

燃气用埋地聚乙烯 (PE) 管道系统

FOR BURIED POLYETHYLENE (PE) PIPE SYSTEM

XINGHE GROUP



江苏星河集团有限公司

JIANGSU XINGHE GROUP LIMITED COMPANY

产品制造求精、质量稳定求优

江苏星河集团有限公司地处素有江中明珠、水上花园城市之称的长江第二岛市——扬中，地理位置得天独厚，交通便捷。

公司始建于1982年，是中国塑协塑料管道专业委员会理事单位，是中国工程建设标准化协会委员单位，是全国塑料制品标准化技术委员会TC48/SC3分技术委员会委员单位，是中国石化集团物资装备公司一级供应网络成员单位，是国家化工工艺配管中心站定点生产企业。

公司占地面积约80000平方米，建筑面积35000平方米，注册资金10000万元，拥有从奥地利辛那提公司和德国巴顿菲尔公司进口燃气用埋地聚乙烯管材生产线、管件注塑机、各种检测设备和仪器共30余台套，满足从原材料进厂到成品出厂整个生产过程的检测，确保压力管道元件制造质量。生产的燃气用埋地聚乙烯管材、管件全部按照国家标准进行设计、制造和验收，品种规格齐全。燃气用埋地聚乙烯管材、管件广泛应用于天然气行业。

公司于2004年取得A1级《压力管道元件制造许可证》，严格按照公司《压力管道元件制造质量手册》要求。公司将秉承“质量第一、安全第一、信誉第一、用户至上”的原则，以雄厚的技术实力、先进的设备和严格管理为基础，发挥生产和技术优势，为我国的天然气事业提供优质的产品作出应有的贡献！

Jiangsu Xinghe Group Corporation is situated in the second island city of Yangtze River—Yangzhong where has been always named as the Bright Pearl of the River and the Garden City on the water. With very convenient communications where is richly endowed excellent geographical location.

The corporation founded in 1982, it is the member of council of the Plastic Pipeline Specialization Committee of China Plastic Association, the member of China Engineering Construction Standardization Association, is the member of TC48/SC3 Sub-Technology Committee of All-China Plastic Product Standardization Technology Committee, the member unit of the Equipment and Resource Market of China Petrochemical Group Material and Equipments Corporation. It is the member of first-ranking Supply Network of China Petroleum and Nature Gas Group Corporation, as well as the appointed Production enterprise of State Chemical Industrial Technology Allocation and Administration Center.

The company occupies an area of about 80000 square meters, of which construction area is 35000 square meters. The registered capital is 10000 million. The company possesses production lines of buried PE gas pipe, injection molding machines of pipe fittings and varies of inspection equipment and instruments, a total of more than 30 sets, introduced from Austrian Cincinnati and Germany Baderfer company. The company control the whole process from the raw materials entering factory to the products of ex-factory to guarantee the quality of pressure piping components. Buried PE gas pipes and fittings, all designed manufactured and checked according to GB standards are widely used in natural gas industry.

The company has obtained A1 Grade special equipment manufacturing license from 2004, in this period, the company strictly abides by the relevant laws and regulations and Quality Manual of Pressure Pipe Components of the company. The company will adhere four principles "Quality first, Safety first, Reputation first, Customers first"; base on strong technical strength, advanced equipment and strict management; give full play to advantages of production and technology; make due contribution to provide high quality products for natural gas business.





ADVANCED PRODUCTION LINES

先进的生产设备

江苏星河集团有限公司引进德国巴顿菲尔和奥地利辛辛那提公司具有国际领先水平的管材生产线,配备了原料集中烘干除湿设备,拥有国内顶级注塑机、多角焊接机等先进的生产设备,为高品质的燃气用埋地聚乙烯管材、管件产品提供可靠的保障。

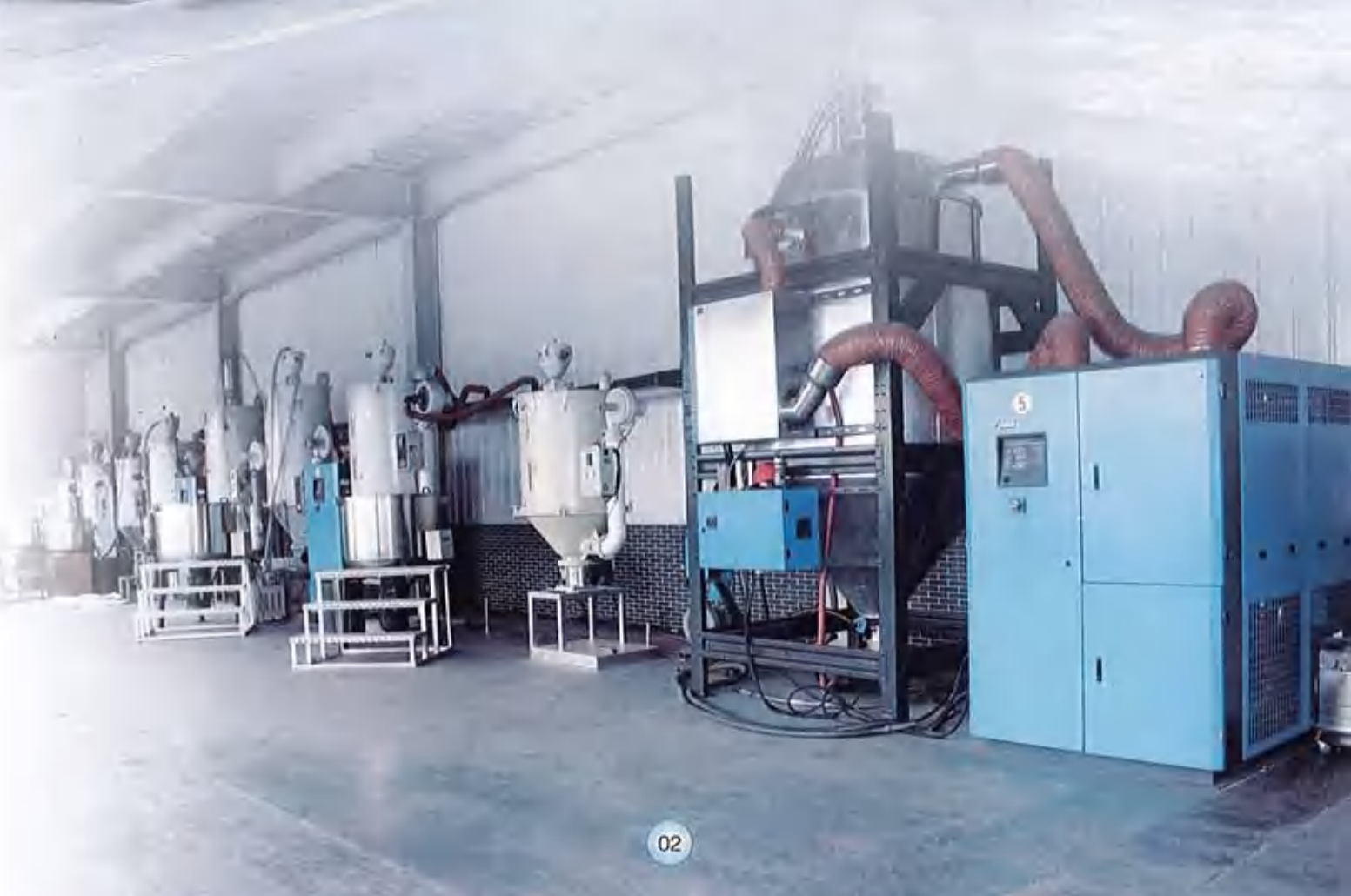
设备特点:

- 原材料集中烘干除湿,真空送料;
- 计算机自动化控制、称重、超声检测系统,工艺控制精确;
- 屏障式螺杆设计,保证塑料充分熔融;
- 独特的蓝式模头设计,确保管材具有良好耐快速和慢速开裂性能;
- 低温高速挤出,保证了塑料的高挤出量;
- 高清晰喷墨标识,确保产品按标准规格要求的永久标识;
- 德国伊诺艾克斯 (INOEX) 公司在线识别设备

Jiangsu Xinghe Group Company introduced Germany Baderfer, Austrian Cincinnati Company international advanced-level pipe and material production lines, matched domestic top-quality raw material, equipped drying and dehumidification equipments, plastic machine and moulds of pipes and parts, multi-angle welder etc. Advanced equipments, all of above mentioned provide reliable guarantee for top-quality products of under ground polyethylene pipes and parts for gas use.

Characteristic of Equipment:

- Drying and dehumidifying raw material, and vacuum feeding.
- Automatically controlled by computer, accurate for ultrasonic inspection system and technique controlling;
- Screen-type screw arbor design can guarantee the plastic smelt fully;
- Special bucket-type mould head design can guarantee the pipe material having excellent performance against high-speed and low-speed cracking;
- Low temperature extrusion, can guarantee plastic to be extruded at large quantity;
- High-clarity ink jetting labl, guarantee the products having permanent identification which complying with standardized specification
- On-line identification equipment of Germany INOEX Company.



PERFECT INSPECTION INSTRUMENT

完善的检测手段

完善的检测手段

公司严格按 ISO9001: 2008 标准质量管理体系要求, 强调预防为主, 重视过程控制。检测中心配备了完善的检验和试验设备。确保高品质的原料生产出符合标准要求的管材、管件产品。

原料复检主要检测仪器有: 水份测定, 密度测定仪, 炭黑 (颜料) 分散度测定仪, 熔融指数分析和氧化诱导期测定仪等。

成品检测设备有: 微机控制的室温和高温管材耐内压试验机, 拉伸试验的电子万能试验机, 差动热分析仪, 冲击试验机等。

Perfect test and measuring means:

Strictly in compliance with the requirements of ISO9001: 2008 standardized quality control system, emphasizes putting prevention first, attach importance to process control, the test and measuring center equipped perfect test and detective equipments, these test and measuring means can guarantee our corporation turning out high-standard pipes and parts by using top-quality raw materail.

The test and measuring instruments can meet the requirements of raw material re-test included as: moisture testing instrument, density tester, carbon-black(pigment)dispersion tester, smelting index analysis and oxidation inductive period testing instrument etc..

The test equipment for finished product include: computer-controlled indoor and high-temperature pipe material internal pressure resistance test machine, electronic universal tester for stretching test, differential thermal analysis instrument as well as impact tester.



管材的力学性能

MECHANICAL PROPERTIES OF PIPE MATERIAL

序号 No.	性能 Performance	单位 Unit	要求 Requirement	试验参数 Test Parameter
1	静液压强度(HS) Hydrostatic Strength	h	破坏时间 ≥ 100 Damage time ≥ 100	20℃(环应力)Ring Stress PE80 PE100 9.0MPa 12.4MPa
			破坏时间 ≥ 165 Damage time ≥ 165	80℃(环应力)Ring Stress PE80 PE100 4.6MPa 5.5MPa
			破坏时间 ≥ 1000 Damage time ≥ 1000	80℃(环应力)Ring Stress PE80 PE100 4.0MPa 5.0MPa
2	断裂伸长率 Breaking Elongation Percentage	%	≥ 350	23℃
3	耐候性 (仅适用于非黑色管材) Weatherability(only applies in no black pipe & fitting)		气候老化后, 以下性能应满足要求: 热稳定性(下表)HS(165h / 80℃)(本表) 断裂伸长率(本表) After weather is ageing, the following performance shall be met: Thermal Stability: Breaking Elongation Percentage	$E \geq 3.5 \text{ GJ/m}$
4	耐快速裂纹扩展(RCP) Weatherability(only applies in no black pipe & fitting)			
	全尺寸(FS)试验: $dn \geq 250\text{mm}$ 或S4试验: 适用于所有直径 Resistina Crack Propagation(quick)RCP: Full Size Test: $dn \geq 250\text{mm}$ or S4 test: applies in all the diameter	MPa	全尺寸试验的临界压力P: $rs \geq 1.5 \times \text{MOP}$ Full Size Test: $d \geq 250\text{mm}$ or S4 test: applies in all the diameter. S4试验的临界压力 $\geq \text{MOP}/2.4 - 0.072$ Critical Pressure of Full size test: Critical Pressure of S4 test:	0℃ 0℃
5	耐慢速裂纹增长 $e \geq 5\text{mm}$ Resisting Crack Extension(slow)	h	165	80℃, 0.8MPa(试验力)(test pressure) 80℃, 0.92MPa(试验力)(test pressure)

1)仅考虑脆性破坏。如果在165h前发生韧性破坏, 则选择较低的应力和相应的最小破坏时间重新试验。
2)热稳定性试验。试验前应去除外表面0.2mm厚的材料。
3)RCP试验适合于在以下条件下使用的PE管材:
—最大工作压力MOP $>0.01 \text{ MPa}$, $d \geq 250\text{mm}$ 的输配系统;
—最大工作压力MOP $>0.4 \text{ MPa}$, $d \geq 90\text{mm}$ 的输配系统;
对于恶劣的工作条件(如温度在0℃以下), 也建议做RCP试验。
4)如果S4试验结果不符合要求, 可以按照全尺寸试验重新进行测试, 以全尺寸试验的结果作为最终依据。
5)PE80, SDR11试验参数。
6)PE100, SDR11试验参数。
1)only consider brittle failure. Slower stress and relevant minimum damage time should be selected to test again if there is any the brittle failure before 165 hours.
2)thermal stability test: materials of 0.2mm thickness on surface should be removed before testing.
3)RCP test applies in PE pipe when the following condition happens:
—Most Operation Pressure MOP $>0.01 \text{ MPa}$, convey and configuration system of $d \geq 250$
—Most Operation Pressure MOP $>0.4 \text{ MPa}$, convey and configuration system of $d \geq 90$
4)inspection should be made according to the requirement of full size test if
S4 test does not meet the requirement. The result of full size test should be final basis.
5)PE80, SDR11 test parameter.
6)PE100, SDR11 test parameter.

管材的物理性能 PHYSICAL PERFORMANCE OF PIPE

序号 No.	项 目 Item	单位 Unit	性能要求 Performance Requirement	试验参数 Test Parameter
1	热稳定性(氧化诱导时间) Thermal Stability(Oxidation Inducement Time)	min	>20	200℃
2	熔体质量流动速率(MFR) Melt Mass Flow Ratio(MFR)	g/10min	加工前后MFR变化 $<20\%$ Variety of MFR is less than 20%	190℃, 5kg
3	纵向回缩率 Vertical Retraction Percentage	%	≤ 3	110℃

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MECHANICAL PROPERTIES OF PIPE MATERIAL

序号 No.	性能 Performance	单位 Unit	要求 Requirement	试验参数 Test Parameter
1	静液压强度(HS) Hydrostatic Strength	h	破坏时间 ≥ 100 Damage time ≥ 100	20℃(环应力)Ring Stress PE80 PE100 9.0MPa 12.4MPa
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			破坏时间 ≥ 1000 Damage time ≥ 1000	80℃(环应力)Ring Stress PE80 PE100 4.0MPa 5.0MPa
2	断裂伸长率 Breaking Elongation Percentage	%	≥ 350	23℃
3	耐候性 (仅适用于非黑色管材) Weatherability(only applies in no black pipe & fitting)		气候老化后, 以下性能应满足要求: 热稳定性(下表)HS(165h / 80℃)(本表) 断裂伸长率(本表) After weather is ageing,the following performance shall be met: Thermal Stability: Breaking Elongation Percentage	E ≥ 3.5GJ/m
4	耐快速裂纹扩展(RCP) Weatherability(only applies in no black pipe & fitting)			
	全尺寸(FS)试验: dn ≥ 250mm或S4试验: 适用于所有直径 Resistina Crack Propagation(quick)RCP: Full Size Test: dn ≥ 250mm or S4 test: applies in all the diameter	MPa	全尺寸试验的临界压力P: rs ≥ 1.5xMOP Full Size Test: d>250mm or S4 test: applies in all the diameter. S4试验的临界压力 ≥ MOP/2.4-0.072 Critical Pressure of Full size test: Critical Pressure of S4 test:	0℃ 0℃
5	耐慢速裂纹增长e>5mm Resisting Crack Extension(slow)	h	165	80℃,0.8MPa(试验力)(test pressure) 80℃,0.92MPa(试验力)(test pressure)
1)仅考虑脆性破坏。如果在165h前发生韧性破坏, 则选择较低的应力和相应的最小破坏时间重新试验。 2)热稳定性试验。试验前应去除外表面0.2mm厚的材料。 3)RCP试验适合于在以下条件下使用的PE管材: —最大工作压力MOP>0.01 MPa, d ≥ 250mm的输配系统; —最大工作压力MOP>0.4MPa, d ≥ 90mm的输配系统; 对于恶劣的工作条件(如温度在0℃以下), 也建议做RCP试验。 4)如果S4试验结果不符合要求, 可以按照全尺寸试验重新进行测试, 以全尺寸试验的结果作为最终依据。 5)PE80,SDR11试验参数。 6)PE100, SDR11试验参数。 1)only consider brittle failure. Slower stress and relevant minimum damage time should be selected to test again if there is any the brittle failure before 165 hours. 2)thermal stability test: materials of 0.2mm thickness on surface should be removed before testing. 3)RCP test applies in PE pipe when the following condition happens: —Most Operation Pressure MOP>0.01 MPa,convey and configuration system of d ≥ 250 —Most Operation Pressure MOP>0.4MPa,convey and configuration system of d ≥ 90 4)inspection should be made according to the requirement of full size test if S4 test does not meet the requirement.The result of full size test should be final basis. 5)PE80,SDR11 test parameter. 6)PE100,SDR11 test parameter.				

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PHYSICAL PERFORMANCE OF PIPE

序号 No.	项 目 Item	单位 Unit	性能要求 Performance Requirement	试验参数 Test Parameter
1	热稳定性(氧化诱导时间) Thermal Stability(Oxidation Inducement Time)	min	>20	200℃
2	熔体质量流动速率(MFR) Melt Mass Flow Ratio(MFR)	g/10min	加工前后MFR变化<20% Variety of MFR is less than 20%	190℃,5kg
3	纵向回缩率 Vertical Retraction Percentage	%	≤3	110℃



星河牌燃气用埋地聚乙烯管材系列 XH POLYETHYLENE GAS PIPE SYSTEM

星河牌燃气用埋地聚乙烯管材采用进口高密度聚乙烯 (HDPE) 原料。按国家标准 GB15558.1《燃气用埋地聚乙烯 (PE) 管道系统第 1 部分: 管材》组织生产。根据用户的要求, 管材可以生产成黑色或黄色, 并可采用不同种类的原料生产。

管材的工作压力

星河牌燃气用埋地聚乙烯管材按标准的要求和设计的工作压力生产。PE80 SDR11 系列管材工作压力为 0.4MPa, SDR17.6 系列管材工作压力为 0.2MPa。PE100 SDR11 系列管材工作压力为 0.6MPa, SDR17.6 系列管材工作压力为 0.4MPa。根据系统的需要, 可生产不同压力等级的管材。压力低, 管材的壁厚减小, 管材成本下降。选择合适的原料和壁厚, 管材的工作压力可达 1.0MPa。

注: SDR 为管外径与壁厚的比值。

管材长度

星河牌燃气用埋地聚乙烯管材的长度一般为 6m、9m、12m, 外径小于等于 63mm 的管也可以盘卷。其它长度可根据用户的要求。

星河牌燃气用埋地聚乙烯管材重量轻且柔韧, 外径 32mm 的管材料 100m 只有 28kg, 一个人可以很容易地搬动, 便于安装敷设。

Xinghe Brand Under Ground Polyethylene Pipe For Gas Use Series:

Xinghe brand under ground polyethylene pipe for gas use are used imported HDPE high-density polyethylene raw material the selected polymeric substance having line welding function, and quick-transmission performance against the environmental stress cracking.

In compliance with the first part of (pipe material) of State GB 15558.1 standard of "under ground polyethylene (PE) pipeline system", the working pressure can arrive to 1.0 Mpa by selecting suitable raw material and thick-wall pipes. The pipes can be processed to yellow or black according to the users' demands. As well as can use various raw material.

Working pressure of pipe material:

Xinghe Brand under ground polyethylene pipe material are produced in compliance with the requirement of standard and according to designed working pressure. PE80 SDR11 pipe series working pressure is 0.4 Mpa, SDR17.6 pipe series working pressure is 0.2Mpa. PE100 SDR11 pipe series working pressure is 0.6Mpa, SDR 17.6 pipe series pipe series working pressure is 0.4 Mpa We can produce various pressure pipes according to the system demands. Less working pressure can reduce the thickness of the pipe wall, so the cost has been lower.

Notice: SDR is the ratio between pipe external diameter and wall thickness

The length of pipes:

The standardized length of Xinghe brand under ground polyethylene pipe is 6、9、12 meters, the external diameter up to 63mm pipe can be rolled up. The other length can meet the customers' requirements.

Xinghe brand polyethylene pipe has the merit of light weight and toughness and tenacity, 100 meters length of the external diameter 32mm pipe only weight 28 kilograms, it is easily moved by one person, so it is convenient for installation and laying out.

燃气用埋地聚乙烯管道的特点

CHARACTERISTICS OF UNDERGROUND PE PLASTIC GAS PIPE SYSTEM

- | | |
|-------------------|--|
| ● 使用寿命在50年以上 | ● Service life in excess of 50 years |
| ● 重量轻 | ● Light in weight |
| ● 费用少于金属管道系统 | ● Lower installed cost than metal pipe systems |
| ● 施工简单 | ● Simple installation |
| ● 土方量少 | ● Less excavation volume |
| ● 不需防腐 | ● Corrosion protection not necessary |
| ● 维修少或不需维修 | ● Low maintenance |
| ● 系统完整性好 | ● Significantly improved system integrity |
| ● 运费少 | ● Reduced transport costs due to lower weight |
| ● 管可盘卷, 进一步降低工程造价 | ● Pipe can be supplied in coils which enables reduced installation costs |
| ● 柔韧性好 | ● Good flexibility |

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管材规格系列 THE SPECIFICATION SERIES OF PIPE MATERIAL

公称外直径(mm) Nominal outside Diameter dn	壁厚 (mm) Wall thickness				大约重量 (kg/100m)	
	PE80		PE100			
	SDR17.6	SDR11	SDR17.6	SDR11	SDR17.6	SDR11
32	—	3.0	—	3.0	—	28.7
40	—	3.7	—	3.7	—	44.2
50	—	4.6	—	4.6	—	68.6
63	3.6	5.8	3.6	5.8	74.2	108.2
75	4.3	6.8	4.3	6.8	104.6	151.6
90	5.2	8.2	5.2	8.2	150.4	219.6
110	6.3	10.0	6.3	10.0	223.7	325.7
125	7.1	11.4	7.1	11.4	285.3	422.2
140	8.0	12.7	8.0	12.7	358.3	526.6
160	9.1	14.6	9.1	14.6	468.0	691.4
180	10.3	16.4	10.3	16.4	591.8	873.9
200	11.4	18.2	11.4	18.2	730.2	1077.7
225	12.8	20.5	12.8	20.5	926.2	1364.1
250	14.2	22.7	14.2	22.7	1135.1	1677.5
280	15.9	25.4	15.9	25.4	1425.9	2103.1
315	17.9	28.6	17.9	28.6	1805.8	2662.2
355	20.2	32.3	20.2	32.3	2298.3	3379.6
400	22.8	36.4	22.8	36.4	2904.1	4290.4
450	25.6	40.9	25.6	40.9	3679.9	5432.7
500	28.4	45.5	28.4	45.5	4376.3	6466.8
560	31.9	50.9	31.9	50.9	5479.8	8104.8
630	35.8	57.3	35.8	57.3	6944.1	10265.9



C型管

C 型管材经证实在废水、污水处理、燃气和由传统原材料如铸铁、钢、混凝土、黏土材质以及石棉材质的工业管道的非开挖修复方面的一种理想的技术。

C 型管材在管材不能到达的地方以及不可能进行开挖工程的重要的交通地带具有特殊的优势。建设工程仅限于小规模的开始以及完工后的工作坑。并且该工作坑在利用原有管网及阀井所进行管材的修复的情况下甚至可以完全复原。

C 型管材的规格从 OD100mm 到 OD500mm，由于管材的 C 形以及 PE 的高柔韧性，即使 OD500 的管材也能至少连续盘卷 120 米。较小口径的管材一次可修复到 700 米，最少数量的连接点既节省了时间和金钱，又提高了可靠性。

C-Shape Pipe

Compact pipe has proved to be the ideal technology for the trenchless rehabilitation of damaged water, sewage, gas and industrial pipelines made of traditional materials such as cast iron, steel, concrete, clay or asbestos/cement.

Compact pipe is especially advantageous where the pipelines is not accessible or where there is heavy traffic so that open trench construction is not possible. Construction work is restricted to small start and end pits, which can even be omitted completely in the case of a sewer pipe rehabilitation where the existing manholes and chambers can be used.

Compact pipe is available in diameter ranging from 100mm to 500mm. The C-shape of the pipe and the high flexibility of the polyethylene allow to coil more than 120m in one continuous length even with a diameter of 500mm. With smaller dimensions, rehabilitation lengths of up to 700m are possible. A minimum amount of pipe connections saves time and money and enhances reliability.





燃气用埋地聚乙烯管件 UNDERGROUND PE PLASTIC GAS FITTINGS

星河牌燃气用埋地聚乙烯管件按国家标准 GB15558.2
《燃气用埋地聚乙烯 (PE) 管道系统第 2 部分:

管件》组织生产, 产品有: 电熔管件、注塑管件、焊制管件、
钢塑过渡接头、法兰、球阀等。品种规格齐全、产品规格系
列不断扩大。

电熔管件系列:

- 采用进口高质量原料、模具注塑制造。
- 焊接电压为国际安全电压 39.5V。
- 管件的足够长度保证了无弯曲应力。
- 采用自动布线技术, 保证电热丝分布均匀、质量稳定、
焊接效果好。

● 隐藏电热丝, 可极大提高管件的抗外力冲击能力, 同
时可避免由于 PE 原料受热流动挤压导致的电热丝短路。

注塑管件系列:

- 采用优质材料模具注塑制造。
- 工作压力满足管网压力要求。
- 内壁光滑阻力小。
- 有热熔对接焊管件和热熔承插焊管件。

焊制管件系列:

- 主要是大口径弯通、三通、四通等。
- 采用热熔对接焊方式在工厂加工成型。
- 工作压力满足管网的压力要求。
- 焊缝强度高于母材强度。
- 使用安全可靠。
- 既可以热熔对接焊又可以电熔焊连接管材。

燃气用埋地聚乙烯管道外径在 250mm 以下的连接可采
用电熔管件连接; 对于外径在 250mm 以上的管道的连接。
多数采用热熔对接焊, 国外的经验和试验证明电熔连接和热
熔对接燃气用埋地聚乙烯管道最合适可靠。电熔连接对操作
工的技能要求少。热熔对接对操作工的技能要求较高, 两者
连接的接口强度都能满足管网的要求。极难出现泄漏的可能
性, 电熔焊接适用于维修改造老管网系统。

The under ground polyethylene pipes and parts for gas use:

Xinghe brand under ground polyethylene pipes and parts are produced in
compliance with the standard of the second part of (pipes and parts) of "the
under ground polyethylene(PE) pipeline system", the products include
electric smelting pipes and parts, plastic injection pipes and parts welding
pipes and parts, steel-plastic transition joints, flanges, ball valves etc., In a
complete specification series, and the product specifications have been
enlarging constantly

Electric smelting pipe and part series

- use imported top-quality raw material, mould plastic injection
manufacturing;
- Welding voltage is the international safe voltage: 39.5V;
- the enough length guarantee that there are no bending stress;
- adopt automatic laying out technology, guarantee the heating wire to be
distributed evenly, the quality is stable and having fine welding effect;
- the concealed heating wire can improve the performance for external
force-resistant and impact-resistant, at same time, it also avoid the heating
wire short-circuit which caused by PE raw material bearing heating flow and
squeezing.

Plastic injection pipe and part series:

- made with top-quality material;
- the working pressure meet the requirements of pipe network;
- the inner pipe wall is smooth and glossy with small resistance;
- include heat smelting abutment welding pipes and parts and heat smelting
plugging welding pipes and parts.

The welding pipe and part series:

- mainly include large bore elbow triplet and four-way piece;
- the heat abutment welding type are processed forming in the factory;
- the working pressure meet the requirement of pipe network;
- the welding intensity is higher than original material;
- operation are safe and reliable;
- it is application both to heat smelting welding connection and to electric
smelting connection pipes and parts.

The under ground polyethylene pipeline for gas use, for the external
diameter up to 250mm connection can use electric smelting pipe and part
connection, for the external diameter over 250mm pipeline connection, most
of them adopt heat smelting abutment welding connection, the domestic
experience and the verifying by test, the electric smelting connection the
under ground polyethylene pipeline is the most suitable and reliable. The
electric smelting connection need less requirement for the operators skill, the
connection junction has high intensity, it is rarely that the leakage possibility
will be appear, at same time, the electric smelting welding connection is
also application to the old system service and reformation.





燃气用埋地聚乙烯管件力学性能

THE MECHANICAL PROPERTIES OF UNDER GROUND POLYETHYLENE PIPES AND PARTS FOR GAS USE

管件性能要求 The performance requirement of pipes and parts:

序号 NO.	项 目 ITEM	性能要求 Performance Requirement		试验参数 Test Parameter	
1	静液压强度 The strength of static hydraulic pressure	20℃	无破坏 no damage 无渗漏 no leakage	密封接头 Sealing joint	A型 a-type
				方向 Direct	任意 arbitrary
				调节时间 Adjusting time	1h
				试验周期 Testing period	100h
				环应力 Circular stress;	
				PE80管材 PE pipe material	10Mpa
				PE100管材 PE pipe material	12.4Mpa
				试验温度 Testing temperature	20℃
		80℃	无破坏 no damage 无渗漏 no leakage	密封接头 Sealing joint	A型 a-type
				方向 Direct	任意 arbitrary
				调节时间 Adjusting time	12h
				试验周期 Testing period	165h
				环应力 Circular stress;	
				PE80管材 PE pipe material	4.6Mpa
PE100管材 PE pipe material	5.5Mpa				
试验温度 Testing temperature	~ 80℃				
2	对接熔接抗剥离强度 (A) stripping resistance for welding connection			试验温度 Testing temperature	23℃ ± 2℃
3	剥离强度 (B) Peel strength	剥离脆性破坏百分比 brittle break peeling percentage ≤ 33.3%		试验温度 Testing temperature	23℃
4	冲击强度 (C) Impact strength	不破坏、不渗漏 no damage, no leakage		试验温度 Testing temperature	0℃
				下落高度 falling height	2m
				落锤重量 weight of monkey hammer	2.5kg
5	压力降 (C) pressure decreasing	dn ≤ 63: 0.05 × 10 ⁻³ MPa dn ≥ 63: 0.01 × 10 ⁻³ MPa		空气流速 air flow speed	制造商标明 marked by manufacturer
				试验介质 testing medium	空气 air
				试验压力 testing pressure	2.5 × 10 ⁻³ MPa
a) 对于80℃静液压试验, 仅考虑脆性破坏。如果在破坏时间前发生韧性破坏, 允许在低应力下重新进行该试验。应力和相关的试验时间应从表中选择。 b) 试验直到破坏: 韧性破坏=通过, 脆性破坏=未通过。 c) 仅适用于电熔承口管件(选择一种方法), 对于公称直径大于90mm的电熔管件, 仲裁时, 采用ISO13954: 1997IDT。					
a) For 80℃ static hydraulic pressure test, only have regarded the brittle break, if the tough damage has been happened during the breaking period, it is allowable to re-test it at the low stress condition, the stress and the smallest relative time should be selected from the table; b) Test till to breaking: tough break=pass; brittle break=have not passed; c) It is only application for electric smelting moulting connection pipes and parts(select one method) for the nominal diameter dimension larger than 90mm's electrical smelting pipes, adopt ISO13954: 1997IDT Standard when arbitrate.					

管件的物理性能 The physical properties of pipes and parts

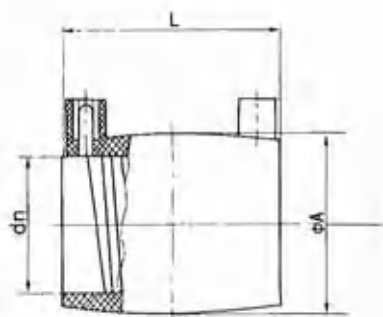
性能 Performance	单位 unit	要求 requirements	试验参数 Test Parameter
氧化诱导时间 oxidation inductive time	min	>20	200℃
熔体质量流动速率(MFR) the flow speed rate of smelt substance	g/10min	管件的MFR变化不应超过管件制造所使用的混配料的MFR的 ± 20% The MFR changing of pipes and parts should not surpass MFR ± 20% of mixed material which used by pipes and parts manufacturer.	190℃/5kg条件(T)
a) 如果与200℃的试验结果有明显的修正关系, 可以在210℃进行试验。仲裁时, 试验温度应为200℃。 All can be tested at the temperature of 210℃, if the test result at the 200℃ temperature has definite modified relationship, the test temperature ought to be 200℃ when arbitrate.			

电熔套管

CASING OF HEATING WIRE

外形尺寸表:

公称直径 dn	ΦA	L	产品代码
20	30	90	
25	35	90	
32	42	90	
40	52	100	
50	64	110	
63	82	120	
75	95	140	
90	112	145	
110	134	160	
125	154	180	
160	196	186	
200	243	192	
225	272	226	
250	303	180	
315	379	190	
355	426	270	

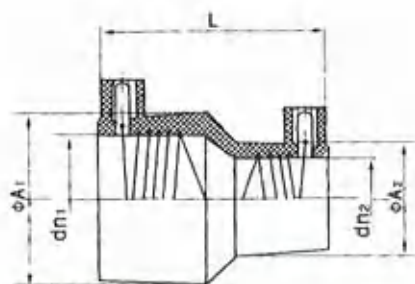


电熔异径

SLOPER OF HEATING WIRE

外形尺寸表:

公称直径 dn1 × dn2	ΦA1	ΦA2	L	产品代码
25 × 20	35	30	100	
32 × 25	42	35	100	
40 × 32	52	42	108	
50 × 32	64	42	113	
50 × 40	64	52	119	
63 × 32	80	42	119	
63 × 40	80	52	125	
63 × 50	80	64	130	
75 × 63	95	80	148	
90 × 63	112	80	152	
90 × 75	112	95	164	
110 × 63	134	80	162	
110 × 90	134	112	178	
160 × 110	193	133	251	

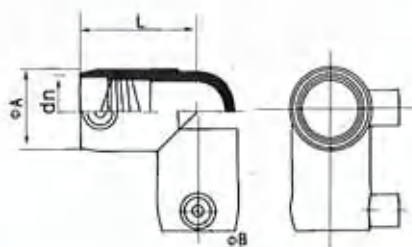


电熔90° 弯通

90 DEGREE ELBOW JOINT OF HEATING WIRE

外形尺寸表:

公称直径 dn	ΦA	L	产品代码
32	42	68	
40	52	74	
50	64	87	
63	82	96	
75	95	110	
90	112	118	
110	134	143	
160	195	206	
200	215	217	
250	312	256	

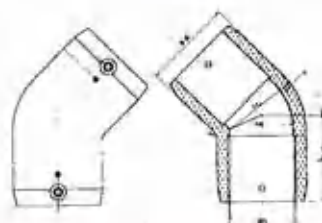




电熔45°弯头 45 DEGREE ELBOW JOINT OF HEATING WIRE

外形尺寸表:

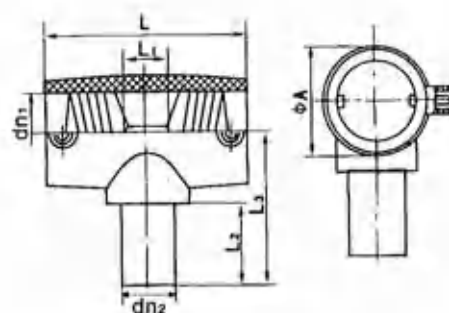
公称直径 dn	ΦA	L	产品代码
32	42	68	
40	52	74	
50	64	87	
63	82	96	
75	95	110	
90	112	118	
110	134	143	
160	195	206	



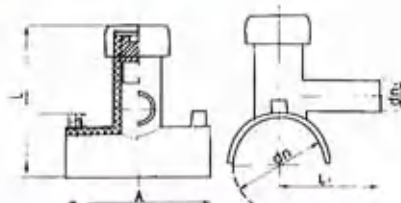
电熔三通 TEE-JOINT OF HEATING WIRE

外形尺寸表:

公称直径 dn1 × dn2 × dn3	ΦA	L	L1	L2	L3	产品代码
20 × 20 × 20	30	110	20	70.5	50	
25 × 20 × 25	35	115	25	73	50	
25 × 25 × 25	35	115	25	73	50	
32 × 20 × 32	42	122	32	76.5	50	
32 × 25 × 32	42	122	32	76.5	50	
32 × 32 × 32	42	122	32	76.5	50	
40 × 20 × 40	52	139	39	86.5	55	
40 × 25 × 40	52	139	39	86.5	55	
40 × 32 × 40	52	139	39	86.5	55	
40 × 40 × 40	52	139	39	86.5	55	
50 × 25 × 50	64	156	46	97	60	
50 × 32 × 50	64	156	46	97	60	
50 × 40 × 50	64	156	46	97	60	
50 × 50 × 50	64	156	46	97	60	
63 × 32 × 63	80	176	56	110	61	
63 × 40 × 63	80	176	56	110	61	
63 × 50 × 63	80	176	56	110	61	
63 × 63 × 63	80	176	56	110	61	
75 × 32 × 75	95	206	66	127	75	
75 × 40 × 75	95	206	66	127	75	
75 × 50 × 75	95	206	66	127	75	
75 × 63 × 75	95	206	66	127	75	
75 × 75 × 75	95	206	66	127	75	
90 × 32 × 90	112	224	80	139	78	
90 × 40 × 90	112	224	80	139	78	
90 × 50 × 90	112	224	80	139	78	
90 × 63 × 90	112	224	80	139	78	
90 × 75 × 90	112	224	80	139	78	
90 × 90 × 90	112	224	80	139	78	
110 × 32 × 110	134	256	96	164	92	
110 × 40 × 110	134	256	96	164	92	
110 × 50 × 110	134	256	96	164	92	
110 × 63 × 110	134	256	96	164	92	
110 × 75 × 110	134	256	96	164	92	
110 × 90 × 110	134	256	96	164	92	
110 × 110 × 110	134	256	96	164	92	



注: 本表只包括部分电熔异径三通规格, 其它规格按用户要求。

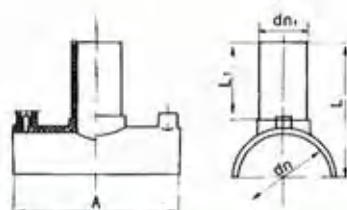


电熔鞍形旁通

HEATING WIRE BYPASS SADDLE

外形尺寸表:

公称直径 dn	A	L	L ₁	产品代码
63 × 32	118	125	78	
90 × 63	180	202	165	
110 × 40	180	202	165	
110 × 63	180	202	165	
160 × 63	180	202	165	
200 × 90	260	240	235	
250 × 90	260	240	235	

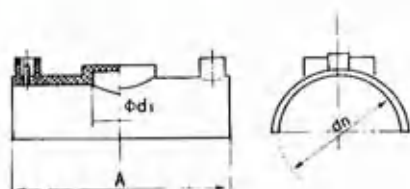


电熔鞍形直通

STRAIGHT PASS SADDLE OF HEATING WIRE

外形尺寸表:

公称直径 dn × dn ₁	A	L	L ₁	产品代码
90 × 63	180	120	64	
110 × 63	180	115	64	
125 × 63	180	125	64	
160 × 63	180	125	64	
200 × 63	245	150	90	
200 × 90	245	150	90	
250 × 63	245	150	90	
250 × 90	245	150	90	
315 × 110	360	190	100	
315 × 160	360	190	100	



电熔鞍形封堵

PLUGGING SADDLE OF HEATING WIRE

外形尺寸表:

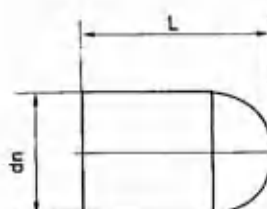
公称直径 dn	A	Φd ₁	产品代码
90	180	48	
110	180	48	
125	180	48	
160	180	48	
200	245	64	
250	245	64	
315	360	90	



热熔注塑管帽 HOT-MELT PLASTIC INJECTION PIPE CAP

外形尺寸表:

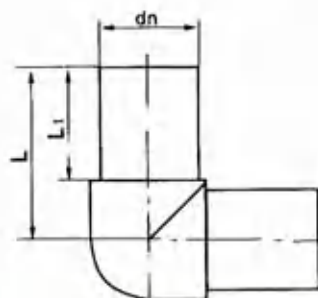
公称直径 dn	L	产品代码
32	61	
40	66	
50	75	
63	84.5	
75	107.5	
90	115	
110	140	
125	137	
160	162	
200	186	
250	193	
315	230	
355	240	



热熔注塑90°弯头 90 DEGREE ELBOW PIPE OF HOT-MELT PLASTIC INJECTION

外形尺寸表:

公称直径 dn	L	L ₁	产品代码
32	71	50	
40	81.5	55	
50	93	60	
63	106	65	
75	122	75	
90	133	77	
110	157	85	
160	203	90	
220	268	130	
250	291	130	
315	346	150	
355	382	175	
400	430	200	
450	471	215	
500	510	229	

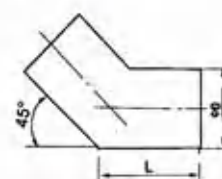


热熔注塑45°弯头

45 DEGREE ELBOW PIPE OF HOT-MELT PLASTIC INJECTION

外形尺寸表:

公称直径 dn	L	公称直径 dn	L	产品代码
110	260	35	505	
125	275	400	450	
160	310	450	600	
200	350	500	650	
250	400	560	710	
315	465	630	780	

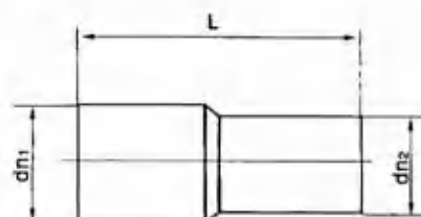


热熔注塑异径

HOT-MELT PLASTIC INJECTION REDUCER

外形尺寸表:

公称直径 $dn_1 \times dn_2$	L	产品代码
110 × 40	245	
110 × 50	245	
110 × 63	105	
110 × 75	130	
110 × 90	130	
125 × 50	197.5	
125 × 63	100	
125 × 75	197.5	
125 × 90	100	
125 × 110	100	
160 × 63	120	
160 × 75	222	
160 × 90	120	
160 × 110	130	
160 × 125	222	
200 × 63	265	
200 × 75	265	
200 × 90	265	
200 × 110	175	
200 × 125	265	
200 × 160	265	
250 × 63	285	
250 × 75	285	
250 × 90	285	
250 × 110	285	
250 × 125	285	
250 × 160	175	
250 × 200	294	
315 × 250	225	
355 × 315	335	
315 × 200	294	
315 × 160	225	

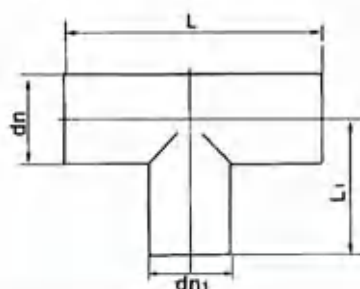


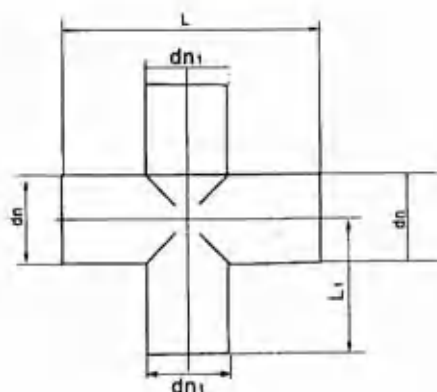
热熔注塑三通

HOT-MELT PLASTIC INJECTION TEE-JOINT

外形尺寸表:

公称直径 $dn \times dn_1 \times dn$	L	L ₁	产品代码
50 × 50 × 50	220	110	
63 × 63 × 63	234	117	
90 × 90 × 90	300	150	
110 × 110 × 110	300	150	
110 × 63 × 110	350	155	
125 × 125 × 125	350	175	
160 × 160 × 160	426	213	
160 × 90 × 160	400	220	
160 × 110 × 160	400	220	
200 × 200 × 200	470	235	
200 × 110 × 200	440	230	
200 × 160 × 200	440	230	
250 × 250 × 250	556	278	
250 × 200 × 250	570	295	
315 × 315 × 315	670	335	
315 × 250 × 315	670	317	
355 × 355 × 355	764	382	
400 × 400 × 400	860	430	
450 × 150 × 450	942	471	
500 × 500 × 500	1020	510	

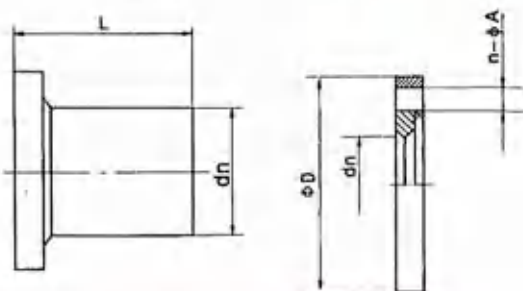




热熔注塑四通 HOT-MELT PLASTIC INJECTION TEE-JOINT

外形尺寸表:

公称直径 dn × dn ₁ × dn	L	L ₁	产品代码
50 × 50 × 50	220	110	
63 × 63 × 63	234	117	
90 × 90 × 90	300	150	
110 × 110 × 110	300	150	
110 × 63 × 110	350	155	
125 × 125 × 125	350	175	
160 × 160 × 160	426	213	
160 × 90 × 160	400	220	
160 × 110 × 160	400	220	
200 × 200 × 200	470	235	
200 × 110 × 200	440	230	
200 × 160 × 200	440	230	
250 × 250 × 250	556	278	
250 × 200 × 250	570	295	
315 × 315 × 315	670	335	
315 × 250 × 315	670	317	
355 × 355 × 355	764	382	
400 × 400 × 400	860	430	
450 × 150 × 450	942	471	
500 × 500 × 500	1020	510	

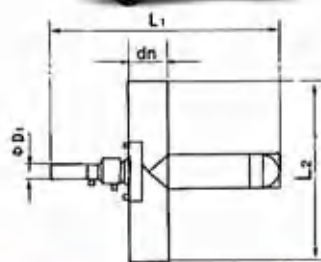


松套法兰 (钢塑法兰接头)

PLASTIC COATING CORROSIVE-RESISTANT STEEL FLANGE PIECE

外形尺寸表:

公称直径 dn	ΦD	L	产品代码
63	165	84	
90	200	104	
110	235	115	
160	285	123	
200	340	180	
250	395	150	
315	445	190	
355	500	190	
400	565	280	



PE冷凝水缸 PE BALL VALVE

外形尺寸表:

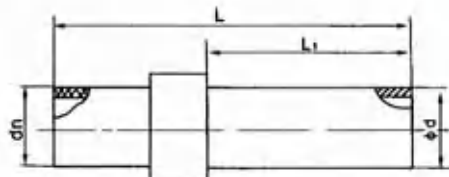
公称直径 dn	ΦD ₁	L ₁	L ₂	产品代码
90	32	660	530	
110	32	660	550	
125	32	660	600	
160	32	660	640	
200	32	1020	660	
250	32	1020	720	
315	32	1100	800	

直管式钢塑接头

SEAMLESS STRAIGHT-PIPE STEEL-PLASTIC JOINT

外形尺寸表:

公称直径 dn × Φd	L	L ₁	产品代码
25 × 27	395	230	
32 × 34	410	230	
40 × 42	410	230	
50 × 48	410	230	
63 × 60	410	230	
90 × 89	410	210	
110 × 108	410	210	
160 × 159	640	350	
200 × 203	730	400	
250 × 248	820	430	
315 × 299	830	450	

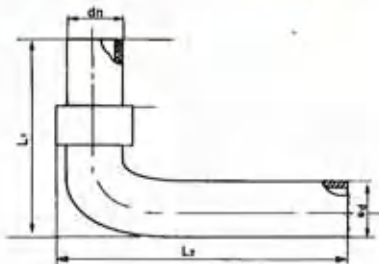


弯管式钢塑接头 (90°)

SEAMLESS CURVED PIPE STEEL-PLASTIC JOINT (90 DEGREE)

外形尺寸表:

公称直径 dn × Φd	L	L ₁	产品代码
32 × 34	400	800	
40 × 42	380	920	
50 × 48	440	800	
63 × 60	500	880	

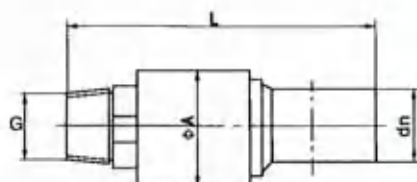


丝扣式钢塑接头 (外螺纹)

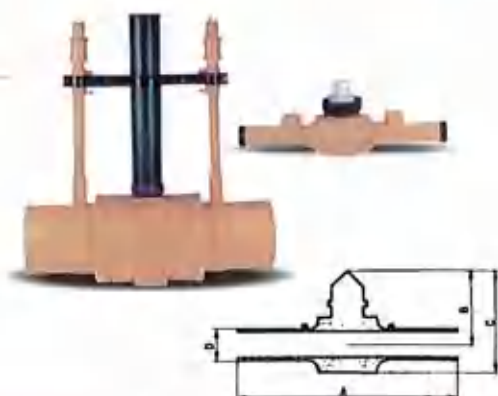
BUTTON-BYPE STEEL-PLASTIC JOINT OF NODULAR CAST IRON

外形尺寸表:

公称直径 dn × G	ΦA	L	产品代码
32 × 1"	55	180	
40 × 1 1/4"	65	185	
50 × 1 1/2"	75	185	
63 × 2"	88	195	



注: 按用户要求可生产成内螺纹型式 (定货时请说明)。



PE球阀 PE CONDENSATION TUBE

外形尺寸表:

规格	A	B	C	D	产品代码
63 (2")	620	165	230	63	
90 (3")	825	245	357	90	
110 (4")	825	245	357	110	
160 (6")	876	292	452	160	
200 (8")	876	292	452	200	
250	1237	410	648	250	
315	1237	410	648	315	

热熔对焊三通 Tee



公称直径 dn	产品代号	公称直径 dn	产品代号
90		315	
110		355	
125		400	
160		450	
180		500	
200		560	
250		630	

热熔对焊管件 (焊制管件)

星河牌热熔对焊管件主要是大口径三通、弯头等。管件选用管材利用多角焊机进行焊接在工厂加工成型。工作压力满足管网的压力要求。焊缝强度高于母材强度。

使用安全、可靠。

在管网的连接中既可以电熔焊又可以对接焊连接。

热熔对焊22.5度弯头 22.5 Deg Bend



公称直径 dn	产品代号	公称直径 dn	产品代号
90		315	
110		355	
125		400	
160		450	
180		500	
200		560	
250		630	

Fabricated Fitting Series

Xinghe fabricated fittings are mostly larger diameter tees, elbows, etc.

The fittings are fabricated by butt welding in factory.

Working pressure can satisfy the requirement of the distribution network.

The strength at the welding joint is higher than the strength of pipe itself.

Safe and reliable.

The fittings can be welded by either electrofusion welding or butt welding in the connection of distribution network.

热熔对焊45度弯头 45 Deg Bend



公称直径 dn	产品代号	公称直径 dn	产品代号
90		315	
110		355	
125		400	
160		450	
180		500	
200		560	
250		630	

热熔90度弯头 90 Deg Bend



公称直径 dn	产品代号	公称直径 dn	产品代号
90		315	
110		355	
125		400	
160		450	
180		500	
200		560	
250		630	

注: 其它角度的对接管件可根据用户的特殊要求定制, 具体事项请与责任业务员联系。

Note: Any angle required can be manufactured. Please contact the sales responsible for further information.



PE管抗化学腐蚀性 CHEMICAC RESISTANCE OF PE

介质 Chemical	浓度 Concentration	耐腐蚀性 Resistance to corrosion		介质 Chemical	浓度 Concentration	耐腐蚀性 Resistance to corrosion	
		20℃	60℃			20℃	60℃
盐酸 Hydrochloric acid	1c	好Good	好Good	邻苯二甲酸 (酞酸) Phthalic acid	50%	好Good	好Good
硫酸 Sulphuric acid	10%	好Good	好Good	硬脂酸 N-octadecanoic acid	100%	好Good	中等Mo derate
	50%	好Good	好Good	丁二酸 (琥珀酸) Succinic acid	50%	好Good	好Good
	98%	好Good	差Poor	醋酸戊酯 iso-Amylacetate	100%	好Good	好Good
	发	差Poor	差Poor	醋酸丁酯 Butyl acetate	100%	好Good	好Good
硝酸 Nitric acid	25%	好Good	好Good	醋酸乙酯 Ethyl acetate	100%	中等Mo derate	差Poor
	50%	中等Mo derate	差Poor(D)	二氯乙基 1,2-Dichloroethylene	100%	差Poor	差Poor(D)
	75%	差Poor	差Poor(D)	二氯苯 Dichlorobenzene	100%	中等Mo derate	差Poor(D)
氯磺酸 Hydrobromic acid	50%	好Good	好Good	原油 Crude oil	100%	好Good	中等Mo derate
	100%	好Good	好Good	醇 Kato ne		好Good	好Good
氢氰酸 Hydrocyanic acid	10%	好Good	好Good	丙酮 Acetone	100%	好Good	好Good
氢氟酸 Hydrofluoric acid	60%	好Good	中等Mo derate	丙烯酸 Acrylic acid	980%	好Good	好Good
王水 Aqua regia		好Good	差Poor	苯甲醇 Benzyl alcohol	100%	好Good	好Good
亚硫酸 Sulphurous acid	30%	好Good	好Good	甲醇 Methanol	100%	好Good	好Good
	50%	好Good	好Good	乙醇(酒精) Ethanol(Alcohol)	96%	好Good	好Good
	98%	好Good	差Poor(D)	氢氧化铵 (氨水) Ammonium hydroxide	1c	好Good	好Good
碳酸 Carbolic acid	100%	好Good	好Good	二氧化硫 Sulfur dioxide	1c	好Good	好Good
硼砂(月石) Borax	sat	好Good	好Good	三氧化硫 Sulfur trioxide	100%	差Poor	差Poor
硼酸 Boric acid	sat	好Good	好Good	苯胺 Aniline	100%	好Good	中等Mo derate
铬酸 Chromium trioxide	20%	好Good	中等Mo derate	苯(甲)酮 Benzoin hydride	100%	好Good	中等Mo derate
	60%	好Good	差Poor	苯 Benzene	100%	中等Mo derate	中等Mo derate
磷酸 Phosphoric acid	50%	好Good	好Good	乙二醇 Glycol	100%	好Good	好Good
	95%	好Good	中等Mo derate	丙三醇(甘油) Glycerol	100%	好Good	好Good
硅酸 Silicic acid	100%	好Good	好Good	甲醛 Formaldehyde	40%	好Good	好Good
甲酸(蚁酸) Formic acid	100%	好Good	好Good	甲酚 Cresol	90%	好Good	好Good(D)
乙酸(醋酸) Acetic acid	10%	好Good	好Good	甲苯 Methylbenzene	100%	中等Mo derate	差Poor
一氯代乙酸 Chloroacetic acid		好Good	好Good	二甲苯 Xylene	100%	中等Mo derate	差Poor
二氯乙酸 Dichloroacetic acid	50%	好Good	好Good	苯酚 Phenol	1c	好Good	好Good(D)
	100%	好Good	中等Mo derate(D)	醚 Ether	100%	中等Mo derate	中等Mo derate
三氯乙酸 Trichloroacetic acid	50%	好Good	好Good	萘 Naphthalene	100%	好Good	中等Mo derate
	100%	好Good	中等Mo derate	氯苯 Chlorobenzene	100%	中等Mo derate	差Poor
丙酸 Methylenecetic acid	50%	好Good	好Good	二氯甲烷(甲叉二氯) Dichloro methane	100%	差Poor	差Poor
	100%	好Good	中等Mo derate	氯气 Chlorine gas	100%	中等Mo derate	中等Mo derate
丁酸 Butyric acid	100%	好Good	中等Mo derate	氯液 Chlorine water	100%	差Poor	差Poor
柠檬酸 Citric acid	sat	好Good	好Good	氟 Fluorine	100%	差Poor	差Poor
冰醋酸 Glacial acetic acid	96%	好Good	中等Mo derate	溴 Bromine	100%	差Poor	差Poor
乙醇酸 Glycolic acid	50%	好Good	好Good	氧(氧气) Oxygen	100%	好Good	中等Mo derate
草酸(乙二酸) Oxalic acid	sat	好Good	好Good	臭氧 Ozone	100%	中等Mo derate	差Poor
乳酸(丙醇) Lactic acid	100%	好Good	好Good	硫磺 Sulfur	100%	好Good	好Good
马来酸 Maleic acid	sat	好Good	好Good	氢氧化钠(烧碱) Sodium hydrate	50%	好Good	好Good
含碳6的高脂肪酸 high fatty acid with carbon 6	100%	好Good	好Good	磷酸盐 (或) 酸 Phosphates	sat	好Good	好Good
油酸 Oleic acid	100%	好Good	中等Mo derate	镍盐 Nickel salt	sat	好Good	好Good
过氧酸 Perchloric acid	20%	好Good	好Good	铜盐 Copper salt	sat	好Good	好Good
	50%	好Good	中等Mo derate	盐类氯化物 Salt chloride	sat	好Good	好Good
	70%	好Good	差Poor	硝酸盐 Nitrate	sat	好Good	好Good

注: 1c- 各种浓度的水溶液
sat-20℃饱和水溶液
D- 脱水

Aqueous solution in different concentration
Saturated aqueous solution at 20℃
Dewatering



安装连接 INSTALLATION AND CONNECTION

燃气用埋地聚乙烯管道具有良好的耐化学腐蚀、耐摩擦、重量轻、铺设快、所需辅助安装连接机具少等特点。

燃气用埋地聚乙烯管道主要采用三种连接方式：电熔连接、热熔对接和法兰钢塑转换连接。

电熔连接：管件本身有电发热元件，当给发热元件通一定时间的电流，管材与管件连接部分被熔融粘接，从而形成结实的、永久的、无渗漏的接口。多数燃气公司采用此种连接方式。

热熔对接焊：将一定温度的加热板放在对好的两管端或管件之间加热一定的时间，抽掉加热板，将要焊接的两端迅速对接并保持一定的对接压力，直到接口冷却。这样一个强度高于管材本体的接口便形成了。此法常用于直径大于 63mm 或壁厚大于 5mm 的管材和管件。

法兰、钢塑转换连接：适用不同材料之间，难于直接连接时，可采用过渡管件进行连接，常用于与金属管材及阀门、流量表、压力表等管路附件的连接。

The under ground polyethylene pipes for gas use are characterized the merits of chemical corrosion resistance, abrasion resistant, light weight, quick laying out and need less auxiliary connection machinery.

The connection of the under ground polyethylene Pipe include three methods: electric smelting connection, heat smelting connection and flange, steel-plastic change-over connection.

Electric smelting connection: for pipes and parts, there are electric heating wire within. When give the current to the heating element for some time, the connection section between pipe and part has been smelted and then adhering, as the result, the section has been formed the solid and permanent, no-leakage connection junction. The most gas companies adopt this connection method.

Heat smelting mouting connection: take the heating plate with some temperature to insert between two pipe ends or part and pipe, heating for some time, then draw out the heating plate, give some pressure to push two ends together quickly till the connection junction has been cool. Therefore a connection junction has formed, where has higher intensity than parts and pipes themselves. This method is application to the pipes and parts which the diameter are larger than 63mm and the thickness of pipe wall are larger than 5mm.

Flange, steel-plastic connection: the method is application to the different material between, for the difficult to connecting different material, it can use transition pipe and part, it is always used for the connection of auxiliary parts, elements, such as metal pipes and parts, valves, flow meters as well as pressure gage.



电熔焊机
electric-melt welding machine



鞍型件钻孔刀具
drilling cutting tool for saddle-shaped part



鞍型件焊接夹具
welding jig for saddle-shaped parts



旋转刮刀
Rotary Scraper RSR 110

可以更均匀有效的刮除管子表面的氧化皮其尺寸范围为 32mm-110mm。



爬壁刮刀
Rotary Scraper CS90-315

为了方便地刮除较大口径管表面的氧化皮，星河公司生产并提供 CS90-315 爬壁刮刀。可刮的范围为 90mm-315mm。



旋转切刀
Rotary Cutter

为了更有效方便地切割塑料管，星河公司生产并提供两种不同型号的塑料管切刀。PCS160 型可切 75mm-160mm 塑料管，PCS075 型可切 32mm-75mm 的塑料管。



断气工具
Squeeze off tools

管路维修、延长或接支管，可用此机械装置使 PE 管断气。从而实现操作。其尺寸范围为 32mm-63mm, 75mm-180mm, 180-250mm。



江苏星河集团公司生产的系列 PE 管件,既适用于电熔焊,也适用于热熔焊。我们建议 $\Phi 160\text{mm}$ (包括以下) 管的连接采用电熔焊,对于 $\Phi 160\text{mm}$ 以上管的连接,电熔焊仍是更可靠,但也可以采用热熔焊。

Our PE pipes are adapted to electric and upsides jointing. For the $\Phi 110\text{mm}$ or below pipes we suggest to take heat-melt jointing. For above $\Phi 110\text{mm}$ pipes,we think electric-melt jointing is more stable but heat-melt jointing can also be in considre ration.



电容焊接件解剖图





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