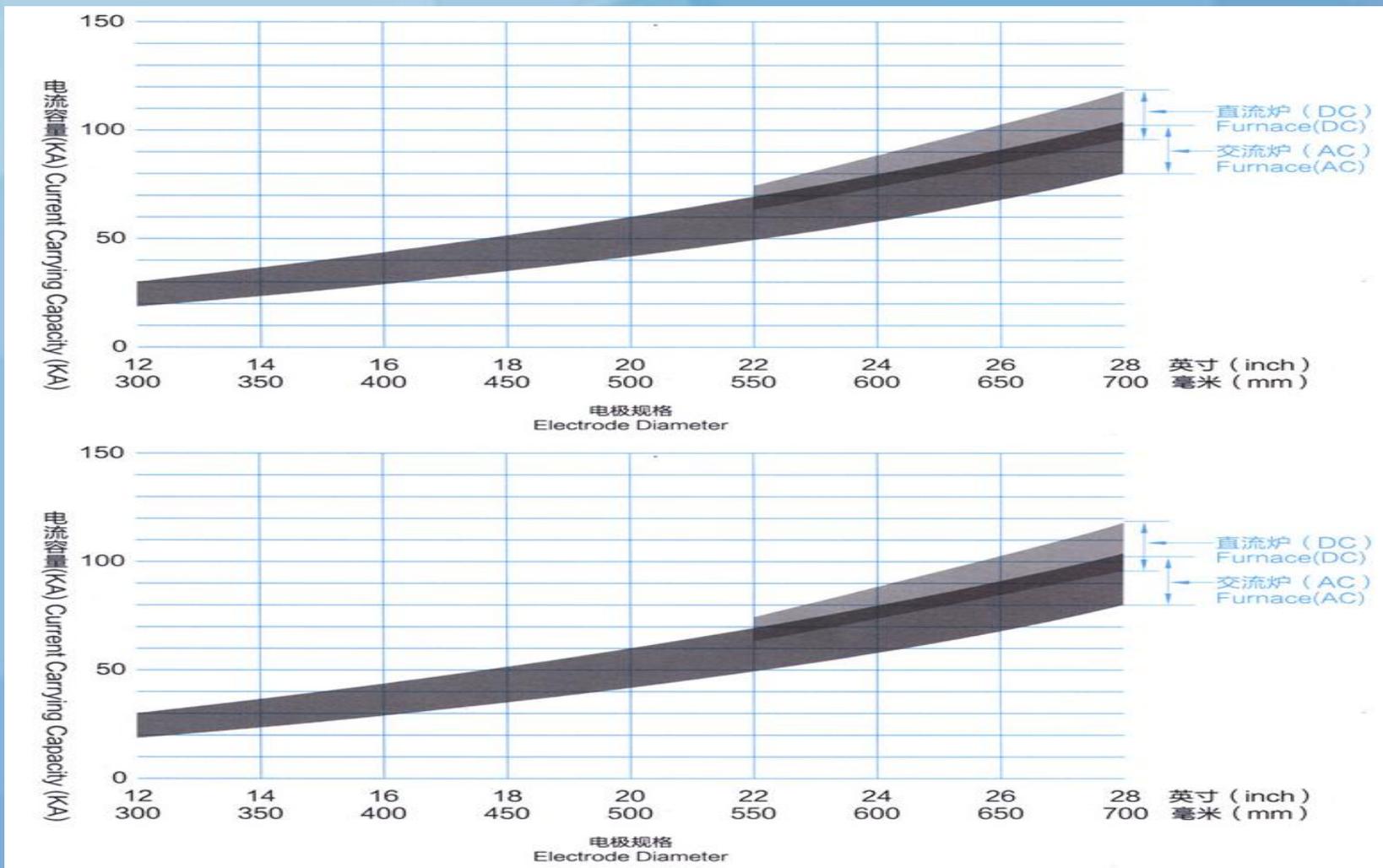
# 石墨电极产品指标

## UHP石墨电极尺寸的选择

### 超高功率石墨电极电流容量 Current Capacity Of UHP Graphite Electrodes

规格 Specifications		电流容量(A) Current Capacity(A)		电流密度 (A/cm <sup>2</sup> ) Current Density(A/cm <sup>2</sup> )	
英寸(inch)	毫米(mm) <sup>3</sup>	交流AC	直流DC	交流AC	直流DC
12	300	18,000-32,000	-	24-43	-
14	350	22,000-39,000	-	22-39	-
16	400	28,000-47,000	-	21-36	-
18	450	34,000-55,000	-	21-33	-
20	500	41,000-63,000	-	20-31	-
22	550	48,000-70,000	65,000-78,000	19-28	26-32
24	600	55,000-80,000	75,000-90,000	19-27	26-31
W	650	69,000-89,000	87,000-104,000	20-26	25-30
28	700	80,000-100,000	100,000-120,000	20-25	25-30

# 石墨电极产品指标

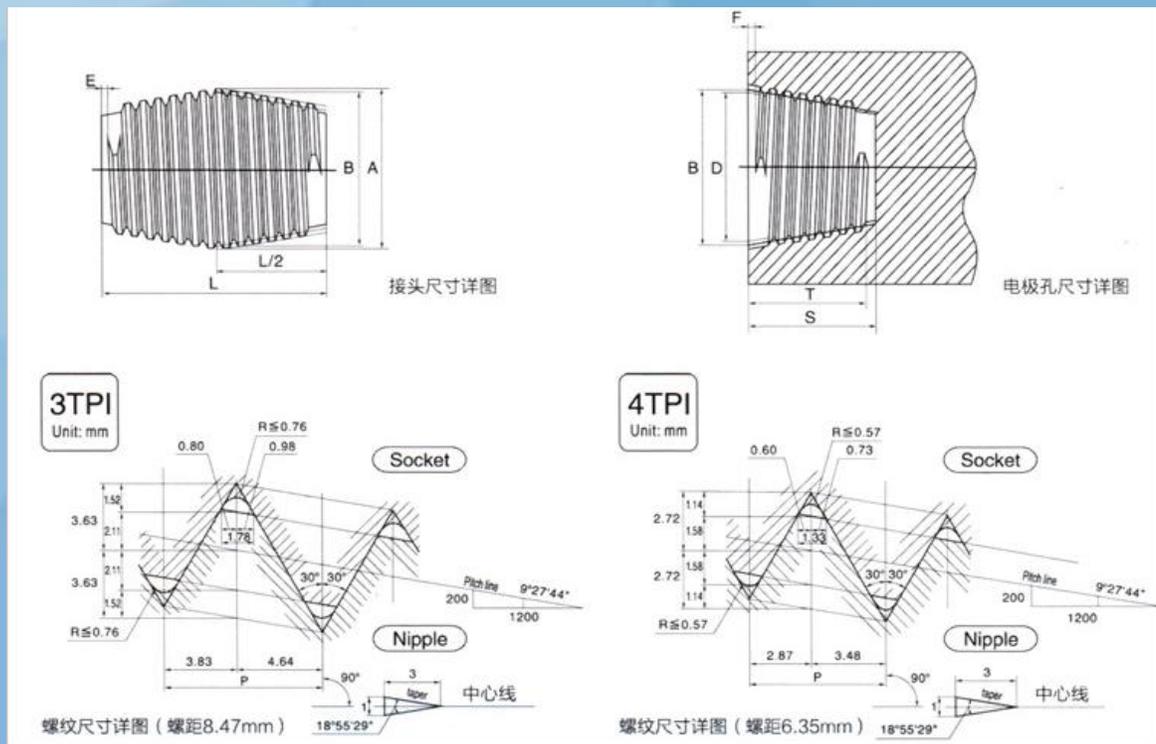


# 石墨电极产品指标

## 接头特性指标

规格	≤φ400	φ450-500	φ550	φ600-700
电阻率 Specific Resistance ( $\mu\Omega\text{M}$ )	≤4.0	≤3.8	≤3.6	≤3.6
抗折 Flexural Strength (MPa)	18-24	17-25	20-28	20-28
弹性模量 Elastic Modulus (GPa)	≤18	≤18	≤18	≤18
体积密度 Bulk Density ( $\text{g}/\text{cm}^3$ )	1.76-1.84	1.78-1.84	1.79-1.86	1.79-1.86
热膨胀系数 Coefficient Of Thermal Expansion ( $10^{-6}/^{\circ}\text{C}$ )	0.9-1.3	0.9-1.2	0.9-1.1	0.9-1.1
灰分 Ash Content (%)	≤0.3	≤0.3	≤0.3	≤0.3

# 石墨电极产品指标



04

# 等静压石墨 (Isostatic graphite)



简介

Brief  
introduction



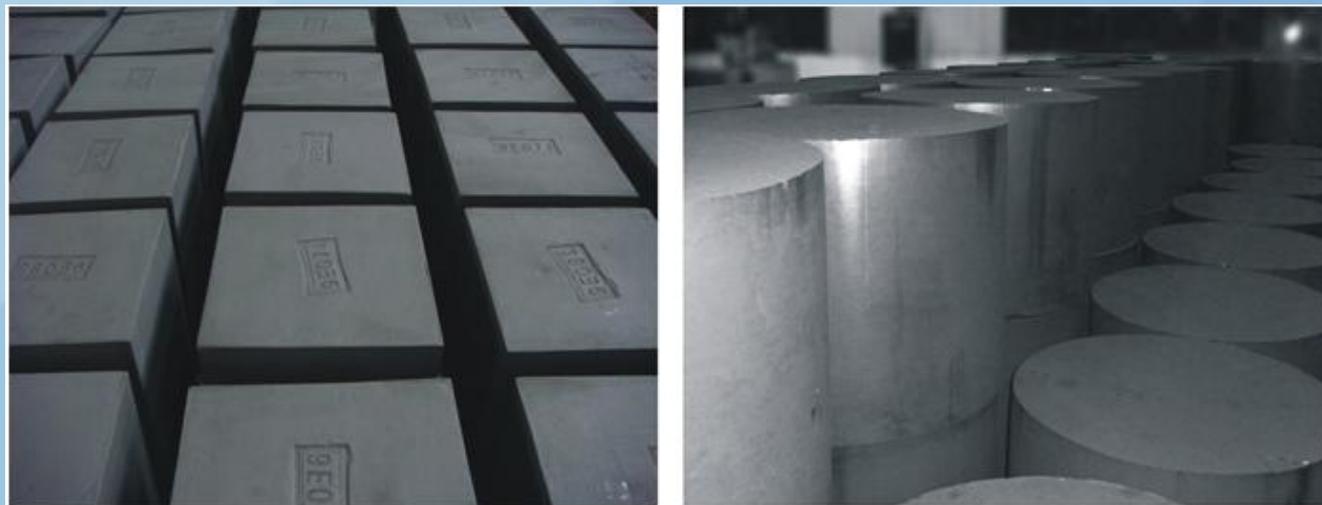
用途

Uses



产品指标

Product index



中文

我司经营的产品是用等静压法成型生产技术生产的细颗粒冷等静压各向同性石墨，具有一般材料无法比拟的特点；导电、导热性良好，高温强度高，热膨胀系数小，自润滑，耐高温，耐酸碱盐，耐腐蚀，体积密度高，易加工等特点。在国民经济各部门各行业得到了越来越广泛的应用，如单晶硅直拉，多晶硅铸锭及生产，电火花加工，金属连铸，真空炉用，烧结，贵重金属熔炼，高温耐腐蚀容器，玻璃，医药，化工等与本产品特性相关的特殊用途。

English

Our products are cold isostatic isotropic graphite, which is produced by isostatic pressing technology. It has the characteristics of incomparable general materials; good conductivity and thermal conductivity, high temperature strength, low thermal expansion coefficient, self-lubrication, high temperature resistance, acid-alkali-salt resistance, corrosion resistance, high volume density, easy processing and so on. It has been widely used in various sectors of national economy, such as Czochralski monocrystalline silicon, polycrystalline silicon ingot and production, EDM, metal continuous casting, vacuum furnace, sintering, precious metal smelting, high temperature corrosion resistant container, glass, medicine, chemical industry and other special uses related to the characteristics of the product.



2019

# 用途:一、半导体、光伏行业



中文

English

- 1、在CZ直拉单晶硅石墨热场中通常会用到高纯度等静压石墨如：保温罩、加热器、石墨三瓣坩、坩托、导流筒、石墨电极、电极螺母等。
- 2、用于等离子体增强化学气相沉积法使用的PECVD石墨舟片、电极座、石墨螺丝、石墨螺帽。
- 3、用于硅外延设备，表面SiC涂层的立式、盘式、单片式石墨基座，MOCVD制程用SiC涂层石墨基座。
- 4、离子注入用石墨电极、衬块、石墨屏蔽罩等配件，等离子刻蚀用石墨电极，半导体封装制程用模具、高等级模板、治具。
- 5、感应加热锗氧化物、区熔半导体材料、熔化高纯度金属的石墨坩埚、石墨舟皿及其配件，直拉锗与化合物单晶的高纯度石墨加热器、保温罩等。
- 6、蓝宝石HEM法生产中使用到的高纯度石墨加热器、石墨电极

产品牌号	体积密度 > g/cm <sup>3</sup>	电阻率 μΩ·m	抗压强度 MPa	抗折强度 MPa	肖氏硬度	灰份 PPm	热膨胀系数 ×10 <sup>-6</sup> /°C	热导率 W/(m·k)	弹性模量 GPa	用途
CDI-1A	1.85	10~12	90	45	60	300	4.3	133	11.5	半导体领域、光伏产业用石墨热场、陶瓷烧结、真空炉用。
CDI-1B	1.80	11~13	86	40	55	300	4.1	121	10.0	半导体领域、光伏产业用石墨热场、陶瓷烧结、真空炉用。
CDI-1C	1.80	10-13	88	47	58	300	4.5	120	11.6	半导体领域、光伏产业用石墨热场、陶瓷烧结、真空炉用。
CDI-1D	1.75	10~13	82	40	54	300	4.4	108	10.5	半导体领域、光伏产业用石墨热场、陶瓷烧结、真空炉用。

1. High purity isostatic graphite is usually used in CZ Czochralski silicon graphite thermal field, such as thermal insulation cover, heater, graphite triple-petal pot, crucible holder, guide tube, graphite electrode, electrode nut, etc.
2. PECVD graphite boat, electrode base, graphite screw and graphite nut for plasma enhanced chemical vapor deposition.
3. SiC coated graphite base for silicon epitaxy equipment, vertical, disc and monolithic graphite base for surface SiC coating, and for MOCVD process.
4. Graphite electrodes for ion implantation, lining blocks, graphite shield and other accessories, graphite electrodes for plasma etching, dies for semiconductor packaging process, high-grade templates and fixtures.
5. Induction heating germanium oxide, zone melting semiconductor material, graphite crucible for melting high purity metals, graphite boat and its accessories, high purity graphite heater for Czochralski germanium and compound single crystal, thermal insulation cover, etc.
6. High purity graphite heater and graphite electrode used in sapphire HEM process

## 用途：二、有色金属连铸行业

中文

- 1、连铸铝用石墨坩埚、石墨结晶器、挤出铝型材用石墨盘与石墨环等。
- 2、铸铁型材连铸所用的各种规格的石墨结晶器、各种型号的石墨模具。
- 3、有色金属连续铸造及贵重金属冶炼用等静压石墨结晶器，大尺寸石墨坯料，石磨盘、石墨坩埚、压铸，离心浇铸用石墨模具。

English

1. Graphite crucibles, graphite crystallizers, graphite plates and rings for extruding aluminium profiles, etc.
2. Various specifications of graphite crystallizers and various types of graphite moulds for continuous casting of cast iron profiles.
3. Isostatic graphite crystallizer for non-ferrous metal continuous casting and precious metal smelting, large-size graphite blank, stone grinder, graphite crucible, die casting, graphite mould for centrifugal casting.



石墨模具

石墨模具

石墨发热体

石墨模具

石墨模具

2019

Chen Kai

产品牌号	体积密度 > g/cm <sup>3</sup>	电阻率 μΩ·m	抗压强度 MPa	抗折强度 MPa	肖氏硬度	灰份 Ppm	热膨胀系数 ×10 <sup>-6</sup> /°C	热导率 W/(m·k)	弹性模量 GPa	用途
CDI-5L	1.85	11.5	95	47	62	400	4.3	140	11.5	主要用于黄铜、青铜连铸用于石墨模具、贵重金属熔炼等。
CDI-8L	1.80	11	86	40	55	400	4.0	130	11.5	主要用于青铜、铸铁等连铸用石墨模具、贵重金属熔炼等。
CDI-9L	1.88	13	105	50	65	400	4.6	120	12.5	主要用于纯铜、白铜连铸用石墨模具等对纯度要求高的相关应用。

# 用途：三、真空炉用、烧结、石英玻璃制品行业

中文

English



- 1、真空冶炼用的石墨隔热板和底座，高温电阻炉炉管、棒板、支架夹具、石墨护板、发热体、感应加热器等石墨部件。
- 2、电子元器件烧结用石墨盘、石墨模具。
- 3、高性能陶瓷生产及高温熔炼炉所需石墨模具和石墨零部件等。
- 4、压力烧结工艺用大尺寸坯料及三明治式加压烧结用石墨模。
- 5、生产工业玻璃所需的铸模及石墨异形件。
- 6、石英玻璃制品所需石墨模具、坩埚、电极、发热体、石墨棒及石墨角尺。
- 7、硬盘喷镀用的高纯度的等静压石墨靶材，阴极溅镀用的超高纯石墨电极。
- 8、生产金刚石刀具用石墨模具与石墨棒，生产合成金刚石用加热部件与支持部件。
- 9、硬度合金制造用石墨舟、皿、坩埚及容器、衬垫、加热器部件和加热棒、管、石墨装料盘、装料机构等部件。

1. Graphite insulation plate and base for vacuum smelting, graphite parts such as high temperature resistance furnace tube, bar plate, support fixture, graphite guard plate, heater, induction heater, etc.
2. Graphite discs and graphite moulds for sintering electronic components.
3. Graphite moulds and graphite parts for high performance ceramics production and high temperature smelting furnace.
4. Pressure sintering process with large size billet and sandwich pressure sintering with graphite mould.
5. Casting molds and graphite profiles for industrial glass production.
6. Graphite moulds, crucibles, electrodes, heaters, graphite rods and graphite angle rulers for quartz glass products.
7. High purity isostatic graphite target for hard disk spraying and ultra-high purity graphite electrode for cathode sputtering.
8. Production of graphite mould and rod for diamond cutting tool, production of heating parts and supporting parts for synthetic diamond.
9. Graphite boats, dishes, crucibles and containers, liners, heater parts and heating rods, tubes, graphite trays and charging mechanisms for hardness alloy manufacturing.

产品牌号	体积密度 > g/cm <sup>3</sup>	电阻率 μΩ·m	抗压强度 MPa	抗折强度 MPa	肖氏硬度	灰份 PPm	热膨胀系数 ×10 <sup>-6</sup> /℃	热导率 W/(m·k)	弹性模量 GPa	用途
CDI-1B	1.80	11~13	86	40	55	300	4.1	121	10.0	半导体领域、光伏产业用石墨热场、陶瓷烧结、真空炉用。
CDI-4S	1.80	≧15	80	37	55	500	4.0	121	11.5	电子件烧结、硬质合金烧结、真空炉用、金刚石烧结、贵重金属熔炼、密封件用石墨模具等。

05

# 催化油浆 (Catalytic slurry oil)



简介  
Introduction



用途  
Uses



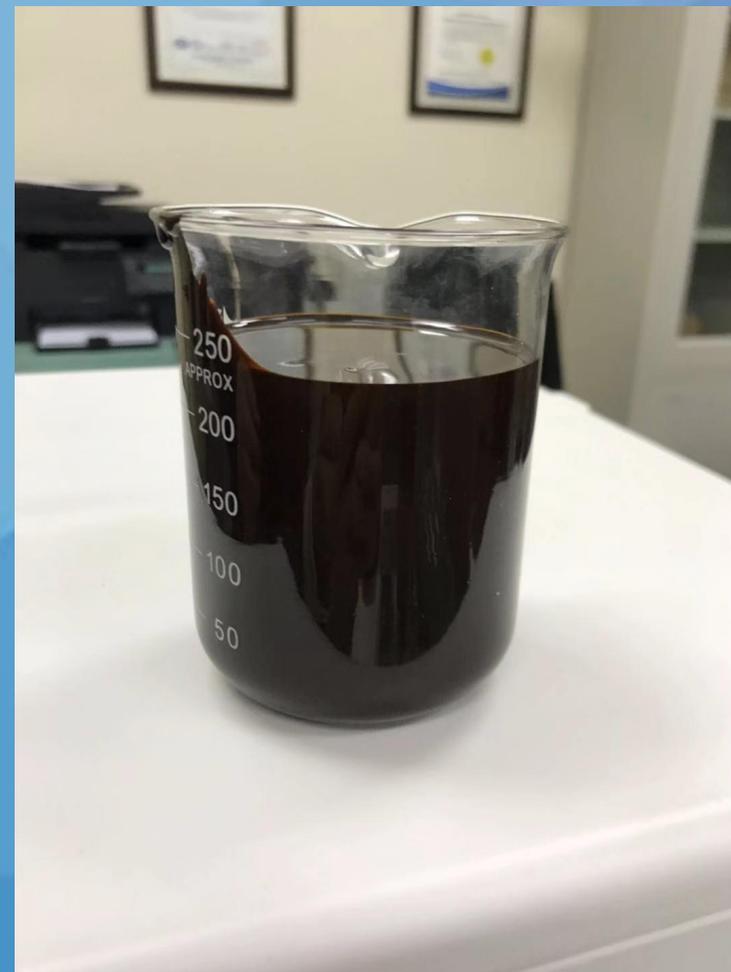
产品指标  
Product index

# 简介

## introduction

近年来，随着重油催化裂化加工能力的不断增加，在催化、裂化的过程中所生成的油浆的产量得到了不断地提高。目前，油浆的产量大约占据了催化、裂化的处理总量的百分之五至百分之十之间，大约为4Mt/a。现如今，油浆俨然已经为了燃料油的主要调和油。我们知道，这种利用油浆所进行燃烧方式其效益是比较低下的。催化油浆作为油系针状焦的原料逐渐得到广泛利用。

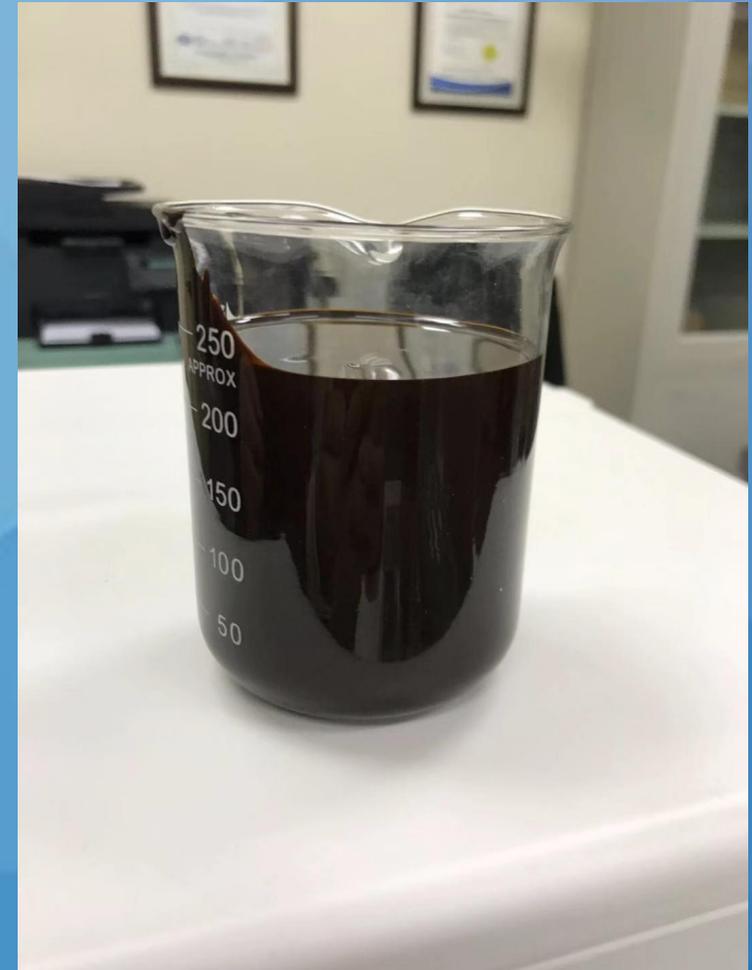
油浆原料的稳定性对于针状焦的品质具有十分重要的意义。针对国内催化油浆产量少且分布在不同的炼厂，产品指标和产量不稳定的特点，我公司积极开发进口油浆资源。为了企业能生产出高品质，理化指标稳定的优质国产针状焦，我司提供进口优质富含芳烃的低硫油浆进行市场供应，希望能够解决油系针状焦生产企业的困扰。



# 用途

## Uses

- 一、调制船燃
- 二、去催化剂生产澄清油
- 三、油系针状焦原料



# 产品指标

## Product index

优质原料是生产优质针状焦的重要保障



河北琛锴石化商品贸易有限公司

### 产品质量检验单

分析日期	2019.03.10		分析单位	专业机构		产地	国外进口	
样品名称	(催化)油浆		样品编号	低硫20190301		中硫20190302		
			用途	油系针状焦原料		取样方式	专业邮寄	
联系方式	13731181777		贸易公司名称	河北琛锴石化产品贸易有限公司				
实测指标								
进口油浆	低硫(20190301)油浆				中硫(20190302)油浆			
	组分指标		馏程指标		组分指标		馏程指标	
检测名称	标准指标	实测值	流出单位	常减压℃	标准指标	实测值	流出单位	常压℃
密度g/ml	≤1.085	1.0355	初馏点	64/220	≤1.085	1.0617	初馏点	223
S%	≤0.35	0.2761	5%	139/317	≤0.6	0.506	5%	310
残炭%	≤10	7.78	10%	162/346	≤10	9.1	10%	362
灰分%	≤0.05	0.014	20%	189/379	≤0.05	0.021	25%	400
沥青质%	实测	2.36	30%	205/398	实测	1.06	30%	428
胶质%	实测	8.01	40%	221/417	实测	10.6	50%	450
芳香分%	≥50	75.4	50%	236/436	≥50	62.52	70%	480
饱和分%	实测	14.23	60%	254/456	实测	21.99	88vol%	520
N(ppm)	实测	2655	70%	275/483	实测	5281.2	83.46mass%	
Ca(ppm)	实测	6.05	80%	309/523	实测	6.01		
Cu(ppm)	实测	0.12	88.1vol%	350/568	实测	0.11		
Fe(ppm)	实测	4.71	83.33mass%		实测	3.8		
Mg(ppm)	实测	1.61			实测	1.51		
Na(ppm)	实测	6.99			实测	7.01		
Ni(ppm)	实测	0.91			实测	0.88		
V(ppm)	实测	30.38			实测	26.8		
链烷烃%	实测	2.6			实测	/		
环烷烃%	实测	20.4			实测	/		
一环%	实测	9.5			实测	/		
二环%	实测	12.7			实测	/		
三环%	实测	15.7			实测	/		
四环%	实测	23.9			实测	/		
四环以上%	实测	8			实测	/		
未测芳烃%	实测	5.6			实测	/		
气味	正常	正常			正常	正常		
闪点℃	≥75	120			≥75	118		
倾点℃	≤15	9			≤15	10		
粘度	实测	/			实测	13.73		

河北琛锴石化产品贸易有限公司  
2019.03.23



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