A Group of Companies Respected by
The Locals & Trusted by The World

一家受当地人尊重 受世界信赖的集团企业

江龙炭素集团
JIANG LONG CARBON GROUP
江苏江龙新能源科技有限公司
Jiangsu Jianglong New Energy Technology Co., Ltd.

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江龙炭素集团
JIANG LONG CARBON GROUP

TO BUILD A WORLD-CLASS
CARBON BRAND
>打造世界一流炭素品牌

Making Superior Graphite Electrodes &
Creating A Sustainable Future

制造精品石墨电极 创造可持续发展未来

中国·徐州
Xuzhou China

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您可以信赖我们
YOU CAN COUNT ON US

- 3大工厂
- 始于1987, 30多年行业经验
- 服务全球400余客户
- 588名专业员工
- 60000吨产能

- 3 Integrated Factories
- Established In 1987, More Than 35 Years Industry Experience
- Serving over 400 Customers Worldwide
- 588 Professional Employees
- 60,000 Tons of Capacity

COMPANY INTRODUCTION
公司简介

江龙炭素集团始建于1987年，是江苏省唯一一家拥有全套工艺的炭素制品生产企业。集团目前拥有5家子公司，通过ISO 9001:2015、ISO 14001:2015、OHSAS18001:2007认证。占地面积40万平方米，雇员588人。年产各种石墨电极6万吨，其它炭素产品3万吨。

作为一家领先的炭素制品方案解决商，江龙炭素深耕石墨电极，在为全球钢厂提供绿色高品质石墨电极的同时，也在炭素领域不断探索，不断革新，努力成长为全球知名炭素品牌。

集团生产销售直径100-750MM各种规格石墨电极及其它各种石墨制品。进口优质针状焦及其它各种原材料。

主营产品涵盖超高功率石墨电极，高功率石墨电极，普通功率石墨电极，石墨块/石墨方，石墨炭套，石墨棒，增碳剂等。也可以根据客户需求定制各种石墨产品。

企业使命 通过不断改进生产工艺，引进顶级生产设备和专业技术人才，制造高品质，低成本，绿色环保的石墨电极，帮助全球钢厂提高生产效率降低生产成本。
企业愿景 打造世界一流炭素品牌，实现永续经营。
企业精神 高效 卓越 服务 奉献
价 值 观 互利共赢 同创共享
经营理念 为客户创造价值 为员工谋求发展 为社会承担责任
环境理念 清洁生产 持续改善
安全理念 人人防范 共享平安
品质理念 质量就是生命 信誉就是未来

Jianglong Carbon Group was founded in 1987 and is the only manufacturing enterprise of carbon products with complete set of processes in Jiangsu China. Jianglong Group has five subsidiaries, covering a total area of 400,000 square meters, having 588 employees and is ISO 9001:2015, ISO 14001:2015 and OHSAS18001:2007 certified with an annual output of 60,000 tons graphite electrodes, as well as other carbon products with an annual output of 30,000 tons.

As a leading carbon product solution provider, Jianglong Carbon is deeply engaged in graphite electrode, and while providing green and high quality graphite electrode for global steel mills we also keep exploring and innovating in the field of carbon, and strive to grow into a global famous carbon brand.

Jianglong Carbon Group manufacturing and sales of graphite electrodes ranging from ϕ100 to ϕ750mm and many other graphite products of various specifications. Import high quality needle coke and many other raw materials.

Our main products cover Ultra-high Power (UHP) Graphite Electrodes, High Power (HP) Graphite Electrodes, Regular Power (RP) Graphite Electrode, Graphite Blocks, Graphite Carbon Sleeve, Graphite Rods, Graphite Petroleum Coke, etc. We can also customize various graphite products according to customers' requirements.

Corporate Mission Through continuous improvement of production process, introduction of top production equipment and professional technical expertise, we manufacture high quality, low cost and green graphite electrodes to help global steel mills improve production efficiency and reduce production costs.
Corporate Vision To build a world-class carbon brand and achieve sustainable business.
Spirit of Corporate High efficiency, Excellent, Good Service, Dedication
Our Values Mutual Benefit and Win-win, Create and Share Together
Theory of Business Create Benefit for Customer, Seek Development for Staff, Take Responsibility for Society
Theory of Environment Cleaner Production, Continuous Improvement
Security Philosophy Preventing for All and Sharing Peace
Quality Concept Quality is Life, Reputation is Future

COMPANY MILESTONE

发展历程

致力于炭素行业 为全球炼钢行业提供精品石墨电极

Dedicated To The Carbon Industry
Delivering Superior Graphite Electrodes
To The Global Steelmaking Industry

1987年 徐州电极五厂成立。
No.5 Xuzhou Electrode plant was established.

1988年 3340KVA艾奇逊石墨化炉投入生产。
3340KVA Acheson type graphitization furnace was put into production.

1999年 徐州电极五厂改制。
No.5 Xuzhou Electrode plant was reformed.

2000年 新建5座五料箱双层倒焰窑焙烧炉投产。
Down-draft kiln baking furnace was put into production.

2001年 新建直径2米高压浸渍系统。
New-built Dia 2meters High pressure impregnation system.

2003年 新建24罐煅烧炉投产。
New calcination furnace put into production.

2004年 新建年产4万吨压型车间投产（1500吨卧式油压机）。
Annual capacity 40000 tons of Forming workshop was put into production.

2007年 新建18室环式焙烧炉投产。
New-built 18- room ring baking furnace.

2009年 新建20室环式焙烧炉投产。
New-built 20- room ring baking furnace.

2010年 新建3万吨卧式高压浸渍系统投产（压力20MPA）。
Annual capacity 30000 tons of high pressure impregnation machine was putted into production.

2011年 新建24室环式焙烧炉投产。
New-built 24-room ring baking furnace.

2012年 新建36室环式焙烧炉投产。
New-built 36-room ring baking furnace.

2013年 新建20000KVA串接LWG石墨化投产。
New-built 20000KVA LWG graphitization furnace.

2014年 新建机加工车间投产（大规格全数控）。
New-built machining line was put into operation (large size full CNC).

2015年 新建2.5万吨二次焙烧隧道窑投产。
New-built annual capacity 25000 tons of second baking tunnel furnace.

2016年 新建20000KVA艾奇逊石墨化投产，成立江苏江龙新能源科技有限公司（负责对外开展业务）。
New-built 20000KVA Acheson graphitization furnace. Jiangsu Jianglong New Energy Technology Co., Ltd. was established.

2017年 引进2500吨卧式油压机。
Introduced 2500 tons horizontal press forming system.

2018年 引进4100吨立捣卧挤油压机及新建整套现代化压型车间。
Introduced 4100 tons of vertical pounding and horizontal extrusion hydraulic presses system and a new set of modern press shop.

2019年 现代化浸渍系统扩大产能，新增隧道炉扩大产能；4100吨新压机投产；引进EIRICH搅拌捏合系统；引进日本进口不二越全自动机加工设备；UHP600/UHP650石墨电极在国外市场试用，效果非常完美。
Modernized impregnation system and tunnel furnace capacity expansion; new 4,100-ton forming system put into operation; Introduction of EIRICH Kneading system, LOESCHE mill system, Batching system & NACHI Robot production lines; UHP600/UHP650 graphite electrodes have been tried in foreign markets with perfect results.

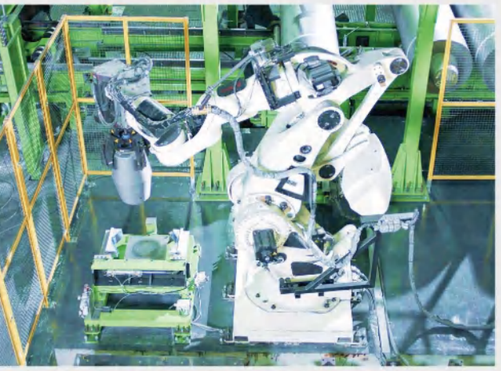
2020年 江龙集团国内首家率先推出Φ750MM石墨电极。该产品以其优异的效果得到了来自国内外钢厂的高度评价。
Jianglong Group is the first one to launch ϕ750mm graphite electrode in China. This product has been highly evaluated by steel mills from home and abroad for its excellent results.

2022年 江龙炭素集团已经与全球前十大钢铁集团建立合作关系。
Jianglong Carbon Group has established partnerships with the top 10 global steel groups.

MAIN PRODUCTION FACILITIES
主要生产设施 >>>

日本进口NACHI全自动石墨电极本体机加工系统
Fully Automatic Graphite Electrode Machining System Imported From NACHI Japan

世界顶级一体化成型系统
World's Top All-In-One Press System



日本进口NACHI石墨电极接头预组装系统
Graphite Electrode Nipple Pre-assembly System Imported from NACHI Japan

大容量高效率浸渍系统
Large Capacity High Efficiency Impregnation System

4100吨电极挤压机
4100 Tons Press System

全自动石墨电极接头机加工系统
Fully Automatic Graphite Electrode Nipple Machining System

德国进口爱立许混捏系统
EIRICH Kneading System Imported from Germany

MAIN PRODUCTION PROCESSES
主要生产工序

江龙集团是江苏省唯一一家拥有全套生产工序的炭素制品企业，经过几十年的发展，集团已具备年产成品石墨电极6万吨的产能。我们将高标准的质量管理体系贯穿到整个生产流程，严格把关每一道生产工序，并根据客户的使用反馈不断改进优化，确保每一根成品电极都达到国际质量标准。

Jianglong Carbon Group is the only carbon products manufacturing enterprise in Jiangsu Province with a full set of production processes. After decades of development, the Group has an annual production capacity of 60,000 tons of finished graphite electrodes. We put the high standard quality management system throughout the whole production process, strictly control each production process, and continuously improve and optimize according to the feedback from customers, to ensure that each finished electrode meets the international quality standard.

江龙石墨电极生产流程图
Production Flow Chart of Jianglong Graphite Electrode

1 原料破碎
Raw Material Crushing

优质针状焦或石油焦煅烧后经过机械设备破碎成符合工艺要求的粒度。

High quality needle coke or petroleum coke is calcined and then crushed by mechanical equipment into sizes that meets the requirements of the process.

2 配料混捏
Dosing and Mixing

来自德国的顶级混捏系统，研磨系统以及来自瑞士的配料系统为配料混捏提供质量保障。

The top quality mixing system from Germany, the grinding system and the dosing system from Switzerland provide the quality assurance for the mixing.

3 挤压成型
Extrusion Forming

江龙集团拥有世界顶级一体化成型系统，从原料到电极生胚，每个环节都精准可控，高度自动化更节能更环保，为生产出高质量石墨电极奠定坚

Jianglong Carbon Group has the world's top integrated molding system, from raw materials to green electrode, every link is precisely controlled, highly automated, more energy-saving and environmentally friendly, laying a solid foundation for the production of high-quality graphite electrodes.

6 二次焙烧
Re-baking

江龙炭素集团拥有隧道窑一座，年产二焙品6万吨。

Jianglong Carbon Group has a tunnel kiln with an annual capacity of 60,000 tons of re-baked products.

7 石墨化
Graphitization

江龙炭素集团拥有三个石墨化车间，配有两台20000KVA变压器，一台6630KVA变压器。年产石墨化品6万吨。

The group has three graphitization workshops with two 20,000KVA transformers and one 6630KVA transformer. The annual output of graphitized products is 60,000 tons.

8 机加工
Machining

江龙炭素集团拥有5条机加工系统，最新引进日本NACHI石墨电极本体机加工，石墨电极接头预组装系统，效率更高，精度更好。配有整套日本进口环规，及其它高精度测量工具，最大程度保证产品的精度要求。

Jianglong Carbon Group has 5 machining systems, the latest introduction of Graphite Electrode machining and Nipples pre-assembly system with industrial robot (Imported from NACHI Japan), higher efficiency, higher precision. Equipped with a full set of Japanese imported ring gauges and other high-precision measuring tools to ensure the maximum degree of product precision requirements.

4 一次焙烧
Primary Baking

江龙集团拥有环式焙烧炉四座。其中18室，20室，24室和36室各一座。年产一焙品6万吨。

Jianglong Group has four ring type baking furnaces. There are 18, 20, 24 and 36 chambers each. The annual output of primary baking product is 60,000 tons.

5 高压浸渍
High Pressure Impregnation

江龙炭素集团配套大容量高效率真空浸渍系统，绿色节能环保，月处理能力可达5000吨，保证充足的供应能力。

Jianglong Carbon Group is equipped with large-capacity and high-efficiency vacuum impregnation system, which is green, energy-saving and environmentally friendly, with a monthly processing capacity of up to 5,000 tons, ensuring sufficient supply capacity.

9 质量检查
Quality Inspection

江龙炭素集团拥有完善质量管理体系。我们对产品质量严格把关，精准要求，努力为客户考虑到每一个细节，以保证客户在使用过程中的可靠性。

Jianglong Carbon Group has a perfect quality management system. We have strict control and precise requirements on product quality, and try to consider every detail for our customers to ensure their reliability in the process of use.

10 包装发运
Packing and Shipping

成品电极按客户要求进行包装，装船装车发运并提供完善的售后服务。

Finished graphite electrodes are packed according to customers' requirements, shipped via containers or trucks and provided with perfect after-sales service.

QUALITY CONTROL & CERTIFICATIONS
质量控制与认证

江龙炭素集团技术力量雄厚，研发能力强劲，现拥有发明专利1项， 实用新型专利34项。
公司对质量控制精益求精，产品内控指标优于行业标准，严格按照 ISO9001：2015 体系要求，生产全流程受控。
在追求质量优先的同时，公司先后配套取得了 ISO14001：2015 体系和 OHSAS18001：2007 体系认证。

Jianglong Carbon Group has strong technical force and strong research and development ability, and now has 1 invention patent and 34 utility model patents.
The company is striving for excellence in quality control, and the internal control index of the products is better than the industry standard, and the whole production process is controlled in strict accordance with the requirements of ISO9001:2015 system.
In the pursuit of quality first, the company has obtained ISO14001:2015 system and OHSAS18001:2007 system certification.


MANAGEMENT SYSTEM CERTIFICATION

Jiangsu jianglong new energy technology co. LTD

GB/T24001-2016 / ISO14001:2015

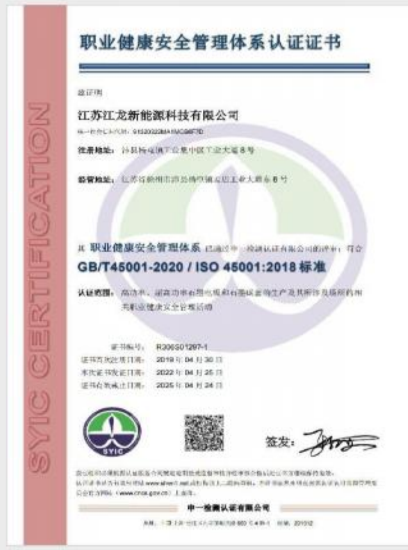
SYIC CERTIFICATION


环境管理体系认证证书

江苏江龙新能源科技有限公司

GB/T24001-2016 / ISO14001:2015 标准

SYIC CERTIFICATION


职业健康安全管理体系认证证书

江苏江龙新能源科技有限公司

GB/T45001-2020 / ISO 45001:2018 标准

SYIC CERTIFICATION


MANAGEMENT SYSTEM CERTIFICATION

Jiangsu jianglong new energy technology co. LTD

GB/T45001-2020 / ISO 45001:2018

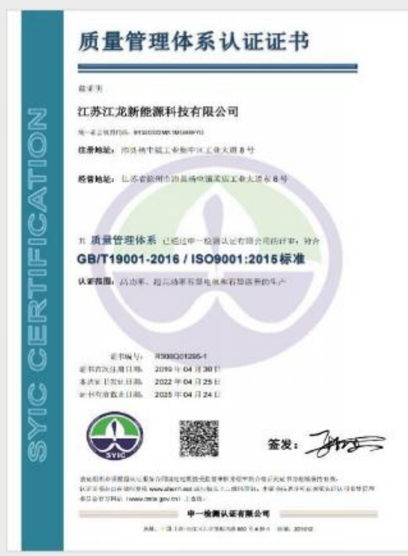
SYIC CERTIFICATION


MANAGEMENT SYSTEM CERTIFICATION

Jiangsu jianglong new energy technology co. LTD

GB/T19001-2016 / ISO9001:2015

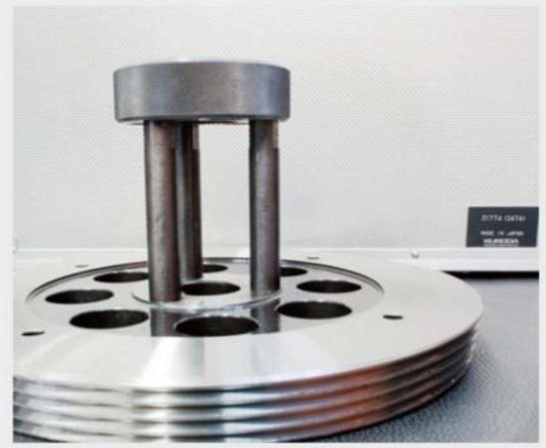
SYIC CERTIFICATION


质量管理体系认证证书

江苏江龙新能源科技有限公司

GB/T19001-2016 / ISO9001:2015 标准

SYIC CERTIFICATION



PRODUCT TECHNICAL REFERENCE INDICATORS
产品技术参考指标

石墨电极和接头理化指标
Physical & Chemical Properities of Graphite Electrodes & Nipples

性能 Properties		单位 Unit	石墨电极公称直径 Nominal Diameter of Electrodes									
			普通功率石墨电极 RP				高功率石墨电极 HP		超高功率石墨电极 UHP			
			ϕ75-225 3-9"	ϕ250-300 10-12"	ϕ350-550 14-22"	ϕ600-800 24-32"	ϕ75-400 3-16"	ϕ450-600 18-24"	ϕ300-400 12-16"	ϕ450-500 18-20"	ϕ550-650 22-26"	ϕ700-800 28-32"
电阻率 Electric Resistance≤	电极 Graphite Electrode	uΩ·m	7.5	7.8	8.0	8.0	6.5	6.5	5.8	5.5	5.5	5.3
	接头 Electrode Nipple		5.5	5.5	5.5	5.5	4.5	4.5	4.3	4.3	4.0	4.0
体积密度 Bulk Density≥	电极 Graphite Electrode	g/cm³	1.60	1.60	1.60	1.60	1.65	1.65	1.70	1.70	1.70	1.70
	接头 Electrode Nipple		1.73	1.73	1.73	1.73	1.75	1.75	1.78	1.78	1.78	1.78
抗折强度 Flexural Strength≥	电极 Graphite Electrode	Mpa	10.5	8.5	8.5	6.5	11.0	11.0	10.5	10.5	10	10
	接头 Electrode Nipple		15.0	15.0	15.0	15.0	18.0	20.0	20.0	20.0	22.0	23.0
弹性模量 C.T.E≤	电极 Graphite Electrode	GPa	9.3	9.3	9.3	9.3	12.0	12.0	14.0	14.0	14.0	14.0
	接头 Electrode Nipple		14.0	14.0	14.0	14.0	16.0	16.0	18.0	18.0	20.0	20.0
热膨胀系数 Elastic Modulus≤	电极 Graphite Electrode	10^{-6}/℃	2.8	2.8	2.8	2.8	2.2	2.2	1.4	1.4	1.4	1.4
	接头 Electrode Nipple		2.6	2.7	2.7	2.7	1.8	1.8	1.3	1.3	1.2	1.2
灰分 Ash ≤		%	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3

石墨电极尺寸
Graphite Electrode Dimensions

公称直径 Nominal Diameter		实际直径 Actual Diameter		公称长度 Nominal Length (mm)	Allowance (mm)
英寸 inch	毫米 mm	最大 Max	最小 Min		
12	300	307	302	1600/1800/2000	±100
14	350	357	352	1600/1800/2000/2200	
16	400	409	403	1800/2000/2200/2400	
18	450	460	454	1800/2000/2200/2400	
20	500	511	505	1800/2000/2200/2400	
22	550	562	556	1800/2000/2200/2400/2700	±150
24	600	613	607	2000/2200/2400/2700/3000	
26	650	663	657	2000/2200/2400/2700/3000	
28	700	714	708	2000/2200/2400/2700/3000	
30	750	765	759	2700	
32	800	816	810	2700	

注：如果有特殊需求或疑问请及时联系我们
Note: Please contact us for any special needs or questions.

3TPI超高功率接头外形尺寸重量表
Table of 3TPI Nipple Dimension & Weight

电极直径 Electrode Diameter		扣型 Nipple Shape	接头直径 Nipple Diameter	接头长度 Nipple Length	参考重量（kg） Reference Weight (UHP)
inch	mm				
10	250	155T3N	155.57	220.00	5.32
12	300	177T3N	177.16	270.90	8.56
14	350	215T3N	215.90	304.80	14.72
16	400	241T3N	241.30	338.70	20.66
18	450	273T3N	273.05	355.60	28.52
20	500	298T3N	298.45	372.60	36.24

4TPI超高功率接头外形尺寸重量表
Table of 4TPI Nipple Dimension & Weight

电极直径 Electrode Diameter		扣型 Nipple Shape	接头直径 Nipple Diameter	接头长度 Nipple Length	参考重量（kg） Reference Weight (UHP)
inch	mm				
10	250	152T4N	152.40	190.50	4.60
12	300	177T4N	177.80	215.90	7.40
14	350	203T4N	203.20	254.00	11.37
16	400	222T4N	222.25	304.80	15.95
16	400	222T4L	222.25	355.60	17.87
18	450	241T4N	241.30	304.80	19.27
18	450	241T4L	241.30	355.60	21.66
20	500	269T4N	269.88	355.60	28.04
20	500	269T4L	269.88	457.20	33.69
22	550	298T4N	298.45	355.60	35.24
22	550	298T4L	298.45	457.20	42.63
24	600	317T4N	317.50	355.60	40.49
24	600	317T4L	317.50	457.20	49.18
26	650	355T4L	355.60	558.80	74.2
28	700	374T4N	374.65	457.20	71.64
28	700	374T4L	374.65	558.80	83.4
30	750	406T4N	406.40	584.20	104.47
30	750	406T4L	406.40	609.60	107.76
32	800	432T4L	431.80	635.00	121.95

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PROBLEM ANALYSIS AND ENGAGEMENT TORQUE

问题分析与接合扭矩

石墨电极推荐接合扭矩

Graphite Electrode Recommended Joint Torque

电极直径 Electrode Diameter		力矩 Torque
inch	mm	N.m
12	300	900
14	350	1300
16	400	1550
18	450	1850
20	500	2500
22	550	3500
24	600	4000
26	650	5000
28	700	6000
30	750	7500
32	800	9500

注：如有疑问请及时联系我们 Note: Please contact us for any questions.

石墨电极在冶炼中出现各种问题的分析指导

Guidance To Analysis of Electrodes Problems

影响因素 Factors	电极折断 Body Breakage	接头折断 Nipple Breakage	电极柱松动 Loosening	端部掉块 Tip Spalling	线极损失 Bolt loss	氧化 Oxidation	电极消耗 Consumption
废钢中的不导电物 Nonconductor In Charge	X	X					
废钢块太大 Heavy Scrap In Charge	X	X					
变压器容量太大 Transformer Capacity Too Large	X	X		X	X	X	X
三相不平衡 Phase Lmbalance	X	X		X	X		X
相旋转 Phase Rotation		X	X				
震动过大 Excessive Vibration	X	X	X				
夹持器压力太高或太低 Clamper Pressure Too High Or Too Low	X		X				
炉盖电极孔与电极不同心 Roof Electrode Socket Disalignment With Electrode	X	X	X				
炉盖上电极喷水冷却 Water Sprayed On Electrodes Above Roof							√
废钢预热 Scrap Preheating							√
二次电压太高 Secondary Voltage Too High	X	X		X	X		X
二次电流太高 Secondary Current Too High	X	X		X	X	X	X
功率因数太低 Power Factor Too Low	X	X		X	X		X
油消耗太高 Oil Consumption Too High				X	X	X	X
氧消耗过高 Oxygen Consumption Too High				X	X	X	X
出钢到出钢时间太长 Long Time Gap From Tapping To Tapping						X	X
电极浸入钢水中 Electrode Dipping					X		X
连接部位不清洁 Dirty Joint		X	X				
提升塞和扭紧工具未得到好的保养 Poorly Maintained Lift Plug And Tightening Tool		X	X			X	
电极连接不紧 Insufficient Joint Tightening		X	X			X	

PREVENTION PROTECTION AND DAMAGE CAUSES

预防保护与折损原因

电极折损原因

The Causes of Electrode Breakage

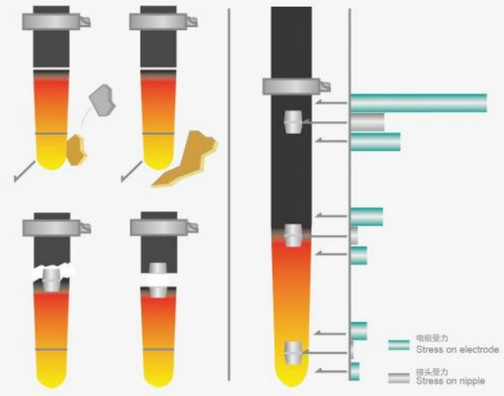
- 电极受力状态，从上向下力的程度依次递减，位于夹持器下方的电极和接头部位受力最大。
- 当电极受到外力时：应力集中的外力 > 电极强度 导致电极折损。
- 外力产生的原因有：熔化期大块炉料崩塌，废钢中电极下端不导电物体，块状流钢撞击等。
- 电极夹持器升降应答速度不协调，炉盖电极孔偏芯，电极连接不良使接缝处有间隙和使用强度不达标的接头等也易造成折断。
- 电极与接头加工精度不良，造成配合不好，也易造成接头折断。

When the electrode is stressed, the degree of force decreases progressively from the top to bottom. The maximum stress is on the joint of electrode and nipple under the holder.
When the electrode is subjected to external force: The external force of stress concentration > the strength of the electrode, and this will lead to the damage of the electrode.
The causes of external force: the collapse of the big charging materials during the melting period, the non-conducting objects exist at the bottom of the electrode in the scrap steel, the impact of the nubby flowing steel.
The causes of breakage:the incongruous response speed of the lifters, the deviated electrode the furnace cover holes from the core, the gaps between the joint of electrode and nipple and the unsubstandard nipples.
Poor machining accuracy of electrodes and joints will also cause poor coordination and joint breakage.

防止电极折断，脱扣和过度氧化的预防措施

Preventive Measures for Breakage, Releasing & Over Oxidation

- 调节好电极相序，三相交流电弧炉中，电极相序要正确，相序应为逆时针方向，若为顺时针方向，电极使用时会松动，造成折损。
- 减少由机械外力、炉内塌料和操作不当引起的折损和破损，装炉时大块钢料应尽量装在炉下层，且废钢料在炉内要分布均匀。
- 避免废钢中存在非导电材料，不要使石灰等非导电物体聚集在电极正下方，影响通电或折断电极。
- 注意炉盖位置，电极柱与炉顶孔对中，且电极柱平行，炉顶孔壁要经常清理，避免残留钢渣堆积而挤断电极。
- 保持电炉倾动系统的状况良好，使电炉倾动保持平稳。
- 选用强度高，加工精度好的优质接头，使用时避免多家产品混用。
- 保护好电极端面，防止端面氧化和嵌入异物造成端面不平整而影响电极间的连接。



块钢撞击使电极折损
The impact of steel block causes the breakage of electrode

- 保护好电极端面，防止端面氧化和嵌入异物造成端面不平整而影响电极间的连接。
- 电极和接头上，防止钢渣或异物嵌入影响连接，使用前，要用压缩空气吹净。
- 减少电极周界的氧化消耗，加强炉子的密封性，减少空气入侵炉内，尽量减少赤热电极在炉外暴露时间，规范吹氧操作。
- 对于熔炼炉，若条件允许，电极采用喷淋冷却技术，能有效降低电极侧面氧化消耗。

The electrode phase sequence must be correct. In three-phase AC arc furnace, the electrode phase sequence should be counter-clockwise. If it was clockwise, the electrodes will be loose and to be damaged.
In order to reduce the breakage and damage caused by mechanical force, inside material collapse and improper operation, the large steel material should be put in the lower layer of the furnace, and the scrapped steel should be evenly distributed in the furnace.
Avoiding non-conductive materials are in scrap steel, do not allow non-conductive objects such as lime to accumulate directly below the electrodes, otherwise it would affect the electrification or break the electrode.
Pay attention to the position of the furnace cover. The electrode pillar should be centered in the furnace top hole, and the electrode pillars should be parallel. The furnace roof should be cleaned regularly to avoid the electrodes being broken due to the accumulation of residual steel slag.
Keep the tilting system in the good steady condition and keep the furnace being tilted reposefully.
Using high-quality nipples with high strength and high precision. Avoid mixed-use nipples that are produced by different manufactures
Protect the end surface of the electrodes from being uneven because of oxidation and foreign matter inserting. Otherwise, it will influence the connection of electrodes.
Clean electrodes and nipples with compressed air before applying it, in case it influences the connection due to slag or foreign matter.
Reducing the oxidation consumption around the electrodes, strengthening the sealability of furnace and reducing air intrusion into the furnace.
Minimizing the exposure time of red-hot electrodes outside the furnace and standardizing blowing oxygen operation.
For smelting furnaces, using spray cooling technology if the conditions permit, which can reduce the oxidation consumption of electrodes effectively.

OTHER CARBON PRODUCTS

其它炭素制品

年产成品石墨电极6万吨其它炭素制品3万吨

Annual Output of 60,000 Tons Graphite Electrode Other Carbon Products 30,000 Tons

石墨方参考技术指标
Graphite Blocks Technical Reference Indicators

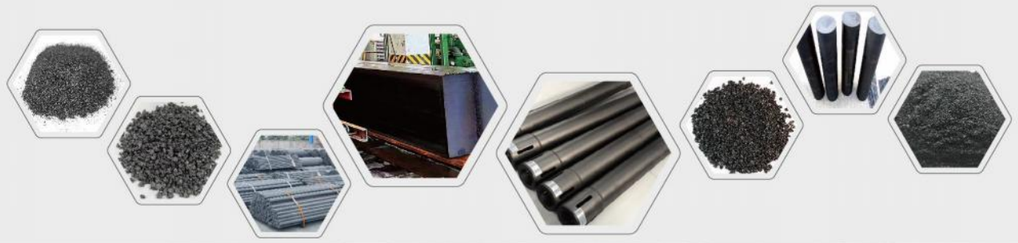
性能 Properities	单位 Unit	参数 Specifications	
体积密度 Bulk Density	g/cm³	≥ 1.71	1.73
粒度 Grain Size	mm	2.0	0.8
电阻率 Specific Resistance	μΩm	≤ 9.5	8.9
抗折强度 Flexural Strength	MPa	≥ 12.0	13.5
抗压强度 Compressive Strength	MPa	≥ 28.0	32
热膨胀系数 C.T.E. (to 100℃)	10⁻⁶/℃	≤ 2.7	2.5
热导率 Thermal Conductivity	W/mK	≥ 115	135
灰分 Ash Content	%	≤ 0.2	0.12

注Note:
1) 体积密度为整块产品的数值 Bulk density is the value of the whole product;
2) 电阻率、抗折强度、CTE 和热导率为平行方向的数值 Resistivity, flexural strength, CTE and thermal conductivity are the values in parallel direction;
3) 抗折强度使用四点法 Flexural strength adopts the four-point method.

标准尺寸 Standard Sizes: 500*500*1800mm, 650*500*1800/2400mm, 630*630*2100/2400/3300mm
其他尺寸及石墨加工件可根据客户要求提供。 Other sizes and graphite machined parts are available upon request.

硅钢连续退火炉用炭套的性能指标
Perfromance Indicators of Graphite Carbon Sleeve for Silicon Steel Continuous Annealing Furnace

产品类别 Products / 性能指标 Properities	低温炭套 Low Temperature Carbon Sleeve	中温炭套 Medium Temperature Carbon Sleeve	高温炭套 High Temperature Carbon Sleeve
抗折强度 Flexural Strength MPa	≥ 15	≥ 18	≥ 15
抗压强度 Compressive Strength MPa	≥ 30	≥ 35	≥ 30
显气孔率 Stomatal Rate %	≤ 12	≤ 10	≤ 12
体积密度 Bulk Density g/cm³	≥ 1.73	≥ 1.75	≥ 1.73
石墨化度 Graphitized Degree %	70 – 90	70 – 90	70 – 90
肖氏硬度 Shaw Hardness HS	35 – 50	35 – 50	35 – 50
气孔的最大直径 Max. dia. of stomata mm	≤ 0.2	≤ 0.1	≤ 0.2
Fe元素含量 Fe Element Content %	≤ 0.02	≤ 0.01	≤ 0.02
Ca元素含量 Ca Element Content %	≤ 0.02	≤ 0.01	≤ 0.02
Na, K各元素含量 Na, K Element Content %	<0.01	≤ 0.01	<0.01
使用条件 Conditions of Use	常温–900℃，干/湿气氛 Normal temperature –900℃, dry/wet atmosphere	850–950℃, 干/湿气氛 850–950℃, dry/wet atmosphere	950℃以上，干气氛 950℃above,dry atmosphere



- 石墨方/石墨块 Graphite Block
- 石墨炭套 Graphite Carbon Sleeve
- 石墨粉 Graphite Powder
- 石墨化石油焦 Graphitized Petroleum Coke(GPC)
- 石墨棒 Graphite Rod
- 沥青焦 Pitch Coke
- 细颗粒石墨 Fine Grain Graphite
- 负极材料 Cathode Material

KEY ADVANTAGES OF JIANGLONG CARBON

江龙的核心优势

江龙炭素集团主营Φ400-800超高功率石墨电极，高功率石墨电极，普通功率石墨电极。也可以根据客户需求定制各种石墨产品，如石墨方，石墨炭套，石墨棒，增碳剂（石墨粉，石墨化石油焦），沥青焦，细颗粒石墨，负极材料等。请随时联系我们以了解更多服务项目，我们很乐意倾听您的任何问题和需求！

Jianglong Carbon Group is mainly engaged in ϕ400-800 Ultra-high Power Graphite Electrode, High Power Graphite Electrode, Regular Power Graphite Electrode. We can also customize various graphite products according to customers' requirements, such as Graphite Block, Graphite Carbon Sleeve, Graphite Rod, Carbon Additive (Graphite Powder, Graphitized Petroleum Coke), Pitch Coke, Fine Grain Graphite, Cathode Material, etc. Please feel free to contact us to learn more about our services, we are happy to listen to any questions and needs you may have!

历史悠久，技术实力雄厚 Long History & Strong Technical Capability

江龙炭素集团始建于1987年，是江苏省唯一一家拥有全套工艺的炭素制品生产企业。

Established in 1987, Jianglong Carbon Group is the only manufacturing enterprise of carbon products with complete set of processes in Jiangsu China.

顶级原材料 Top Quality Raw Materials

江龙炭素集团与国内外顶级原材料供应商建立战略合作伙伴关系，包括PHILLIPS 66,MITSUBISHI,JPC,PMC KOREA, JINZHOU, JINGYANG, YIDA, KOPPERS,ETC.

Jianglong Carbon Group has established strategic partnerships with top domestic and international raw material suppliers, including Phillips 66, Mitsubishi, JPC, PMC KOREA, Jinzhou, Jingyang, Yida, Koppers, etc.

世界顶级生产设备 World-class Production Facilities

来自德国，日本，瑞士等国家的顶级生产设备为生产出高品质石墨电极奠定坚实基础。

The top production facilities from Germany, Japan, Switzerland and other countries provide a solid foundation for the production of high quality graphite electrodes.

中国第一家率先推出UHP750超高功率石墨电极 First in China to Launch UHP750 Ultra-high Power Graphite Electrode

中国第一家率先推出UHP750超高功率石墨电极的综合性炭素制品生产企业。

The first comprehensive carbon products manufacturer in China to launch UHP750 ultra-high power graphite electrode in 2020.

产品质量可靠，性价比高 Reliable Product Quality & High Cost Performance

截止2022年，江龙以其优异的产品及服务已经与来自全球的500余钢企建立合作伙伴关系。

By 2022, Jianglong has established partnerships with more than 500 steel companies from all over the world with its excellent products and services.

出口全球60多个国家和地区 Exported to more than 60 countries and regions

出口全球60多个国家和地区， 深受世界前十钢厂信赖,包括宝武集团，日本新日铁，河钢集团，浦项集团，沙钢集团，鞍钢股份，建龙集团，塔塔集团，韩国现代，青山控股等。

Exported to more than 60 countries and regions around the world, trusted by the world's top ten steel mills, including Baowu Group, Nippon Steel, HBIS Group, POSCO Group, Shagang Group, ANGANG Steel, Jianlong Group, Tata Group, Korea Hyundai, TSINGSHAN Holdings, etc.

机制灵活，高效响应 Flexible & Efficient Response

江龙炭素是独资民营集团企业。管理扁平高效，运营响应灵敏，决策迅速精准；明晰的权责、灵活的机制使公司在市场中往往夺得先机，深度拥有客户。坚持“协作缔造价值，合作必须共赢” 的经营理念，深度耕耘市场，牢固客情关系。

Jianglong Carbon is a wholly-owned private group enterprise with efficient management system, can response and make decision quickly and accurately. It often catches the advantages and gets customers in the market with the clear responsibilities and flexible management. Jianglong insists the business concept “Team efforts creates values, Cooperation lead to win-win” to in-depth study market and establish customer relationship firmly.

全程服务优势 One-stop Service

精益求精，创新发展，感知责任，诚信共赢是江龙炭素的企业精神。公司的销售工程师团队，售前及时为客户提供价值咨询，售中始终为客户降本增效，售后坚持为客户分忧解惑。所有使用异议问题，24H 到达现场解决。

The enterprise spirit of Jianglong Carbon is continuous improvement, innovative development, sense responsibility, honesty & win-win. Sales engineer team of Jianglong can provide pre-sales consultation service timely and valubly, help customers reduce cost and increase efficiency on sale and persist in solving customers' worries and puzzles after sales. All objection problems will be solved on site within 24 hours.

地理区位优势 Advantages of Geographical Location

徐州地处苏、鲁、豫、皖四省交界，素有五省通衢之称，是国家综合交通枢纽。连霍、京福、京沪等国家高速公路主干线在此交汇，京沪、陇海两大干线铁路于此相交，京杭大运河傍城而过，徐州已经初步形成公路、铁路、水运、航空、管道五通汇流的立体化交通格局。强大的物流网络助力，产品配送迅捷，国内产品均可实现 48H送达。

Xuzhou is located at the junction of provinces Jiangsu, Shandong, Henan and Anhui, known as the important national comprehensive transportation hub. It is the junction of national main lines of expressway and railway as well as Beijing-Hangzhou Grand Canal passes by. Xuzhou has already formed a three-dimensional traffic pattern of highway, railway, waterway, and airway. With the advantages of powerful logistics network, the products can be delivered fast within 48 hours in domestic.

焦化煤气优势 Advantages of Power Resources

距工厂 1 公里，2 座百万吨焦炉煤气，是江龙炭素热处理焙烧工序优质稳定的气源保障。

The gas for baking is coke oven gas which is from coking plant 1 kilometer away from Jiang long factory, this coking plant has two coke ovens with capacity million tons. It is the guarantee of high quality and stable gas resources.

电厂电力优势 Advantages of Gas Resources

工厂毗邻不足 2 公里，装机容量 444MW 的火力发电厂是江龙炭素的战略伙伴，为公司石墨化热处理工序提供了强大可靠的电力能源保障。

The power for graphitization is the direct supplied from thermal power plant 2 kilometers away from Jiang long factory whose installed capacity is 444MW. The power plant is the strategic partner of Jianglong and provides the reliable power resources.

FUTURE PROSPECT
展望未来

同心创业，大风歌里觅精神；合作共赢，微山湖畔绘蓝图；创新、开放、友好的江龙炭素将与各界携手共进，立足江苏，辐射全国，放眼全球，用自身实力和对社会的贡献，用诚信和品质打造中国炭素行业的卓越品牌，让江龙牌享誉国际。

Jianglong will insist the spirit consensus and synerg in business and win-win cooperation.
Jianglong will make progress together with all works of life with its innovation, open-mindedness and kindness attitude.
Jianglong will keep a foothold in Jiangsu, extend in China and all of the world.
Jianglong will build the outstanding brand of carbon industry with Its abundant strength, contribution to society, integrity and high quality.
Jianglong will to be renowned in the whole world with Its persistent efforts.

部分主要合作客户
Some of Our Main Partners

BAOWU · NIPPON STEEL · 河钢集团有限公司 HBIS GROUP CO.,LTD. · posco · 沙钢集团 SHAGANG GROUP · 鞍钢股份 ANGANG STEEL CO., LTD · 建龙集团 JIANLONG GROUP · TATA · HYUNDAI STEEL · 日照钢铁控股集团有限公司 RIZHAO STEEL HOLDING GROUP CO.,LTD. · 青山控股 TSINGSHAN · FHS · 新兴铸管 XINXING PIPES · TSG · شركة السويس للصلب SUEZ STEEL CO. · SEAH · MAGNITOGORSK IRON & STEEL WORKS · AKS 100% REFINED STEEL TMT 500W & 550W

SUCCESSFUL CASES
成功案例


UHP750 EAF


UHP700 EAF


UHP650 EAF


UHP600 EAF

UHP550 EAF


UHP500 LF