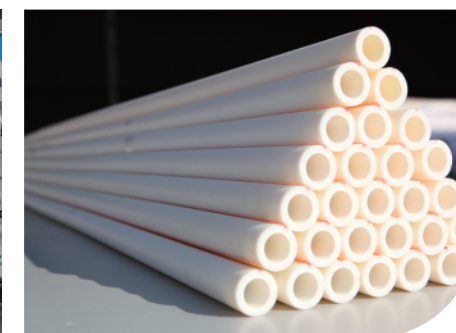
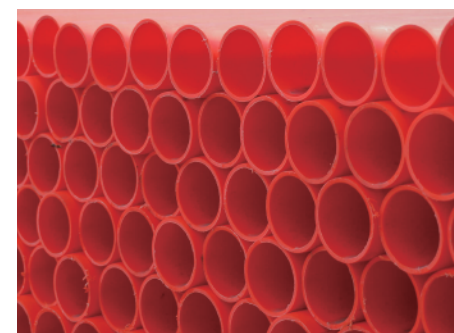


博大管业产品手册

BODA PIPE INDUSTRY PRODUCT MANUAL



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山东博大管业有限公司
SHANDONG BODA PIPES CO.,LTAD.



BODA

PE燃气

PE GAS PIPELINE

PE给水

PE WATER SUPPLY PIPELINE

PE-RTII型供热

PE-RT II TYPE HEATING SUPPLY

PP-R冷热水管材管件

PP-R COLD AND HOT WATER
PIPES AND FITTINGS

MPP电缆导管

MPP CABLE CONDUIT

PE-RTI型地暖

PE-RT I Type Floor Heating

产品手册

PRODUCT
MANUAL



COMPANY INTRODUCTION

企业简介

山东博大管业有限公司创立于 2000 年 9 月，专注塑料管道生产 20 余年，是国内创立时间最早、成套进口设备配置先进的中大型塑料管材生产厂家之一。公司注册资金 10080 万元，占地面积约 60000 平方米，厂房面积约 16000 平方米，专业生产“博源”牌聚乙烯（PE）、聚丙烯（PP）等十大系列产品，产品广泛应用于燃气、给排水、电力、供热和农林灌溉等领域。

FOUNDED IN SEPTEMBER 2000, SHANDONG BODA PIPES CO., LTD. HAS BEEN SPECIALIZING IN THE PRODUCTION OF PLASTIC PIPELINES FOR MORE THAN TWO DECADES. STANDING OUT AS ONE OF THE EARLIEST AND LARGEST MANUFACTURERS OF PLASTIC PIPES IN CHINA, THE COMPANY BOASTS STATE-OF-THE-ART IMPORTED EQUIPMENT. WITH A REGISTERED CAPITAL OF 100.8 MILLION YUAN, THE COMPANY SPANS ACROSS APPROXIMATELY 60,000 SQUARE METERS, INCLUDING A FACTORY AREA OF AROUND 16,000 SQUARE METERS. SPECIALIZING IN THE PRODUCTION OF THE "BOYUAN" BRAND, THE COMPANY OFFERS A DIVERSE RANGE OF TEN SERIES, INCLUDING POLYETHYLENE (PE) AND POLYPROPYLENE (PP). THESE PRODUCTS ARE WIDELY UTILIZED IN VARIOUS FIELDS, SUCH AS GAS, WATER SUPPLY AND DRAINAGE, ELECTRICITY, HEATING, AGRICULTURAL AND FORESTRY IRRIGATION.

公司拥有全球领先的生产设备、CNAS 国家认可实验室，产品畅销国内 23 个省自治区直辖市并出口非洲、东南亚、东欧，年生产能力 60000 吨，实现了经济效益和社会效益的同步发展。

THE COMPANY POSSESSES WORLD-LEADING PRODUCTION EQUIPMENT AND A CNAS NATIONALLY RECOGNIZED LABORATORY. ITS PRODUCTS ARE WIDELY DISTRIBUTED ACROSS 23 PROVINCES, AUTONOMOUS REGIONS, AND MUNICIPALITIES WITHIN CHINA, WHILE ALSO FINDING THEIR WAY TO MARKETS IN AFRICA, SOUTHEAST ASIA, AND EASTERN EUROPE. WITH AN ANNUAL PRODUCTION CAPACITY OF 60,000 TONS, THE COMPANY HAS ACHIEVED SYNCHRONIZED DEVELOPMENT OF ECONOMIC AND SOCIAL BENEFITS.

公司矢志坚守质量至上的信念，率先通过了 ISO9001、ISO14001、ISO45001 三体系认证、诚信管理体系认证、中国环境标志产品认证、五星级售后服务认证，中水润科节水产品认证，创新实施在线监造，并以此严格管理生产、经营活动中的每一个环节，产品质量始终稳居国内领先水平。

COMMITTED TO THE BELIEF OF QUALITY ABOVE ALL ELSE, THE COMPANY HAS TAKEN THE LEAD IN OBTAINING ISO9001, ISO14001, AND ISO45001 SYSTEM CERTIFICATIONS, AS WELL AS CERTIFICATIONS FOR INTEGRITY MANAGEMENT, CHINA ENVIRONMENTAL LABELING PRODUCT, FIVE-STAR AFTER-SALES SERVICE, WATER CONSERVATION PRODUCT CERTIFICATION BY CHINA WATER RESOURCES SCIENCE AND TECHNOLOGY, AND ONLINE SUPERVISION AND INSPECTION. STRICT MANAGEMENT IS IMPLEMENTED IN EVERY ASPECT OF PRODUCTION AND BUSINESS ACTIVITIES, ENSURING THAT PRODUCT QUALITY REMAINS AT THE FOREFRONT OF THE DOMESTIC INDUSTRY.



BUSINESS PHILOSOPHY: STEADY AND PRAGMATIC, SUSTAINABLE DEVELOPMENT, BECOMING A CENTURY-OLD PLASTIC ENTERPRISE

企业经营理念：稳健务实，持续发展，做百年塑企

公司是中国塑料加工工业协会塑料管道专业委员会理事单位、中国城市燃气协会、中国水利灌溉企业协会会员单位。荣获中国品质优秀企业、全国诚信守法民营企业、中国著名品牌、绿色建筑选用产品、全国产品和服务质量诚信品牌、全国管材管件行业领先品牌、全国质量检验信得过产品、山东省高新技术企业、山东名牌、山东省著名商标、山东民营经济知名品牌、山东知名品牌、山东优质品牌、山东省守合同重信用企业、入选 CCTV《品质》等 30 多项荣誉。

THE COMPANY HOLDS ESTEEMED MEMBERSHIPS IN VARIOUS ASSOCIATIONS, INCLUDING THE PLASTIC PIPE PROFESSIONAL COMMITTEE OF THE CHINA PLASTICS PROCESSING INDUSTRY ASSOCIATION, THE CHINA CITY GAS ASSOCIATION, AND THE CHINA WATER CONSERVANCY AND DRAINAGE ENTERPRISE ASSOCIATION. IT HAS RECEIVED OVER 30 HONORS, INCLUDING "CHINA'S QUALITY EXCELLENT ENTERPRISE," "NATIONAL INTEGRITY AND LAW-ABIDING PRIVATE ENTERPRISE," "CHINA'S FAMOUS BRAND," "GREEN BUILDING SELECTED PRODUCT," "NATIONAL PRODUCT AND SERVICE QUALITY INTEGRITY BRAND," "LEADING BRAND IN THE NATIONAL PIPE AND FITTING INDUSTRY," "NATIONALLY TRUSTED PRODUCT FOR QUALITY INSPECTION," "SHANDONG PROVINCIAL HIGH-TECH ENTERPRISE," "SHANDONG FAMOUS BRAND," "SHANDONG FAMOUS TRADEMARK," "SHANDONG PRIVATE ECONOMY WELL-KNOWN BRAND," "SHANDONG WELL-KNOWN BRAND," "SHANDONG QUALITY BRAND," AND "SHANDONG CONTRACT-HONORING AND CREDITWORTHY ENTERPRISE, AND BEING SELECTED FOR CCTV'S QUALITY.



CORPORATE CULTURE

企业文化

企业宗旨：专注博大品质，关注伙伴价值

ENTERPRISE PURPOSE: FOCUS ON BODA QUALITY, VALUE PARTNERS

企业愿景：与时俱进，深耕塑料管道领域

ENTERPRISE VISION: KEEP UP WITH THE TIMES AND DEEPLY CULTIVATE THE FIELD OF PLASTIC PIPES

经营理念：稳健务实，持续发展，做百年塑企

BUSINESS PHILOSOPHY: STEADY AND PRAGMATIC, SUSTAINABLE DEVELOPMENT, BECOMING A CENTURY-OLD PLASTIC ENTERPRISE

管理理念：至善至信，提质增效

MANAGEMENT PHILOSOPHY: PERFECTION AND TRUSTWORTHINESS, IMPROVING QUALITY AND EFFICIENCY

质量理念：博源品质，创造品牌价值

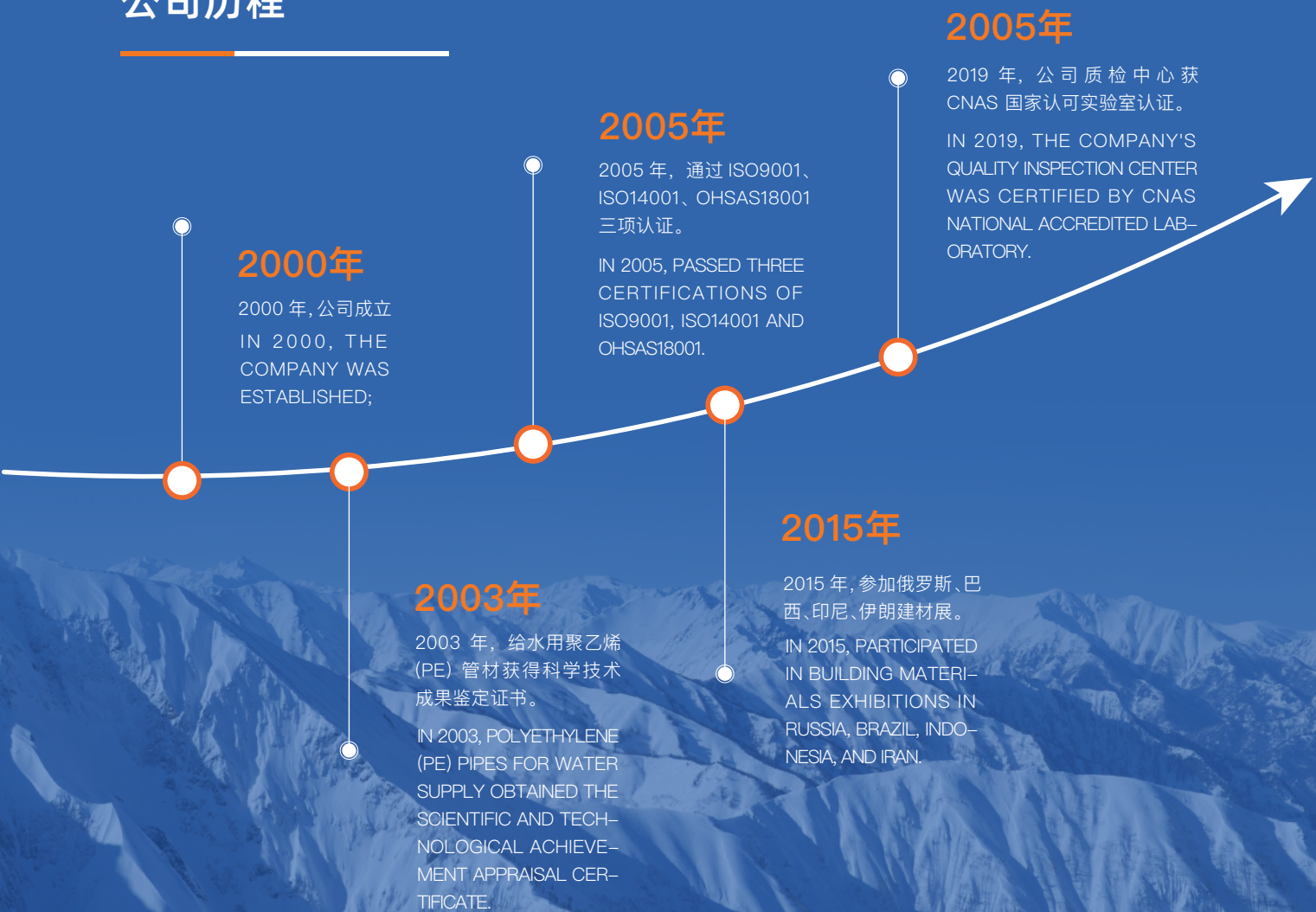
QUALITY PHILOSOPHY: BROAD AND PROFOUND QUALITY, CREATING BRAND VALUE

服务理念：以满足客户需求为目标

SERVICE PHILOSOPHY: AIM TO SATISFY CUSTOMER NEEDS

COMPANY HISTORY

公司历程



PRODUCTION EQUIPMENT

PRODUCT MANUAL 07/08

生产设备

公司拥有全球领先的生产设备、CNAS 国家认可实验室，现有管材生产线 12 条，聚乙烯 (PE) 管材生产线 9 条，其中 8 条为 KRAUSS MAFFEI 高速挤出生产线；MPP 管材生产线 1 条，PP-R 管材生产线 1 条，原材料德国摩丹烘干设备 3 台，集中供料系统 4 套，注塑机 5 台，其它辅助生产设备若干。

THE COMPANY HAS WORLD LEADING PRODUCTION EQUIPMENT AND CNAS NATIONAL ACCREDITATION LABORATORY, THERE ARE 12 PIPE PRODUCTION LINES AND 9 POLYETHYLENE (PE) PIPE PRODUCTION LINES, 8 OF WHICH ARE KRAUSS MAFFEI HIGH-SPEED EXTRUSION LINES; 1 MPP PIPE PRODUCTION LINE, 1 PP-R PIPE PRODUCTION LINE, 3 SETS OF RAW MATERIAL GERMAN MOTAN DRYING EQUIPMENT, 4 SETS OF CENTRALIZED FEEDING SYSTEMS, 5 SETS OF INJECTION MOLDING MACHINES, AND SEVERAL OTHER AUXILIARY PRODUCTION EQUIPMENT.

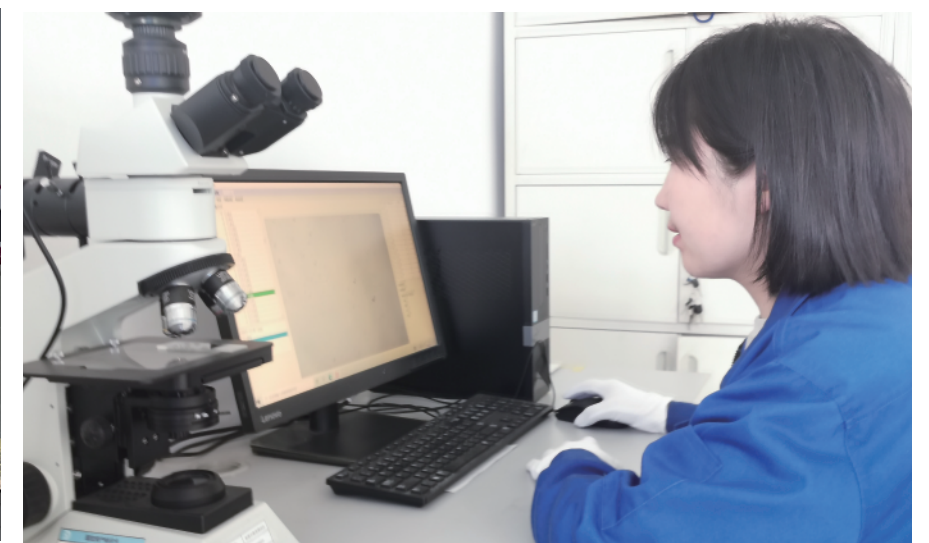


公司投资 200 多万元购进先进的检测设备，建设质量检测中心，在 2019 年获得国家合格评定委员会的 CNAS 实验室认证，同时也获得国际实验室认可合作组织 ILAC 及亚太认可合作组织 APAC 的认证。

THE COMPANY INVESTED MORE THAN 2 MILLION YUAN TO PURCHASE ADVANCED TESTING EQUIPMENT, AND BUILD A QUALITY TESTING CENTER, IN 2019, IT OBTAINED THE CNAS LABORATORY CERTIFICATION OF THE NATIONAL CONFORMITY ASSESSMENT COMMITTEE, AS WELL AS THE CERTIFICATION OF THE INTERNATIONAL LABORATORY ACCREDITATION COOPERATION ORGANIZATION ILAC AND THE ASIA-PACIFIC ACCREDITATION COOPERATION ORGANIZATION APAC.

质量检测中心包括静液压试验室、物理试验室、力学试验室、热学试验室四个先进的检测室。还有样品室、制样室，满足对原材料及成品的检测检验，设备包含日本三菱生产的卡尔·费休微量水分测定仪、德国耐驰生产的差示扫描量热仪、熔体流动速率仪、炭黑分散度测试仪、炭黑含量测试仪、万能试验机、静液压试验机等。

THE QUALITY TESTING CENTER INCLUDES FOUR ADVANCED TESTING ROOMS: HYDROSTATIC LABORATORY, PHYSICS LABORATORY, MECHANICS LABORATORY AND THERMAL LABORATORY. THERE ARE ALSO SAMPLE ROOMS AND SAMPLE PREPARATION ROOMS, WHICH CAN MEET THE TESTING AND INSPECTION OF RAW MATERIALS AND FINISHED PRODUCTS. THE EQUIPMENT INCLUDES KARL FISCHER TRACE MOISTURE ANALYZER PRODUCED BY MITSUBISHI IN JAPAN, DIFFERENTIAL SCANNING CALORIMETER PRODUCED BY NETZSCH IN GERMANY, MELT FLOW RATE METER, CARBON BLACK DISPERSION TESTER, CARBON BLACK CONTENT TESTER, UNIVERSAL TESTING MACHINE, AND STATIC HYDRAULIC TESTING MACHINE, ETC.



PRODUCT INTRODUCTION

产品介绍

PRODUCT MANUAL 11/12



·燃气用埋地聚乙烯(PE)管材

Buried Polyethylene (PE) Pipes for Gas Applications

·给水用聚乙烯(PE)管材

Polyethylene (PE) Water Supply Pipes

·供热用耐热聚乙烯(PE-RT) II 型管材

Heat-resistant Polyethylene (PE-RT) Type II Pipes for Heating Applications

·地暖用耐热聚乙烯(PE-RT) I 型管材

Heat-resistant Polyethylene (PE-RT) Type I Pipes for Floor Heating

·MPP电缆导管

MPP Cable Conduit

·PA12尼龙管

PA12 Nylon Tubing

·聚乙烯(PE)管件

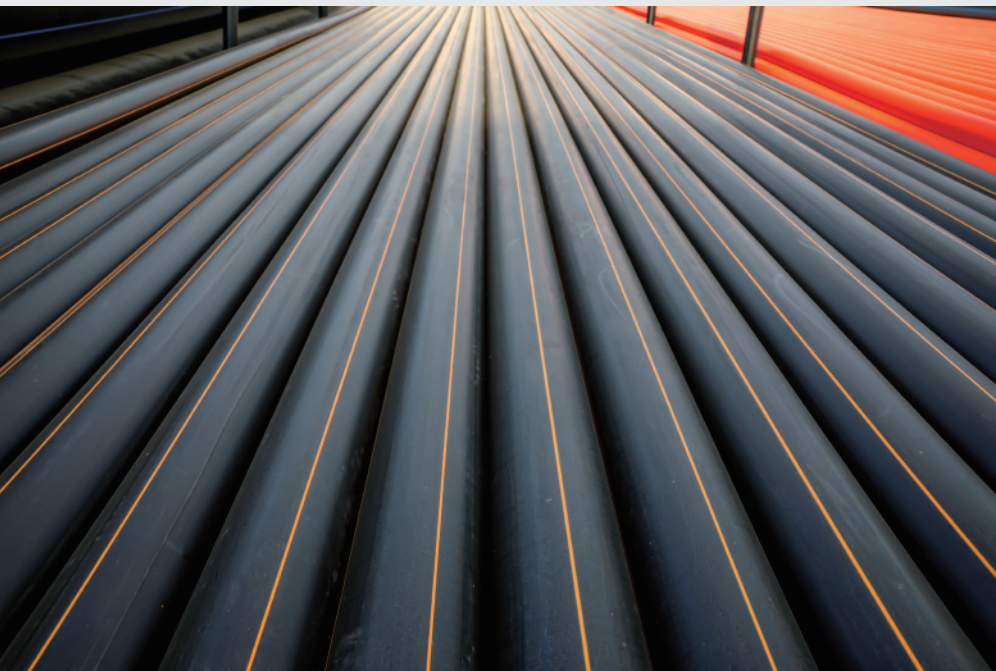
BODA PIPES INDUSTRY

·无规共聚聚丙烯(PP-R)管件

BODA PIPES INDUSTRY

燃气用埋地聚乙烯(PE)管材

BURIED POLYETHYLENE (PE) PIPES FOR GAS APPLICATIONS



EXECUTION STANDARDS AND APPLICATIONS

执行标准及用途

博源牌燃气用埋地聚乙烯管材按照国家标准《燃气用埋地聚乙烯 (PE) 管道系统 第 1 部分：管材》(GB/T15558.1-2015) 的要求组织生产和检验，适用于输送天然气、液化石油气、人工煤气等介质。本公司生产的聚乙烯 (PE) 燃气管材包括 SDR11、SDR17、SDR21 和 SDR26 四个系列，其中 SDR11 和 SDR17 为首选系列。

THE BOYUAN BRAND BURIED POLYETHYLENE PIPES FOR GAS APPLICATIONS ARE PRODUCED AND INSPECTED IN ACCORDANCE WITH THE NATIONAL STANDARD GB/T15558.1-2015 BURIED POLYETHYLENE (PE) PIPELINE SYSTEMS FOR GAS APPLICATIONS – PART 1: PIPES. THESE PIPES ARE DESIGNED FOR THE SAFE TRANSPORTATION OF NATURAL GAS, LIQUEFIED PETROLEUM GAS, ARTIFICIAL GAS, AND OTHER MEDIA. OUR COMPANY OFFERS A RANGE OF PE GAS PIPES IN FOUR DISTINCT SERIES: SDR11, SDR17, SDR21, AND SDR26, WITH SDR11 AND SDR17 BEING OUR PREFERRED AND MOST WIDELY USED SERIES.

PRODUCT FEATURES

产品特点

1、优异的物理性能 (EXCELLENT PHYSICAL PROPERTIES)

采用优质聚乙烯原料，既有良好的刚性、强度、也有很好的柔性、耐蠕变性，而且更有热熔连接性能优良的特点，有利于塑料管道的安装。

CRAFTED FROM TOP-NOTCH POLYETHYLENE, THESE PIPES EXHIBIT ROBUST RIGIDITY AND STRENGTH, ALONG WITH REMARKABLE FLEXIBILITY AND CREEP RESISTANCE. FURTHERMORE, THEIR SUPERIOR HOT-MELT CONNECTION CAPABILITIES GREATLY SIMPLIFY THE INSTALLATION PROCESS OF PLASTIC PIPELINES.



2、耐腐蚀, 使用寿命长 (CORROSION RESISTANCE AND LONG SERVICE LIFE)

聚乙烯 (PE) 是惰性材料，除少量强氧化剂外，可耐多种化学介质的侵蚀，无电化学腐蚀，不需要防腐层，正常使用条件下使用寿命超过 50 年。

POLYETHYLENE (PE) IS AN INERT MATERIAL THAT IS RESISTANT TO CORROSION FROM VARIOUS CHEMICAL MEDIA, EXCEPT FOR A FEW STRONG OXIDIZING AGENTS. IT'S IMMUNE TO ELECTROCHEMICAL CORROSION, ELIMINATING THE NEED FOR A CORROSION PROTECTION LAYER. WITH PROPER USAGE, ITS LIFESPAN CAN EXCEED 50 YEARS.



3、韧性好 (GOOD TOUGHNESS)

聚乙烯 (PE) 管材是一种高韧性管材，其断裂伸长率超过 350%，对基础不均匀沉降和错位的适应能力非常强，抗震性好，世界各地的实践证实 PE 管是抗震性最好的管道。

POLYETHYLENE (PE) PIPES ARE HIGHLY TOUGH, WITH AN ELONGATION AT BREAK EXCEEDING 350%. THEY HAVE STRONG ADAPTABILITY TO UNEVEN SETTLEMENT AND MISALIGNMENT OF THE FOUNDATION, EXCELLENT SEISMIC RESISTANCE, AND HAVE BEEN PROVEN TO BE THE MOST EARTHQUAKE-RESISTANT PIPELINES WORLDWIDE.



4、挠性好

4. EXCELLENT FLEXIBILITY



聚乙烯 (PE) 管材的挠性极好, 小口径管材可以盘卷, 减少大量管件; 聚乙烯 (PE) 管材的走向容易按照施工的要求进行改变, 可在管材允许的弯曲半径内绕过障碍, 降低施工难度。

POLYETHYLENE (PE) PIPES HAVE EXCEPTIONAL FLEXIBILITY, ENABLING SMALL-DIAMETER PIPES TO BE COILED UP, THEREBY SIGNIFICANTLY REDUCING THE NEED FOR ADDITIONAL FITTINGS. FURTHERMORE, THE DIRECTION OF PE PIPES CAN BE EFFORTLESSLY ALTERED TO MEET CONSTRUCTION DEMANDS, ALLOWING THEM TO NAVIGATE AROUND OBSTACLES WITHIN THEIR PERMISSIBLE BENDING RADIUS, THUS SIMPLIFYING THE CONSTRUCTION PROCESS.

5、流通能力大, 耐磨性高

5. HIGH FLOW CAPACITY AND ABRASION RESISTANCE



聚乙烯 (PE) 管材内壁光滑, 摩擦系数小, 介质流动阻力小, 流通能力大, 并具有优异的耐磨性能。

POLYETHYLENE (PE) PIPES FEATURE SMOOTH INNER WALLS, RESULTING IN LOW FRICTION COEFFICIENTS AND MINIMAL FLOW RESISTANCE FOR MEDIA. THIS ENSURES A HIGH FLOW CAPACITY AND EXCEPTIONAL ABRASION RESISTANCE.

6、施工简便

6. EASY CONSTRUCTION



聚乙烯 (PE) 管材密度小、重量轻、搬运方便; 采用热熔或电熔连接方式, 快速简便, 小口径管材可使用盘管, 减少焊口, 加快施工速度。可采用管沉入的方法在水底铺设, 大大降低了施工难度和费用。

POLYETHYLENE (PE) PIPES BOAST A LOW DENSITY AND LIGHTWEIGHT, MAKING THEM EASY TO HANDLE. THEY CAN BE CONNECTED RAPIDLY AND CONVENIENTLY USING HOT-MELT OR ELECTROFUSION WELDING TECHNIQUES. ADDITIONALLY, SMALL-DIAMETER PIPES CAN BE SUPPLIED IN COILED FORM, MINIMIZING WELDING JOINTS AND ACCELERATING CONSTRUCTION. THE PIPES CAN ALSO BE CONVENIENTLY LAID UNDERWATER USING THE PIPE-SINKING METHOD, SIGNIFICANTLY REDUCING CONSTRUCTION CHALLENGES AND COSTS.

7、密封性好

7. GOOD SEALABILITY



聚乙烯 (PE) 管材主要采用热熔、电熔连接, 保证了接口材质结构与管体本身的统一性, 实现了接头与管材的一体化。与橡胶圈类接头或其它机械接头相比, 不存在接头扭曲造成的泄露危险, 密封性好。

POLYETHYLENE (PE) PIPES ARE PRIMARILY CONNECTED USING HOT-MELT OR ELECTROFUSION WELDING TECHNIQUES, GUARANTEEING A SEAMLESS INTEGRATION OF THE JOINT MATERIAL STRUCTURE WITH THE PIPE BODY. THIS ENSURES A UNIFIED AND INTEGRAL CONNECTION BETWEEN THE JOINT AND THE PIPE. UNLIKE RUBBER RING JOINTS OR OTHER MECHANICAL JOINTS, THERE IS NO RISK OF LEAKAGE DUE TO JOINT DISTORTION, RESULTING IN EXCELLENT SEALING PERFORMANCE.

8、抗应力开裂性好

8. GOOD RESISTANCE TO STRESS CRACKING



聚乙烯 (PE) 管材具有优良的耐快速裂纹扩展及耐慢速裂纹增长性能, 耐环境应力性非常突出。

POLYETHYLENE (PE) PIPES EXHIBIT EXCELLENT RESISTANCE TO RAPID CRACK PROPAGATION AND SLOW CRACK GROWTH, WITH OUTSTANDING ENVIRONMENTAL STRESS RESISTANCE.

9、低温抗冲击性好

9. GOOD IMPACT RESISTANCE AT LOW TEMPERATURES



聚乙烯 (PE) 的低温脆化温度低, 可在 -20-40°C 范围内安全使用, 冬季施工时不会发生管材脆裂现象。

POLYETHYLENE (PE) HAS A LOW-TEMPERATURE BRITTLINESS TEMPERATURE, MAKING IT SAFE FOR USE IN A RANGE OF -20° C TO 40° C. THERE IS NO RISK OF BRITTLE FRACTURE DURING WINTER CONSTRUCTION.

序号 SERIAL NUMBER	项目 ITEM	要求 REQUIREMENT	试验参数 TEST PARAMETERS	
1	氧化诱导时间 OXIDATION INDUCTION TIME	>20MIN >20MIN	试验温度 TEST TEMPERATURE	200℃
2	熔体质量流动速率 (MFR)(G/10MIN) MELT MASS FLOW RATE (MFR) (G/10MIN)	加工前后 MFR 变化 <20% MFR CHANGE BEFORE AND AFTER PROCESSING <20%	负荷质量 LOAD MASS 试验温度 TEST TEMPERATURE	5KG 190℃
3	静液压强度 (80℃, 165H) STATIC HYDRAULIC STRENGTH (80℃, 165H)	无破坏, 无渗漏 NO DAMAGE, NO LEAKAGE	PE80 环应力 PE80 RING STRESS PE100 环应力 PE100 RING STRESS 试验时间 TEST DURATION 试验温度 TEST DURATION	4. 5MPA. 5. 4MPA. >165H 80℃
4	断裂伸长率 ELONGATION AT BREAK	>350% ≥350%	试验温度 TEST TEMPERATURE	23±2℃

PE燃气管材
FE GAS PIPE

PE80							
SDR11		SDR17		SDR21		SDR26	
规格 (MM) SPECIFICATION (MM)	单重 (KG/M) UNIT WEIGHT (KG/M)	规格 (MM) SPECIFICATION (MM)	单重 (KG/M) UNIT WEIGHT (KG/M)	规格 (MM) SPECIFICATION (MM)	单重 (KG/M) UNIT WEIGHT (KG/M)	规格 (MM) SPECIFICATION (MM)	单重 (KG/M) UNIT WEIGHT (KG/M)
20X3.0	0.166	—	—	—	—	—	—
25X3.0	0.215	—	—	—	—	—	—
32X3.0	0.286	32X3.0	0.286	—	—	—	—
40X3.7	0.439	40X3.0	0.365	—	—	—	—
50X4.6	0.680	50X3.0	0.464	50X3.0	0.464	—	—
63X5.8	1.075	63X3.8	0.738	63X3.0	0.592	—	—
75X6.8	1.501	75X4.5	1. 042	75X3.6	0.848	75X3.0	0.711
90X8.2	2.175	90X5.4	1.497	90X4.3	1.216	90X3.5	1.002
110X10.0	3.211	110X6.6	2.224	110X5.3	1.822	110X4.2	1.470
125X11.4	4.184	125X7.4	2.837	125X6.0	2.323	125X4.8	1.888
140X12.7	5.221	140X8.3	3. 562	140X6.7	2.911	140X5.4	2. 386
160X14.6	6.805	160X9.5	4.644	160X7.7	3.816	160X6.2	3.128
180X16.4	8.660	180X10.7	5.871	180X8.6	4.794	180X6.9	3. 886
200X18.2	10.619	200X11.9	7.240	200X9.6	5.937	200X7.7	4.820
225X20.5	13.513	225X13. 4	9.189	225X10.8	7.500	225X8.6	6.058
250X22.7	16.548	250X14.8	11.252	250X11.9	9.174	250X9.6	7.502
280X25.4	20.830	280X16.6	14.138	280X13.4	11.586	280X10.7	9. 354
315X28.6	26.281	315X18.7	17.898	315X15.0	14.547	315X12.1	11.923
355X32.2	33.456	355X21.1	22.790	355X16.9	18.472	355X13.6	15.056
400X36.4	42.474	400X23.7	28.782	400X19.1	23.564	400X15.3	19.092
450X40.9	53.784	450X26.7	36. 462	450X21.5	29.786	450X17.2	24. 137
500X45.5	66.490	500X29.7	45.048	500X23.9	36.735	500X19.1	29.773
560X50.9	83.266	560X33.2	56. 447	560X26.7	45.980	560X21.4	37. 306
630X57.3	105.497	630X37.4	71.477	630X30.0	58.187	630X24.1	47.272

PE燃气管材
FE GAS PIPE

PE100							
SDR11		SDR17		SDR21		SDR26	
规格 (MM) SPECIFICATION (MM)	单重 (KG/M) UNIT WEIGHT (KG/M)	规格 (MM) SPECIFICATION (MM)	单重 (KG/M) UNIT WEIGHT (KG/M)	规格 (MM) SPECIFICATION (MM)	单重 (KG/M) UNIT WEIGHT (KG/M)	规格 (MM) SPECIFICATION (MM)	单重 (KG/M) UNIT WEIGHT (KG/M)
20X3. 0	0.167	—	—	—	—	—	—
25X3.0	0.216	—	—	—	—	—	—
32X3.0	0.287	32X3.0	0. 287.	—	—	—	—
40X3.7	0.441	40X3.0	0. 367.	—	—	—	—
50X4.6	0.683	50X3.0	0. 466	50X3. 0	0. 466	—	—
63X5.8	1.080	63X3.8	0.742	63X3.0	0.595	—	—
75X6.8	1.508	75X4.5	1. 047	75X3.6	0.852	75X3.0	0.714
90X8.2	2. 186	90X5.4	1.505	90X4.3	1. 223	90X3.5	1.007
110X10.0	3. 228	110X6.6	2. 236	110X5.3	1.832	110X4.2	1.478
125X11.4	4.205	125X7. 4.	2. 852	125X6.0	2. 335.	125X4.8	1. 898
140X12.7	5.249	140X8.3	3. 580	140X6.7	2. 926	140X5.4	2. 398
160X14.6	6.840	160X9.5	4.669	160X7.7	3. 835	160X6.2	3. 145
180X16.4	8.705	180X10.7	5.901	180X8.6	4.819	180X6.9	3.907
200X18.2	10.673	200X11.9	7.278	200X9.6	5.968	200X7.7	4. 845
225X20.5	13.584	225X13.4	9.237	225X10.8	7.539	225X8.6	6.089
250X22.7	16. 633	250X14.8	11.311	250X11.9	9.222	250X9.6	7.541
280X25.4	20.939	280X16.6	14.212	280X13.4	11.647	280X10.7	9.403
315X28.6	26.416	315X18.7	17.992	315X15.0	14.623	315X12.1	11.985
355 X32. 2	33.628	355X21.1	22.910	355X16.9	18.569	355X13. 6	15. 135
400X36.4	42. 692	400X23.7	28. 933	400X19.1	23.688	400X15.3	19.192
450X40.9	54.060	450X26.7	36. 653	450X21.5	29.942	450X17.2	24. 264
500X45.5	66. 831	500X29.7	45.284	500X23.9	36.927	500X19.1	29. 929
560X50.9	83.702	560X33.2	56.743	560X26.7	46. 221	560X21.4	37.501
630X57.3	106.038	630X37.4	71.851	630X30.0	58.492	630X24.1	47.520



给水用聚乙烯(PE)管材

POLYETHYLENE (PE) WATER SUPPLY PIPES

EXECUTION STANDARD AND APPLICATIONS

执行标准及用途

博源牌给水用聚乙烯管材执行标准为《给水用聚乙烯 (PE) 管道系统 第 2 部分：管材》(GB/113663.2-2018)。聚乙烯 (PE) 给水管材按公称壁厚可分为：SDR9、SDR11、SDR13.6、SDR17、SDR21、SDR26、SDR33、SDR41 八个系列, 广泛应用于城市供水、排水、农业灌排、建筑、矿山等领域。

THE BOYUAN BRAND POLYETHYLENE (PE) WATER SUPPLY PIPES ADHERE TO THE STANDARD POLYETHYLENE (PE) PIPING SYSTEMS FOR WATER SUPPLY – PART 2: PIPES (GB/T 13663.2-2018). THESE PIPES ARE CATEGORIZED INTO EIGHT SERIES BASED ON THEIR NOMINAL WALL THICKNESS: SDR9, SDR11, SDR13.6, SDR17, SDR21, SDR26, SDR33, AND SDR41. THEY FIND WIDESPREAD APPLICATION IN VARIOUS SECTORS, INCLUDING URBAN WATER SUPPLY AND DRAINAGE, AGRICULTURAL IRRIGATION, CONSTRUCTION, AND MINING.



产品特点

Product Features

1、优异的物理性能

1.EXCELLENT PHYSICAL PROPERTIES

采用优质聚乙烯原料, 既有良好的刚性、强度、也有很好的柔性、耐蠕变性, 而且更有热熔连接性能优良的特点, 有利于塑料管道的安装。

CRAFTED FROM TOP-NOTCH POLYETHYLENE, THESE PIPES EXHIBIT ROBUST RIGIDITY AND STRENGTH, ALONG WITH REMARKABLE FLEXIBILITY AND CREEP RESISTANCE. FURTHERMORE, THEIR SUPERIOR HOT-MELT CONNECTION CAPABILITIES GREATLY SIMPLIFY THE INSTALLATION PROCESS OF PLASTIC PIPELINES.



2、耐腐蚀, 使用寿命长

2. CORROSION RESISTANCE AND LONG SERVICE LIFE

聚乙烯 (PE) 是惰性材料, 除少量强氧化剂外, 可耐多种化学介质的侵蚀, 无电化学腐蚀, 不需要防腐层, 正常使用条件下使用寿命超过 50 年。

POLYETHYLENE (PE) IS AN INERT MATERIAL THAT IS RESISTANT TO CORROSION FROM VARIOUS CHEMICAL MEDIA, EXCEPT FOR A FEW STRONG OXIDIZING AGENTS.IT'S IMMUNE TO ELECTRO-CHEMICAL CORROSION, ELIMINATING THE NEED FOR A CORROSION PROTECTION LAYER. WITH PROPER USAGE, ITS LIFESPAN CAN EXCEED 50 YEARS.



3、韧性好

3. GOOD TOUGHNESS

聚乙烯 (PE) 管材是一种高韧性管材, 其断裂伸长率超过 350%, 对基础不均匀沉降和错位的适应能力非常强, 抗震性好, 世界各地的实践证实 PE 管是抗震性最好的管道。

POLYETHYLENE (PE) PIPES ARE HIGHLY TOUGH, WITH AN ELONGATION AT BREAK EXCEEDING 350%. THEY HAVE STRONG ADAPTABILITY TO UNEVEN SETTLEMENT AND MISALIGNMENT OF THE FOUNDATION, EXCELLENT SEISMIC RESISTANCE, AND HAVE BEEN PROVEN TO BE THE MOST EARTHQUAKE-RESISTANT PIPELINES WORLDWIDE.



4、挠性好

4. EXCELLENT FLEXIBILITY



聚乙烯 (PE) 管材的挠性极好, 小口径管材可以盘卷, 减少大量管件; 聚乙烯 (PE) 管材的走向容易按照施工的要求进行改变, 可在管材允许的弯曲半径内绕过障碍, 降低施工难度。

POLYETHYLENE (PE) PIPES HAVE EXCEPTIONAL FLEXIBILITY, ENABLING SMALL-DIAMETER PIPES TO BE COILED UP, THEREBY SIGNIFICANTLY REDUCING THE NEED FOR ADDITIONAL FITTINGS. FURTHERMORE, THE DIRECTION OF PE PIPES CAN BE EFFORTLESSLY ALTERED TO MEET CONSTRUCTION DEMANDS, ALLOWING THEM TO NAVIGATE AROUND OBSTACLES WITHIN THEIR PERMISSIBLE BENDING RADIUS, THUS SIMPLIFYING THE CONSTRUCTION PROCESS.

5、流通能力大, 耐磨性高

5. HIGH FLOW CAPACITY AND ABRASION RESISTANCE



聚乙烯 (PE) 管材内壁光滑, 摩擦系数小, 介质流动阻力小, 流通能力大, 并具有优异的耐磨性能。

POLYETHYLENE (PE) PIPES FEATURE SMOOTH INNER WALLS, RESULTING IN LOW FRICTION COEFFICIENTS AND MINIMAL FLOW RESISTANCE FOR MEDIA. THIS ENSURES A HIGH FLOW CAPACITY AND EXCEPTIONAL ABRASION RESISTANCE.

6、施工简便

6. EASY CONSTRUCTION



聚乙烯 (PE) 管材密度小、重量轻、搬运方便; 采用热熔或电熔连接方式, 快速简便, 小口径管材可使用盘管, 减少焊口, 加快施工速度。可采用管沉入的方法在水底铺设, 大大降低了施工难度和费用。

POLYETHYLENE (PE) PIPES BOAST A LOW DENSITY AND LIGHTWEIGHT, MAKING THEM EASY TO HANDLE. THEY CAN BE CONNECTED RAPIDLY AND CONVENIENTLY USING HOT-MELT OR ELECTROFUSION WELDING TECHNIQUES. ADDITIONALLY, SMALL-DIAMETER PIPES CAN BE SUPPLIED IN COILED FORM, MINIMIZING WELDING JOINTS AND ACCELERATING CONSTRUCTION. THE PIPES CAN ALSO BE CONVENIENTLY LAID UNDERWATER USING THE PIPE-SINKING METHOD, SIGNIFICANTLY REDUCING CONSTRUCTION CHALLENGES AND COSTS.

7、密封性好

7. GOOD SEALABILITY



聚乙烯 (PE) 管材主要采用热熔、电熔连接, 保证了接口材质结构与管体本身的统一性, 实现了接头与管材的一体化。与橡胶圈类接头或其它机械接头相比, 不存在接头扭曲造成的泄露危险, 密封性好。

POLYETHYLENE (PE) PIPES ARE PRIMARILY CONNECTED USING HOT-MELT OR ELECTROFUSION WELDING TECHNIQUES, GUARANTEEING A SEAMLESS INTEGRATION OF THE JOINT MATERIAL STRUCTURE WITH THE PIPE BODY. THIS ENSURES A UNIFIED AND INTEGRAL CONNECTION BETWEEN THE JOINT AND THE PIPE. UNLIKE RUBBER RING JOINTS OR OTHER MECHANICAL JOINTS, THERE IS NO RISK OF LEAKAGE DUE TO JOINT DISTORTION, RESULTING IN EXCELLENT SEALING PERFORMANCE.

8、抗应力开裂性好

8. GOOD RESISTANCE TO STRESS CRACKING



聚乙烯 (PE) 管材具有优良的耐快速裂纹扩展及耐慢速裂纹增长性能, 耐环境应力性非常突出。

POLYETHYLENE (PE) PIPES EXHIBIT EXCELLENT RESISTANCE TO RAPID CRACK PROPAGATION AND SLOW CRACK GROWTH, WITH OUTSTANDING ENVIRONMENTAL STRESS RESISTANCE.

9、低温抗冲击性好

9. GOOD IMPACT RESISTANCE AT LOW TEMPERATURES



聚乙烯 (PE) 的低温脆化温度低, 可在 $-20\sim 40^{\circ}\text{C}$ 范围内安全使用, 冬季施工时不会发生管材脆裂现象。

POLYETHYLENE (PE) HAS A LOW-TEMPERATURE BRITTLENESS TEMPERATURE, MAKING IT SAFE FOR USE IN A RANGE OF -20°C TO 40°C . THERE IS NO RISK OF BRITTLE FRACTURE DURING WINTER CONSTRUCTION.

产品规格
Product Specifications

PE100 给水管材(PE100 Water Supply Pipes)					
SDR9/2. 0MPa		SDR11/1.6MPa		SDR13. 6/1.25MPa	
规格 (MM) SPECIFICATION (MM)	单重 (KG/M) UNIT WEIGHT (KG/M)	规格 (MM) SPECIFICATION (MM)	单重 (KG/M) UNIT WEIGHT (KG/M)	规格 (MM) SPECIFICATION (MM)	单重 (KG/M) UNIT WEIGHT (KG/M)
20X2.4	0.141	20X2.3	0. 132	—	
25X3.0	0. 222	25X2. 3	0. 169		
32X3.6	0. 338	32X3. 0	0. 283	32X2.4	0.230
40X4.5	0. 526	40X3.7	0.437	40X3.0	0. 360
50X5.6	0.814	50X4.6	0.676	50X3.7	0.560
63X7.1	1.284	63X5.8	1.074	63X4.7	0. 887
75X8.4	1. 81.	75X6.8	1.501	75X5.6	1. 258
90X10.1	2.611	90X8.2	2. 170	90X6.7	1.806
110X12.3	3.889	110X10.0	3. 236	110X8.1	2.671
125X14.0	5.029	125X11.4	4. 191.	125X9.2	3. 447
140X15.7	6. 315	140X12.7	5. 231	140X10.3	4. 323
160X17.9	8. 231	160X14. 6	6.869	160X11.8	5. 659
180X20.1	10.4	180X16. 4	8. 682	180X13.3	7. 174.
200X22.4	12. 873	200X18.2	10. 707.	200X14. 7	8. 814.
225X25.2	16. 292	225X20.5	13. 565	225X16.6	11. 194.
250X27.9	20. 0515	250X22.7	16. 696	250X18.4	13. 789
280X31.3	25. 189	280X25. 4	20.926	280X20.6	17. 291
315X35.2	31.87	315X28.6	26. 505	315X23.2	21. 906
355X39.7	40.504	355X32.2	33. 634	355X26.1	27. 777
400X44.7	51.391	400X36.3	42.721	400X29.4	35. 257
450X50.3	65.056	450X40.9	54. 143	450X33.1	44.653
500X55.8	80.205	500X45.4	66.784	500X36. 8	55. 157.
560X62.5	100. 615	560X50.8	83. 703.	560X41.2	69. 165
630X70.3	127.321	630X57.2	106.020	630X46. 3	87. 450
710X79.3	161. 840	710X64.5	134. 724	710X52.2	111. 110
800X89.3	205. 365	800X72.6	170.883	800X58.8	141.027
—	—	900X81.7	216. 333	900X66.2	178.611
—	—	1000X90.2	265.547	1000X72.5	217. 591
—	—	—	—	1200X88.2	317.310

产品规格
Product Specifications

PE100 给水管材(PE100 Water Supply Pipes)					
SDR17/1. 0MPa		SDR11/1.6MPa		SDR13. 6/1.25MPa	
规格 (MM) SPECIFICATION (MM)	单重 (KG/M) UNIT WEIGHT (KG/M)	规格 (MM) SPECIFICATION (MM)	单重 (KG/M) UNIT WEIGHT (KG/M)	规格 (MM) SPECIFICATION (MM)	单重 (KG/M) UNIT WEIGHT (KG/M)
—		—		—	
—		—		—	
32X2.3	0.220	—		—	
40X2.4	0. 290	40X2.3	0. 280	—	
50X3.0	0. 460	50X2.4	0. 370	50X2.3	0. 360
63X3.8	0. 728	63X3.0	0. 582	63X2.5	0. 489
75X4.5	1. 027	75X3.6	0. 832	75X2.9	0. 677
90X5.4	1. 478.	90X4. 3	1. 192	90X3.5	0. 980
110X6.6	2. 208	110X5.3	1. 796	110X4.2	1. 438
125X7.4	2.816	125X6.0	2.310	125X4.8	1.867
140X8. 3	3. 537.	140X6.7	2.890	140X5. 4.	2. 352
160X9.5	4. 626	160X7.7	3. 795	160X6.2	3. 086
180X10. 7	5. 862	180X8. 6	4. 770	180X6.9	3. 865
200X11.9	7. 243	200X9.6	5.915	200X7.7	4. 791
225X13.4	9. 175	225X10.8	7.486	225X8. 6	6. 02
250X14.8	11.264	250X11.9	9. 168	250X9. 6	7. 468
280X16.6	14. 1491	280X13.4	11.560	280X10. 7	9. 324
315X18.7	17. 929.	315X15.0	14. 561	315X12.1	11.860
355X21.1	22. 797	355X16. 9	18. 489	355X13.6	15.024
400X23.7	28. 858	400X19.1	23.541	400X15.3	19. 046
450X26.7	36. 572	450X21.5	29.811	450X17.2	24. 088
500X29.7	45. 198	500X23. 9	36. 820	500X19. 1	29. 7221
560X33.2	56. 594	560X26.7	46. 076	560X21.4	37. 297
630X37.4	71.7171	630X30.0	58.245	630X24. 1	47.250
710X42.1	90. 987	710X33.9	74.165	710X27.2	60. 097
800X47.4	115. 433	800X38.1	93. 931	800X30.6	76. 184
900X53.3	146. 031	900X42.9	118. 981.	900X34. 4	96. 353T
1000X59.3	180. 507.	1000X47.7	146. 987.	1000X38.2	118. 888
1200X67.9	248. 738	1200X57.2	211.521	1200X45.9	171.413

管材的物理力学性能
Физико-механическое свойство труб

序号 SERIAL NUMBER	项目 ITEM	要求 REQUIREMENT	试验参数 TEST PARAMETERS	
1	氧化诱导时间 OXIDATION INDUCTION TIME	>20MIN > 20MIN	试验温度 TEST TEMPERATURE	210℃
2	熔体质量流动速率 (MFR)(G/10MIN) MELT MASS FLOW RATE (MFR) (G/10MIN)	加工前后 MFR 变化 <20% MFR CHANGE BEFORE AND AFTER PROCESSING <20%	负荷质量 LOAD MASS	5KG
			试验温度 TEST TEMPERATURE	190℃
3	静液压强度 (80℃, 165H) STATIC HYDRAULIC STRENGTH (80℃, 165H)	无破坏, 无渗漏 NO DAMAGE, NO LEAKAGE	PE80 环应力 PE80 RING STRESS	4. 5MPa
			PE100 环应力 PE100 RING STRESS	5. 4MPa
			试验时间 TEST DURATION	>165H
			试验温度 TEST DURATION	80℃
4	断裂伸长率 ELONGATION AT BREAK	>350% ≥350%	试验温度 TEST TEMPERATURE	23±2℃



无规共聚聚丙烯(PP-R)管材

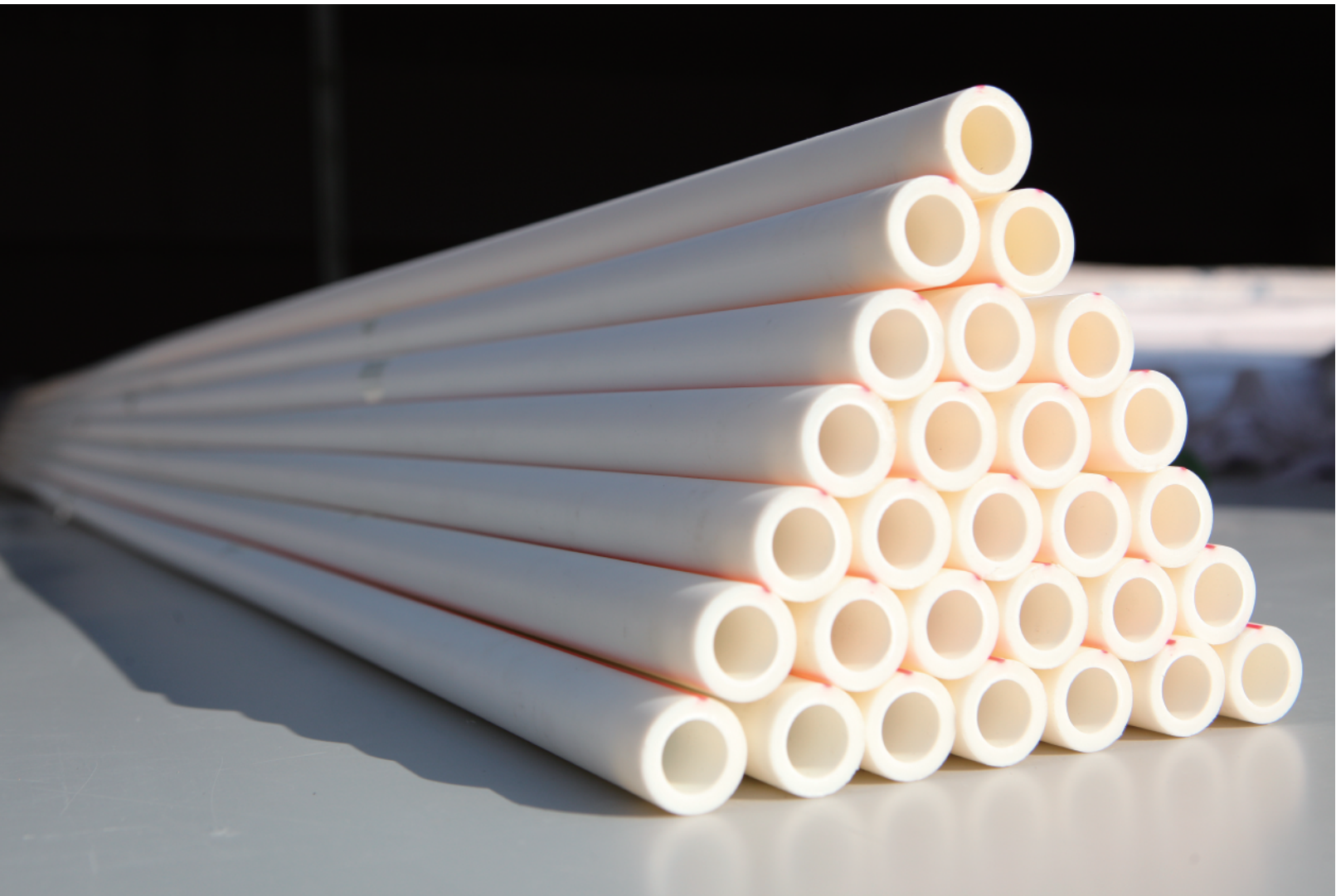
RANDOM COPOLYMER POLYPROPYLENE (PP-R) PIPES

EXECUTION STANDARDS AND APPLICATIONS

执行标准及用途

博源牌冷热水用聚丙烯管材执行标准为《冷热水用聚丙烯管道系统第2部分：管材》(GB/T18742.2-2017) 聚丙烯 (PP-R) 给水管材按公称壁厚可分为：可分为 S6.3、S5、S4、S3.2、S2.5、S2 六个系列，广泛应用于建筑冷热水系统、纯水系统、热水循环系统、饮料生产输送系统、化学介质输送系统及其它工农业用管道系统。

THE POLYPROPYLENE PIPES FOR COLD AND HOT WATER FROM BOYUAN BRAND ADHERE TO THE STANDARD OF POLYPROPYLENE PIPING SYSTEMS FOR COLD AND HOT WATER APPLICATIONS – PART 2: PIPES (GB/T 18742.2-2017). POLYPROPYLENE (PP-R) WATER SUPPLY PIPES CAN BE CLASSIFIED INTO SIX SERIES BASED ON THEIR NOMINAL WALL THICKNESS: S6.3, S5, S4, S3.2, S2.5, AND S2. THEY FIND WIDESPREAD USE IN VARIOUS SYSTEMS, INCLUDING BUILDING COLD AND HOT WATER SYSTEMS, PURE WATER SYSTEMS, HOT WATER CIRCULATION SYSTEMS, BEVERAGE PRODUCTION AND TRANSPORTATION SYSTEMS, CHEMICAL MEDIA TRANSPORTATION SYSTEMS, AS WELL AS OTHER INDUSTRIAL AND AGRICULTURAL PIPELINE APPLICATIONS.



产品特点

Product Features

PP-R 管除了具有一般塑料管重量轻、耐腐蚀、不结垢、使用寿命长等特点外，还具有以下主要特点：

APART FROM SHARING THE TYPICAL ADVANTAGES OF PLASTIC PIPES, SUCH AS BEING LIGHTWEIGHT, CORROSION-RESISTANT, NON-SCALING, AND HAVING A LONG SERVICE LIFE, PP-R PIPES ALSO EXHIBIT THE FOLLOWING KEY FEATURES:

1、无毒卫生

1. NON-TOXIC AND HYGIENIC



PP-R 原料属聚烯烃，其分子仅由碳、氢元素组成，无毒性，卫生性能可靠。使用 PP-R 管可以避免使用镀锌管所造成的内壁结垢、生锈等引起的水质“二次污染”。另外 PP-R 管在原料生产、制品加工、使用及废弃全过程均不会对人体及环境造成不利影响。

PP-R RAW MATERIALS CONSIST SOLELY OF CARBON AND HYDROGEN ELEMENTS, BELONGING TO THE POLYOLEFIN FAMILY. THIS COMPOSITION ENSURES THEIR NON-TOXIC NATURE AND RELIABLE HYGIENE PERFORMANCE. BY USING PP-R PIPES, WE CAN ELIMINATE WATER QUALITY ISSUES SUCH AS SCALING AND RUSTING ON THE INNER WALLS OF GALVANIZED PIPES, THUS PREVENTING "SECONDARY POLLUTION." FURTHERMORE, THROUGHOUT THEIR LIFECYCLE— FROM RAW MATERIAL PRODUCTION TO PROCESSING, USAGE, AND DISPOSAL—PP-R PIPES POSE NO HARMFUL EFFECTS ON HUMANS OR THE ENVIRONMENT.

2、保温节能

2.THERMAL INSULATION AND ENERGY EFFICIENCY



PP-R 管是典型的结晶性聚合物，导热系数远小于金属管道，在热水供给中，能减少热量的散发。

PP-R PIPES ARE TYPICAL CRYSTALLINE POLYMERS WITH A THERMAL CONDUCTIVITY FAR LOWER THAN METAL PIPES. THIS ALLOWS FOR REDUCED HEAT LOSS IN HOT WATER SUPPLY SYSTEMS.



3、耐热性能强

3.EXCELLENT HEAT RESISTANCE

PP-R 管的最高工作温度可以达到 95℃, 长期 (50 年) 使用温度为 70℃, 能够满足家庭热水系统的正常使用。

PP-R PIPES BOAST A MAXIMUM OPERATING TEMPERATURE OF 95 ° C AND A SUSTAINED (50-YEAR) USAGE TEMPERATURE OF 70 ° C, MAKING THEM SUITABLE FOR THE REGULAR OPERATION OF HOUSEHOLD HOT WATER SYSTEMS.

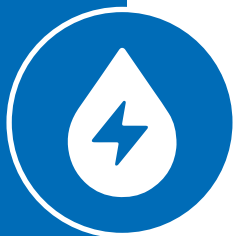


4、耐腐蚀性能强

4.STRONG CORROSION RESISTANCE

PP-R 管的材质属于非极性材料, 对水中的所有离子不起任何化学反应, 不会被化学元素侵蚀。

PP-R PIPES ARE MADE OF NON-POLAR MATERIALS THAT DO NOT REACT CHEMICALLY WITH ANY IONS IN WATER, ENSURING THEY ARE NOT ERODED BY CHEMICAL ELEMENTS.



5、超低水阻

5.ULTRA-LOW WATER RESISTANCE

PP-R 管的内壁摩擦系数为 0.007, 远低于金属管道, 输水能力相比同规格的金属管能够提升 30% 以上, 且不会因为生锈结垢等因素导致输水能力降低。

PP-R PIPES EXHIBIT A FRICTION COEFFICIENT OF 0.007 ON THEIR INNER WALLS, SIGNIFICANTLY LOWER THAN METAL PIPES. THIS TRANSLATES INTO A WATER DELIVERY CAPACITY THAT SURPASSES METAL PIPES OF SIMILAR SPECIFICATIONS BY MORE THAN 30%. FURTHERMORE, THEIR WATER DELIVERY CAPACITY REMAINS UNAFFECTED BY ISSUES SUCH AS RUSTING OR SCALING.

6、密封性能强

6.EXCELLENT SEALING PERFORMANCE

PP-R 管拥有良好的焊接性能, 管件与弯头连接时可采用热熔和电熔, 可以使同种材质的管材和管件成为一个整体, 接口处的拉伸、弯曲和冲击强度均高于管材本身, 杜绝了漏水的隐患。

PP-R PIPES BOAST SUPERIOR WELDING CAPABILITIES, FACILITATING SEAMLESS CONNECTIONS BETWEEN FITTINGS AND ELBOWS THROUGH HOT-MELT OR ELECTROFUSION WELDING TECHNIQUES. THIS INTEGRATION ENSURES THAT THE INTERFACE BETWEEN THE PIPE AND FITTINGS IS STRONGER THAN THE PIPE ITSELF IN TERMS OF TENSILE, BENDING, AND IMPACT RESISTANCE, THEREBY ELIMINATING ANY POTENTIAL RISK OF LEAKS.



7、施工便捷

7.CONVENIENT INSTALLATION

PP-R 管材密度小, 约为铜管的 10.5%, 钢管的 12%, 便于搬运; PP-R 管材、管件的热熔焊接通过一专用工具在数秒或数十秒内即可完成, 快速可靠; 在运输及安装中, 不仅降低了施工强度, 更能缩短施工周期。

PP-R PIPES BOAST A LIGHTWEIGHT DESIGN, WITH A DENSITY THAT IS ONLY ABOUT 10.5% OF COPPER PIPES AND 12% OF STEEL PIPES, FACILITATING EASE OF HANDLING. HOT-MELT WELDING OF PP-R PIPES AND FITTINGS CAN BE SWIFTLY AND SECURELY ACCOMPLISHED WITHIN SECONDS OR MINUTES USING A SPECIALIZED TOOL. THIS SIGNIFICANTLY REDUCES THE LABOR INTENSITY OF INSTALLATION AND ENABLES A SHORTER CONSTRUCTION TIMELINE.



技术指导

序号 SERIAL NUMBER	项目 ITEM	要求 REQUIREMENT	试验参数 TEST PARAMETERS	
1	颜料分散 PIGMENT DISPERSION	≤3 级 ≤ GRADE 3	—	—
		外观级别：AL、A2、A3 或 B APPEARANCE GRADE: AL, A2, A3, OR B		
2	熔体质量流动速率 (MFR) (G/L0MIN) MELT MASS FLOW RATE (MFR) (G/10MIN)	≤0.5G/L0MIN 且与 对应聚丙烯混配料的 变化率不超过 20% MELT MASS FLOW RATE (MFR): ≤ 0.5G/10MIN WITH A VARIATION RATE NOT EXCEEDING 20% COMPARED TO THE CORRESPONDING POLYPROPYLENE BLEND	负荷质量 LOAD MASS	2.16KG
			试验温度 TEST TEMPERATURE	230℃
3	纵向回缩率 LONGITUDINAL SHRINKAGE RATE	≤2% ≤ 3%	试验温度 TEST TEMPERATURE	135±2℃
4	简支梁冲击 CHARPY IMPACT STRENGTH	破损率不大于试样数量的 10% DAMAGE RATE: NOT EXCEEDING 10% OF THE SAMPLE QUANTITY	试验温度 TEST TEMPERATURE	0±2℃
5	静液压强度 (20℃, LH) STATIC HYDRAULIC STRENGTH (20℃, 1H)	无破坏, 无渗漏 NO DAMAGE OR LEAKAGE OBSERVED	环应力 RING STRESS	16.0MPA
			试验时间 TEST DURATION	1H
			试验温度 TEST TEMPERATURE	20℃
6	静液压强度 (95℃, 22H) STATIC HYDRAULIC STRENGTH (95℃, 22H)	无破坏, 无渗漏 NO DAMAGE OR LEAKAGE OBSERVED	环应力 RING STRESS	4.3MPA
			试验时间 TEST DURATION	22H
			试验温度 TEST TEMPERATURE	95℃
7	静液压强度 (95℃, 165H) STATIC HYDRAULIC STRENGTH (95℃, 165H)	无破坏, 无渗漏 NO DAMAGE OR LEAKAGE OBSERVED	环应力 RING STRESS	3.8MPA
			试验时间 TEST DURATION	165H
			试验温度 TEST TEMPERATURE	95℃
8	静液压强度 (95℃, L000H) STATIC HYDRAULIC STRENGTH (95℃, 1000H)	无破坏, 无渗漏 NO DAMAGE OR LEAKAGE OBSERVED	环应力 RING STRESS	3.5MPA
			试验时间 TEST DURATION	1000H
			试验温度 TEST TEMPERATURE	95℃

产品规格

PP-R冷热水管材(PP-R Cold and Hot Water Pipes)

S5/PN1.25 冷水管		S4/PN1.6 冷水管		S3.2/PN2.0 热水管		S2.5/PN2.5 热水管	
PP-R COLD AND HOT WATER PIPES		PP-R COLD AND HOT WATER PIPES		PP-R COLD AND HOT WATER PIPES		PP-R COLD AND HOT WATER PIPES	
规格 (MM)	单重 (KG/M)	规格 (MM)	单重 (KG/M)	规格 (MM)	单重 (KG/M)	规格 (MM)	单重 (KG/M)
SPECIFICATION (MM)	UNIT WEIGHT (KG/M)	SPECIFICATION (MM)	UNIT WEIGHT (KG/M)	SPECIFICATION (MM)	UNIT WEIGHT (KG/M)	SPECIFICATION (MM)	UNIT WEIGHT (KG/M)
25X2.3	0.167	20X23	0.128	20X2.8	0.151	20X34	0.175
32X2.9	0.266	25X2.8	0.194	25X3.5	0.235	25X4.2	0.271
40X3.7	0.420	32X3.6	0.321	32X4.4	0.377	32X5.4	0.443
50X4.6	0.651	40X4.5	0.534	40X5.5	0.5871	40X6.7	0.684
63X5.8	1.030	50X5.6	0.751	50X6.9	0.914	50X8.3	1.061
75X6.8	1.438	63X7.1	1.214	63X8.6	1.438	63X10.5	1.683
90X8.2	2.071	75X8.4	1.874	75X10.3	2.232	75X12.5	2.387
110X10	3.070	90X10.1	2.703	90X12.3	2.927	90X15.0	3.427
		110X12.3	4.024	110X15.1	4.386	110X18.3	5.110

焊接数据表(操作环境温度低于5℃时，加热时间增加50%)

WELDING DATA SHEET(NOTE: WHEN THE OPERATING AMBIENT TEMPERATURE IS BELOW 5℃, THE HEATING TIME SHOULD BE INCREASED BY 50%)

管材外径mm	焊接深度mm	加热时间sec	焊接时间sec	冷却时间min
OUTER DIAMETER OF PIPE (MM)	WELDING DEPTH (MM)	HEATING TIME (SEC.)	WELDING TIME (SEC.)	COOLING TIME (MIN)
20	14	5	4	2
25	15	7	4	2
32	16.5	8	6	4
40	18	12	6	4
50	20	18	6	4
63	24	24	8	6
75	30	30	10	8
90	32	40	10	8
110	38.5	50	15	10

设计与施工参见山东省标准《建筑给水聚丙烯(PP-R)管道工程技术规程》DBJ14-DS11-2001

FOR DESIGN AND CONSTRUCTION, PLEASE REFER TO THE SHANDONG PROVINCIAL STANDARD "TECHNICAL SPECIFICATION FOR POLYPROPYLENE (PP-R) PIPELINE ENGINEERING IN BUILDING WATER SUPPLY" (DBJ14-DS11-2001).

供热用耐热聚乙烯(PE-RT) II 型管材

HEAT-RESISTANT POLYETHYLENE (PE-RT) TYPE II PIPES FOR HEATING APPLICATIONS

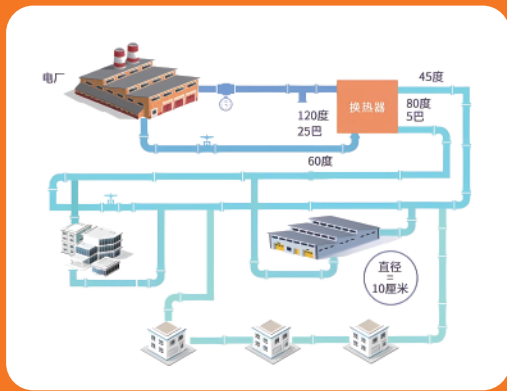
EXECUTION STANDARD AND APPLICATIONS

执行标准及用途

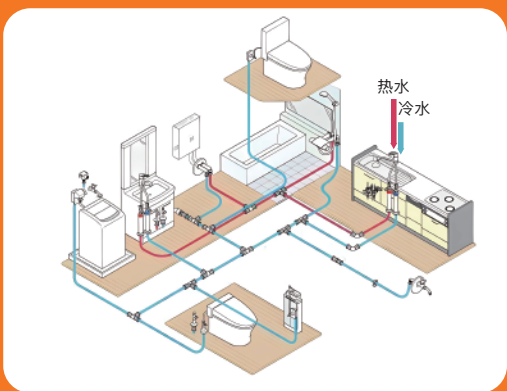
博源牌冷热水用耐热聚乙烯 (PE-RT)II 型管材按国家标准 GB/128799.2-2020《冷热水用耐热聚乙烯 (PE-RT) 管道系统第 2 部分: 管材》、DB37/T5021-2014 《II 型耐热聚乙烯 (PE-RTII) 低温直埋供热管道设计与施工规范》的要求组织生产和检测。

主要适用于工业用及民用热水管道系统。

THE BOYUAN BRAND HEAT-RESISTANT POLYETHYLENE (PE-RT) TYPE II PIPES FOR COLD AND HOT WATER APPLICATIONS ARE MANUFACTURED AND INSPECTED IN STRICT COMPLIANCE WITH THE NATIONAL STANDARD GB/T 18997.2-2020, WHICH PERTAINS TO HEAT-RESISTANT POLYETHYLENE (PE-RT) PIPING SYSTEMS FOR COLD AND HOT WATER APPLICATIONS, SPECIFICALLY PART 2: PIPES, AS WELL AS THE REGIONAL STANDARD DB37/T 5021-2014, WHICH OUTLINES THE DESIGN AND CONSTRUCTION SPECIFICATION FOR LOW-TEMPERATURE DIRECT BURIED HEATING PIPELINES UTILIZING TYPE II HEAT-RESISTANT POLYETHYLENE (PE-RT II). THESE PIPES ARE PRIMARILY INTENDED FOR USE IN BOTH INDUSTRIAL AND DOMESTIC HOT WATER PIPING SYSTEMS.



集中供热管网
CENTRAL HEATING NETWORKS



冷 / 热水输送管道
COLD/HOT WATER TRANSMISSION PIPELINES

产品特点

Product Features



A

使用寿命长: 在正常安装使用条件下, 寿命超过 50 年。

LONG SERVICE LIFE: UNDER NORMAL INSTALLATION AND USAGE CONDITIONS, THE LIFESPAN EXCEEDS 50 YEARS.

B

不结垢, 输送能力强: 内表面光滑, 阻力不到钢管的 1/20, 不结垢, 不会堵塞管道, 管道热负荷可提高 25% 以上。

NON-SCALING AND HIGH TRANSPORT CAPACITY: THE INTERNAL SURFACE IS SMOOTH, WITH RESISTANCE LESS THAN 1/20 OF STEEL PIPES. IT DOES NOT SCALE OR CLOG THE PIPES, ENABLING A 25% OR HIGHER INCREASE IN PIPELINE THERMAL LOAD.

C

不腐蚀锈蚀: 全生命周期内, 不会发生腐蚀及锈蚀现象, 不会导致流量变小, 且不会污染水质, 利于分户计量。

CORROSION RESISTANCE: THROUGHOUT ITS LIFECYCLE, IT REMAINS FREE FROM CORROSION AND RUST, MAINTAINING FLOW RATES AND WATER QUALITY, FACILITATING INDIVIDUAL METERING.

DEFF

导热系数低：管道热损小：PE-RTII 管材为热的不良导体，导热系数低，仅为钢管导热系数的 1/100, 输送过程中热损小。

LOW THERMAL CONDUCTIVITY: PE-RT II PIPES HAVE LOW THERMAL CONDUCTIVITY, ONLY 1/100 OF THAT OF STEEL PIPES, RESULTING IN REDUCED HEAT LOSS DURING TRANSPORTATION.

安装施工成本低，进度快：管材密度小、重量轻、搬运方便；采用热熔或电熔连接方式，快速简便, 加快施工进度；沟边连接, 降低沟槽施工成本；可随地形敷设, 大幅度减少管件数量。

COST-EFFECTIVE AND EFFICIENT INSTALLATION: FEATURING A LIGHTWEIGHT DESIGN AND CONVENIENT HANDLING, THESE PIPES FACILITATE RAPID AND STRAIGHTFORWARD INSTALLATION THROUGH HOT-MELT OR ELECTROFUSION TECHNIQUES, GREATLY SPEEDING UP THE CONSTRUCTION PROCESS. CONNECTING AT THE TRENCH EDGE HELPS TO MINIMIZE TRENCHING COSTS, AND THE PIPES CAN BE LAID SEAMLESSLY ALONG THE TERRAIN, SIGNIFICANTLY REDUCING THE QUANTITY OF FITTINGS REQUIRED.

无补偿自然敷设：随地形自然弯曲, 直埋敷设可以不用补偿, 大幅度减少伸缩节的使用；大幅度减少固定墩、支墩、止推墩的数量, 极大程度减少安装敷设时间。

NATURAL LAYING WITHOUT COMPENSATION: THE PIPES CAN NATURALLY BEND WITH THE TERRAIN, ELIMINATING THE NEED FOR COMPENSATION IN DIRECT BURIAL APPLICATIONS, SIGNIFICANTLY REDUCING THE USE OF EXPANSION JOINTS AND THE NUMBER OF FIXED PIERS, SUPPORT PIERS, AND THRUST RESTRAINT PIERS, GREATLY REDUCING INSTALLATION TIME.



PE-RTI供热管道规格尺寸(mm)
Specifications and Dimensions of PE-RT II Thermal Pipes (mm)

PE-RTI型冷热水用耐热聚乙烯 HEAT-RESISTANT POLYETHYLENE (PE-RT II) FOR COLD AND HOT WATER APPLICATIONS							
S4/SDR9		S5/SDR11		S6.3/SDR13.6		S6.3/SDR13.6	
规格 (MM) SPECIFICATION (MM)	单重 (KG/M) UNIT WEIGHT (KG/M)	规格 (MM) SPECIFICATION (MM)	单重 (KG/M) UNIT WEIGHT (KG/M)	规格 (MM) SPECIFICATION (MM)	单重 (KG/M) UNIT WEIGHT (KG/M)	规格 (MM) SPECIFICATION (MM)	单重 (KG/M) UNIT WEIGHT (KG/M)
25X2.8	0.210	25X2.3	0.181	—	—	—	—
32X3.6	0.338	32X2.9	0.285	—	—	—	—
40X4.5	0.526	40X3.7	0.444	—	—	—	—
50X5.6	0.814	50X4.6	0.687	—	—	—	—
63X7.1	1.298	63X5.8	1.083	—	—	—	—
75X8.4	1.822	75X6.8	1.513	—	—	—	—
90X10.1	2.628	90X8.2	2.193	90X6.7	1.825	90X5.4	1.505
110X12.3	3.902	110X10.0	3.246	110X8.1	2.704	110X6.6	2.236
125X14.0	5.027	125X11.4	4.213	125X9.2	3.483	125X7.4	2.852
140X15.7	6.317	140X12.7	5.249	140X10.3	4.360	140X8.3	3.580
160X17.9	8.222	160X14.6	6.888	160X11.8	5.684	160X9.5	4.669
180X20.1	10.407	180X16.4	8.705	180X13.3	7.217	180X10.7	5.901
200X22.4	12.863	200X18.2	10.735	200X14.7	8.845	200X11.9	7.278
225X25.2	16.284	225X20.5	13.584	225X16.6	11.233	225X13.4	9.237
250X27.9	20.000	250X22.7	16.700	250X18.4	13.836	250X14.8	11.311
280X31.3	25.148	280X25.4	20.939	280X20.6	17.332	280X16.6	14.212
315X35.2	31.811	315X28.6	26.499	315X23.2	21.968	315X18.7	17.992
355X39.7	40.395	355X32.2	33.646	355X26.1	27.854	355X21.1	22.910

传统钢制管道的不足
Drawbacks of Traditional Steel Pipes

1. 接头腐蚀产生泄露和损坏、水质差。
CORROSION AT JOINTS LEADS TO LEAKS AND DAMAGE, COMPROMISING WATER QUALITY.
2. 安装费时费力。
INSTALLATION IS TIME-CONSUMING AND LABOR-INTENSIVE.
3. 锈蚀沉积物造成管道及附属仪表阀门堵塞。
RUST DEPOSITS CAN BLOCK PIPES AND ASSOCIATED INSTRUMENTATION AND VALVES.
4. 使用寿命短、维护费用高。
SHORT SERVICE LIFE AND HIGH MAINTENANCE COSTS.

地暖用耐热聚乙烯(PE-RT) I型管材

HEAT-RESISTANT POLYETHYLENE (PE-RT) TYPE I PIPES FOR FLOOR HEATING



产品特点

Product Features

- 1 无毒、无味、卫生性能好。
NON-TOXIC, ODORLESS, AND EXCELLENT HYGIENE PERFORMANCE.
- 2 具有良好的柔韧性, 易弯曲, 便于施工; 管材生产时可以盘卷管的方式交付, 减少管件的使用量, 降低施工成本。
GOOD FLEXIBILITY AND EASY TO BEND, FACILITATING INSTALLATION. THE PIPES CAN BE DELIVERED IN COILED FORM, REDUCING THE NEED FOR FITTINGS AND LOWERING CONSTRUCTION COSTS.
- 3 管材具有优越的耐低温性能, 因此在冬季低温的情况下也可以施工, 并且在弯曲时管道无需预热。
SUPERIOR LOW-TEMPERATURE RESISTANCE ALLOWS FOR INSTALLATION EVEN IN WINTER CONDITIONS, AND NO PREHEATING IS REQUIRED WHEN BENDING THE PIPES.

EXECUTION STANDARDS AND APPLICATIONS

执行标准及用途

冷热水用耐热聚乙烯管材执行标准为《冷热水用耐热聚乙烯 (PE-RT) 管道系统 第 2 部分: 管材》(GB/128799.2-2020) PE-RT 管材按公称壁厚可分为: S5、S4、S3.2 和 S2.5 四个系列。

广泛应用于建筑地板采暖、冷热水系统, 以及其它工农业用管道系统。

THE STANDARDS FOR HEAT-RESISTANT POLYETHYLENE PIPES FOR COLD AND HOT WATER APPLICATIONS ARE OUTLINED IN HEAT-RESISTANT POLYETHYLENE (PE-RT) PIPING SYSTEMS FOR COLD AND HOT WATER APPLICATIONS – PART 2: PIPES (GB/T 18997.2-2020). PE-RT PIPES CAN BE CLASSIFIED INTO FOUR SERIES BASED ON THEIR NOMINAL WALL THICKNESS: S5, S4, S3.2, AND S2.5. THESE PIPES ENJOY WIDESPREAD APPLICATION IN BUILDING FLOOR HEATING SYSTEMS, COLD AND HOT WATER SYSTEMS, AS WELL AS VARIOUS OTHER INDUSTRIAL AND AGRICULTURAL PIPING SYSTEMS.

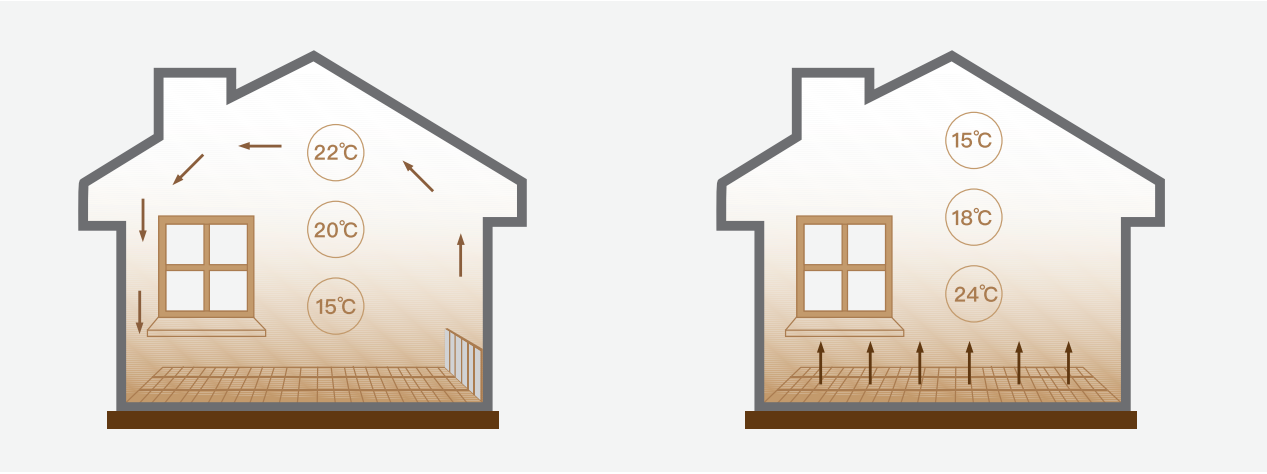
- 4 耐高温性能好, 在标准设计条件下, 可安全使用 50 年以上。
EXCELLENT HIGH-TEMPERATURE RESISTANCE, ENSURING SAFE USE FOR OVER 50 YEARS UNDER STANDARD DESIGN CONDITIONS.
- 5 (管材在生产过程中不添加任何有毒助剂。内壁光滑, 不结垢, 不滋生细菌, 可以安全应用在饮用水输送等领域。
NO TOXIC ADDITIVES ARE USED IN THE PRODUCTION PROCESS. THE SMOOTH INNER WALL PREVENTS SCALING AND BACTERIAL GROWTH, MAKING IT SAFE FOR USE IN POTABLE WATER SYSTEMS.
- 6 可以热熔连接和机械连接, 可靠、不渗漏。
RELIABLE AND LEAK-FREE CONNECTIONS CAN BE ACHIEVED THROUGH HOT MELT OR MECHANICAL CONNECTIONS.

示意图

ILLUSTRATIONS

博源牌 PE-RT 管低温地板辐射采暖系统供暖方式是从下向上发散, 室内温度分布合理, 符合人体舒适指数, 空气不会干燥, 使用成本低。THE BOYUAN BRAND PE-RT PIPE LOW-TEMPERATURE FLOOR RADIANT HEATING SYSTEM DISTRIBUTES HEAT FROM THE BOTTOM UP, RESULTING IN A REASONABLE INDOOR TEMPERATURE DISTRIBUTION THAT ALIGNS WITH HUMAN COMFORT INDICES. THE AIR REMAINS HUMID, AND THE COST OF USAGE IS LOW.

传统的采暖方式热气从人的头部到脚部, 室内热辐射不均匀, 占用空间, 空气干燥, 易落灰尘. 使人感觉头热脚冷, 很不舒服。IN TRADITIONAL HEATING METHODS, HEAT RISES FROM THE HEAD TO THE FEET, RESULTING IN UNEVEN INDOOR HEAT RADIATION, OCCUPATION OF SPACE, DRY AIR, AND DUST ACCUMULATION. THIS OFTEN LEADS TO A DISCOM-FORTING SENSATION OF HOT HEADS AND COLD FEET.



暖气片采暖与博源牌地板辐射采暖对比示意图
COMPARISON ILLUSTRATION OF RADIATOR HEATING AND BOYUAN BRAND FLOOR RADIANT HEATING

管材规格
PIPE SPECIFICATIONS

5/SDR6		2/SDR7.4		S4/SDR9		S5/SDR11	
规格 (MM)	单重 (KG/M)	规格 (MM)	单重 (KG/M)	规格 (MM)	单重 (KG/M)	规格 (MM)	单重 (KG/M)
SPECIFICATION (MM)	UNIT WEIGHT (KG/M)	SPECIFICATION (MM)	UNIT WEIGHT (KG/M)	SPECIFICATION (MM)	UNIT WEIGHT (KG/M)	SPECIFICATION (MM)	UNIT WEIGHT (KG/M)
20X3.4	0. 18	20X2.8	0. 16	20X2.3	0. 13	20X1.9	0. 12
25X4.2	0.28	25X3.5	0. 24	25X2.8	0.2	25X2.3	0.17
32X5.4	0.46	32X4.4	0. 39	32X3.6	0. 33	32X2.9	0.27
40X6.7	0. 71.	40X5.5	0.61	40X4.5	0.51	40X3.7	0.43

管件规格

FITTING SPECIFICATIONS

品名 PRODUCT NAME	公称外径dn NOMINAL OUTER DIAMETER (DN)		
管套 PIPE SLEEVE	20	25	32
90 度弯头 90-DEGREE ELBOW	20	25	32
内螺纹套管 INTERNAL THREAD SLEEVE	20	25	32
外螺纹套管 EXTERNAL THREAD SLEEVE	20	25	32

管材和管件的物理力学性能

PHYSICAL AND MECHANICAL PROPERTIES OF PIPES AND FITTINGS

序号 SERIAL NUMBER	项目 ITEM	要求 REQUIREMENT	试验参数 TEST PARAMETERS	
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2	熔体质量流动速率 (MFR) (G/L0MIN) MELT MASS FLOW RATE (MFR) (G/10MIN)	≤0.5G/L0MIN 且与对应聚丙烯混配料的变化率不超过 20% MELT MASS FLOW RATE (MFR): ≤ 0.5G/10MIN WITH A VARIATION RATE NOT EXCEEDING 20% COMPARED TO THE CORRESPONDING POLYPROPYLENE BLEND	负荷质量 LOAD MASS	5KG
			试验温度 TEST TEMPERATURE	190℃
3	纵向回缩率 LONGITUDINAL SHRINKAGE RATE	≤2% ≤ 3%	试验温度 TEST TEMPERATURE	110+2℃
5	静液压强度 (20℃, LH) STATIC HYDRAULIC STRENGTH (20℃, 1H)	无破坏, 无渗漏 NO DAMAGE OR LEAKAGE OBSERVED	环应力 RING STRESS	9.9MPA
			试验时间 TEST DURATION	1H
			试验温度 TEST TEMPERATURE	20℃
6	静液压强度 (95℃, 22H) STATIC HYDRAULIC STRENGTH (95℃, 22H)	无破坏, 无渗漏 NO DAMAGE OR LEAKAGE OBSERVED	环应力 RING STRESS	3. 8MPA
			试验时间 TEST DURATION	22H
			试验温度 TEST TEMPERATURE	95℃
7	静液压强度 (95℃, 165H) STATIC HYDRAULIC STRENGTH (95℃, 165H)	无破坏, 无渗漏 NO DAMAGE OR LEAKAGE OBSERVED	环应力 RING STRESS	3.6MPA
			试验时间 TEST DURATION	165H
			试验温度 TEST TEMPERATURE	95℃
8	静液压强度 (95℃, L000H) STATIC HYDRAULIC STRENGTH (95℃, 1000H)	无破坏, 无渗漏 NO DAMAGE OR LEAKAGE OBSERVED	环应力 RING STRESS	3.4MPA
			试验时间 TEST DURATION	1000H
			试验温度 TEST TEMPERATURE	95℃

热熔接技术参数

HOT MELT CONNECTION TECHNICAL PARAMETERS

外径(mm) OUTER DIAMETER (MM)	熔接深度(mm) FUSION DEPTH (MM)	加热时间(s) HEATING TIME (S)	插接时间(s) INSERTION TIME (S)	冷却时间(s) COOLING TIME (S)
20	15	5	4	2
25	170	7	4	2
32	19	8	6	4

聚丙烯（MPP）实壁导管
MPP CABLE CONDUIT

EXECUTION STANDARD AND APPLICATIONS

执行标准及用途

MPP 电缆导管又叫 MPP 电力电缆保护管，分为非开挖型与开挖型，具有抗高温、耐外压的特点，适用于 10KV 及以下中低压电缆敷设。MPP 非开挖型导管又称 MPP 顶管或拖拉管，其执行标准为:《电力电缆用导管技术条件 第 7 部分：非开挖用改性聚丙烯塑料电缆导管》(DL/T 802.7-2023)。

MPP CABLE CONDUIT, COMMONLY REFERRED TO AS MPP POWER CABLE PROTECTION PIPE, IS CATEGORIZED INTO NON-EXCAVATION AND EXCAVATION TYPES. POSSESSING EXCELLENT HIGH-TEMPERATURE RESISTANCE AND EXTERNAL PRESSURE TOLERANCE, IT IS IDEALLY SUITED FOR THE INSTALLATION OF 10KV AND LOWER MEDIUM AND LOW-VOLTAGE CABLES. THE MPP NON-EXCAVATION CONDUIT, ALTERNATIVELY KNOWN AS MPP JACKING PIPE OR DRAG PIPE, FOLLOWS THE STANDARD SPECIFIED INTECHNICAL CONDITIONS FOR CONDUITS USED FOR POWER CABLES – PART 7: MODIFIED POLYPROPYLENE PLASTIC CABLE CONDUITS FOR NON-EXCAVATION APPLICATIONS (DL/T 802.7-2023).

非开挖用 MPP 电力导管采用改性聚丙烯为主要原材料，施工过程中无须大量开挖，适用于在道路、建筑物、河床等不适合开挖地段敷设。与传统的开挖敷设相比，非开挖施工不会造成的扬尘、交通堵塞等扰民因素，更适应当前的环保要求。

MPP POWER CONDUITS DESIGNED FOR NON-EXCAVATION APPLICATIONS PRIMARILY UTILIZE MODIFIED POLYPROPYLENE AS THEIR RAW MATERIAL. THIS ELIMINATES THE NEED FOR EXTENSIVE DIGGING DURING INSTALLATION, ENABLING THEIR USE IN AREAS SUCH AS ROADS, BUILDINGS, AND RIVERBEDS WHERE EXCAVATION IS NOT FEASIBLE. UNLIKE TRADITIONAL EXCAVATION METHODS, NON-EXCAVATION CONSTRUCTION SIGNIFICANTLY REDUCES DISRUPTIVE FACTORS LIKE DUST POLLUTION AND TRAFFIC CONGESTION, THUS BETTER ALIGNING WITH CURRENT ENVIRONMENTAL PROTECTION STANDARDS.

产品特点

Product Features

- 1、具有优良的电气绝缘性。
1. EXCELLENT ELECTRICAL INSULATION PROPERTIES.
- 2、具有良好的耐热性能和耐低温冲击性能。
2. GOOD HEAT RESISTANCE AND LOW-TEMPERATURE IMPACT RESISTANCE.
- 3、抗拉、抗压性能好。
3. GOOD TENSILE AND COMPRESSIVE PROPERTIES.
- 4、导管质轻、光滑、摩擦阻力小，可热熔对接。
4. THE CONDUIT FEATURES LIGHT WEIGHT, SMOOTH SURFACE, AND MINIMAL FRICTION, ENABLING EASY THERMAL FUSION.
- 5、可在温度 5℃~70℃范围内长期使用。
5. LONG-TERM USE WITHIN A TEMPERATURE RANGE OF 5℃ TO 70℃.

产品规格

Product Specifications

MPP 电缆导管
MPP CABLE CONDUIT

直埋导管 Direct Burial Conduit				非开挖型 Non-Excavation Type			
SN16		SN24		SN32		SN40	
规格 (MM)	单重 (KG/M)	规格 (MM)	单重 (KG/M)	规格 (MM)	单重 (KG/M)	规格 (MM)	单重 (KG/M)
SPECIFICATION (MM)	UNIT WEIGHT (KG/M)	SPECIFICATION (MM)	UNIT WEIGHT (KG/M)	SPECIFICATION (MM)	UNIT WEIGHT (KG/M)	SPECIFICATION (MM)	UNIT WEIGHT (KG/M)
—	—	100x6	1. 879	100x8	2. 552	100x10	3. 249
125x6	2. 322	125x8	3. 143	125x10	3. 987	125x12	4. 855
150x8	3. 733	150x10	4. 725	150x12	5. 741	150x14	6. 781
175x10	5. 464	175x12	6. 627	175x14	7. 814	175x16	9. 025
200x12	7. 513	200x14	8. 848	200x16	10. 206	200x18	11. 588
225x14	9. 882	225x16	11. 388	225x18	12. 917	225x20	14. 471
250x16	12. 569	250x18	14. 246	250x20	15. 947	250x22	17. 672

序号 SERIAL NUMBER	项目 ITEM	单位 UNITS	指标 INDICATORS	试验方法 TEST METHOD
1	密度 DENSITY	G/CM	0.89~0.93	GB/T1033.1
2	环刚度(3%)(常温) RING STIFFNESS (3%) (AT ROOM TEMPERATURE)	KN/M2	SN24 等级≥24 SN24 GRADE ≥ 24 SN32 等级≥32 SN32 GRADE ≥ 32 SN40 等级≥40 SN40 GRADE ≥ 40	DL/T802.1
5	压扁试验 FLATTENING TEST	/	试样不应出现破裂 THE TEST SPECIMEN SHOULD NOT CRACK	GB/T9647
6	拉伸强度 TENSILE STRENGTH	MPA	≥25	GB/T8804.3
6	焊接强度 WELDING STRENGTH	MPA	≥22.5	GB/T8804.3
6	断裂伸长率 ELONGATION AT BREAK	%	≥150	GB/T 8804.3
7	落锤冲击 FALLING WEIGHT IMPACT TEST	/	10 个试样中至少有 9 个 不破裂 AT LEAST 9 OF 10 SPECIMENS SHOULD NOT CRACK	GB/T14152
8	静摩擦系数 COEFFICIENT OF STATIC FRICTION	/	≤0.35	DL/T 802.1
8	维卡软化温度 VICAT SOFTENING TEMPERATURE	℃	≥150, 按 GB/T1633 试验(采用 ASO 法) ≥ 150, TESTED ACCORDING TO GB/T 1633 (USING ASO METHOD)	GB/T1633
8	纵向回缩率 LONGITUDINAL SHRINKAGE RATE	%	≤0.3	GB/T6671
8	散热性能 HEAT DISSIPATION PERFORMANCE	/	常温下放置规定的时间, 导管内、外壁温度均≤30℃ AFTER PLACEMENT AT ROOM TEMPERATURE FOR THE SPECIFIED DURATION, THE INTERNAL AND EXTERNAL WALL TEMPERATURES OF THE CONDUIT SHOULD NOT EXCEED 30℃.	DL/T 802.1

标志、包装、贮存堆放和出厂合格证

Marking, Packaging, Storage Stacking, and Factory Certificate

- 1

标志、包装和出厂合格证应符合 DL/T802.1 的规定。
MARKING, PACKAGING, AND FACTORY CERTIFICATES SHOULD COMPLY WITH THE PROVISIONS OF DL/T 802.1.
- 2

导管宜室内存放, 堆放处应远离热源及化学品的污染地, 避免阳光的直接照射; 堆放处保持通风良好、干燥、清洁并具备必要的消防设施。
THE CONDUIT SHOULD BE STORED INDOORS IN A LOCATION FAR AWAY FROM HEAT SOURCES AND AREAS CONTAMINATED BY CHEMICALS, AVOIDING DIRECT SUNLIGHT. THE STORAGE LOCATION SHOULD BE WELL-VENTILATED, DRY, CLEAN, AND EQUIPPED WITH NECESSARY FIRE PROTECTION FACILITIES.
- 3

如确需露天堆放时必须遮盖或其他防止紫外线照射的防护措施, 以避免阳光曝晒、雨淋及其他污染。为防止紫外线照射时间太长而引起的导管材料老化, 禁止长期露天堆放, 露天的存放期不得超过 3 个月。
IF OUTDOOR STORAGE IS UNAVOIDABLE, IT IS IMPERATIVE TO PROVIDE ADEQUATE COVERING OR OTHER UV-RESISTANT MEASURES TO SHIELD THE CONDUITS FROM DIRECT SUNLIGHT, RAIN, AND OTHER POTENTIAL CONTAMINANTS. TO MITIGATE THE RISK OF MATERIAL DEGRADATION DUE TO PROLONGED UV EXPOSURE, LONG-TERM OUTDOOR STORAGE IS STRICTLY PROHIBITED, AND THE MAXIMUM OUTDOOR STORAGE DURATION SHOULD NOT EXCEED THREE MONTHS.
- 4

导管堆放处地面应平整, 堆放整齐且堆放高度不应超过 1.5M。
THE GROUND AT THE CONDUIT STORAGE AREA SHOULD BE LEVEL, ENSURING THAT THE CONDUITS ARE STACKED NEATLY AND THAT THE STACKING HEIGHT DOES NOT EXCEED 1.5 METERS.

施工注意事项

Construction Precautions

- ▶ MPP 电缆导管在运输施工过程中严禁抛摔、剧烈撞击、重压。
MPP CABLE CONDUITS ARE STRICTLY PROHIBITED FROM BEING THROWN, SEVERELY IMPACTED, OR HEAVILY PRESSED DURING TRANSPORTATION AND CONSTRUCTION.
- ▶ 热熔对接时两管轴线要对准, 端面切削垂直平整。
WHEN PERFORMING HOT MELT BUTT WELDING, THE AXES OF THE TWO PIPES MUST BE ALIGNED, AND THE END FACES MUST BE CUT VERTICALLY AND SMOOTHLY.
- ▶ 热熔对接的温度为 180℃~210℃, 加热温度、时间要根据气候状况做相应调整。
THE HOT MELT BUTT WELDING TEMPERATURE IS 180℃~210℃, AND THE HEATING TEMPERATURE AND TIME SHOULD BE ADJUSTED ACCORDINGLY BASED ON THE WEATHER CONDITIONS.
- ▶ MPP 电缆导管的最小弯曲半径应≤75℃。
THE MINIMUM BENDING RADIUS OF MPP CABLE CONDUITS SHOULD BE ≤ 75 DE-
GREES.

PA12尼龙管

PA12 NYLON TUBING



EXECUTION STANDARD AND APPLICATIONS

执行标准及用途

PA12, 也称为尼龙 12, 是一种高性能工程塑料。它是一种热塑性材料, 具有良好的机械性能、高温耐性、耐磨性、抗化学腐蚀性和低摩擦系数等优点。因此, PA12 被广泛应用于汽车、航空航天、电子、医疗、新能源等领域的制造和装配。

PA12, COMMONLY REFERRED TO AS NYLON 12, IS A HIGH-PERFORMANCE ENGINEERING PLASTIC. AS A THERMOPLASTIC MATERIAL, IT BOASTS EXCEPTIONAL MECHANICAL PROPERTIES, RESISTANCE TO HIGH TEMPERATURES, WEAR, AND CHEMICALS, AS WELL AS A LOW FRICTION COEFFICIENT. DUE TO THESE ADVANTAGES, PA12 FINDS WIDESPREAD APPLICATION IN THE MANUFACTURING AND ASSEMBLY OF AUTOMOBILES, AEROSPACE COMPONENTS, ELECTRONICS, MEDICAL DEVICES, AND NEW ENERGY TECHNOLOGIES.

产品特点

Product Features

一、物理性能

I. PHYSICAL PROPERTIES



1. 吸水率: 尼龙 PA12 的吸水率较低, 一般在 1-3% 之间, 因此具有较好的湿态稳定性。

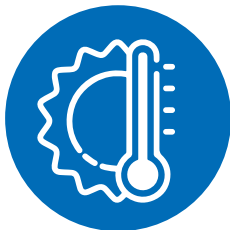
WATER ABSORPTION: PA12 NYLON HAS A LOW WATER ABSORPTION RATE, TYPICALLY RANGING FROM 1-3%, RESULTING IN GOOD WET STABILITY.

2. 熔融温度: 尼龙 PA12 的熔融温度在 170-180°C 之间, 具有良好的耐高温性能。

MELTING TEMPERATURE: THE MELTING TEMPERATURE OF PA12 IS BETWEEN 170-180°C, DEMONSTRATING GOOD HIGH-TEMPERATURE RESISTANCE.

二、热性能

II. THERMAL PROPERTIES



1. 工作温度: 尼龙 PA12 的工作温度在 -40°C-120°C。具有较好的耐热性和耐冷性。

OPERATING TEMPERATURE: PA12 NYLON HAS AN OPERATING TEMPERATURE RANGE OF -40°C TO 120°C, EXHIBITING GOOD HEAT AND COLD RESISTANCE.

2. 线膨胀系数: 尼龙 PA12 的线膨胀系数较低, 一般在 $6-8 \times 10^{-5} \text{ }^{\circ}\text{C}^{-1}$ 之间, 具有较好的尺寸稳定性。

LINEAR EXPANSION COEFFICIENT: PA12 HAS A LOW LINEAR EXPANSION COEFFICIENT, TYPICALLY RANGING FROM $6-8 \times 10^{-5} \text{ }^{\circ}\text{C}^{-1}$, ENSURING GOOD DIMENSIONAL STABILITY.

三、机械性能

III. MECHANICAL PROPERTIES



1. 抗张强度：尼龙 PA12 的抗张强度较高，一般可达到 50–80MPa，具有较好的拉伸性能。

1. TENSILE STRENGTH: PA12 NYLON EXHIBITS HIGH TENSILE STRENGTH, TYPICALLY REACHING 50–80MPa, PROVIDING EXCELLENT TENSILE PERFORMANCE.

2. 弯曲强度：尼龙 PA12 的弯曲强度较高，一般可达到 80–100MPa，具有较好的抗弯性能。

2. BENDING STRENGTH: PA12 NYLON DEMONSTRATES HIGH BENDING STRENGTH, GENERALLY ACHIEVING 80–100MPa, OFFERING GOOD BENDING RESISTANCE.

3. 冲击强度：尼龙 PA12 的冲击强度较高，一般可达到 30–40KJ/M²，具有较好的抗冲击性能。

3. IMPACT STRENGTH: PA12 NYLON HAS HIGH IMPACT STRENGTH, TYPICALLY REACHING 30–40KJ/M², ENSURING GOOD IMPACT RESISTANCE.

四、电性能

IV. ELECTRICAL PROPERTIES



1. 体积电阻率：尼龙 PA12 的体积电阻率较高，一般可达到 10¹⁴–10¹⁶Ω·cm，具有较好的绝缘性能。

VOLUME RESISTIVITY: PA12 NYLON EXHIBITS HIGH VOLUME RESISTIVITY, TYPICALLY RANGING FROM 10¹⁴–10¹⁶Ω·cm, PROVIDING EXCELLENT INSULATION PROPERTIES.

2. 介电常数：尼龙 PA12 的介电常数较低，一般在 3–4 之间，具有较好的电绝缘性能。

DIELECTRIC CONSTANT: PA12 NYLON HAS A LOW DIELECTRIC CONSTANT, TYPICALLY RANGING FROM 3–4, ENSURING GOOD ELECTRICAL INSULATION PERFORMANCE.

产品用途

Product Applications

汽车制造：汽缸盖、气缸体、进气歧管、油泵、油底壳、制动系统等各种零部件。

AUTOMOTIVE MANUFACTURING: CYLINDER HEADS, CYLINDER BLOCKS, INTAKE MANIFOLDS, OIL PUMPS, OIL PANS, BRAKING SYSTEMS, AND VARIOUS OTHER COMPONENTS.

航空航天工业：导航仪器、各种管道和其他零件，以减少重量和提高机械性能。

AEROSPACE INDUSTRY: NAVIGATION INSTRUMENTS, VARIOUS PIPELINES, AND OTHER PARTS TO REDUCE WEIGHT AND IMPROVE MECHANICAL PERFORMANCE.

电子领域：电子通讯设备、电缆绝缘材料、屏蔽膜等。

ELECTRONIC FIELD: ELECTRONIC COMMUNICATION EQUIPMENT, CABLE INSULATION MATERIALS, SHIELDING FILMS, ETC.

医疗设备：因为其耐化学药品和耐高温性能，用于制造医疗设备、外科器械、牙科器具等。

MEDICAL EQUIPMENT: DUE TO ITS CHEMICAL RESISTANCE AND HIGH-TEMPERATURE TOLERANCE, IT IS USED TO MANUFACTURE MEDICAL DEVICES, SURGICAL INSTRUMENTS, DENTAL APPLIANCES, ETC.

新能源设备：用于储能设备的冷凝管等

NEW ENERGY EQUIPMENT: USED FOR CONDENSER PIPES IN ENERGY STORAGE EQUIPMENT.

按管材用途的相关标准执行。相关规格，按照客户要求加工。

THE PRODUCT IS EXECUTED ACCORDING TO RELEVANT STANDARDS FOR THE INTENDED USE OF THE TUBING. CUSTOM SPECIFICATIONS CAN BE PROCESSED BASED ON CUSTOMER REQUIREMENTS.

BODA PIPES INDUSTRY

聚乙烯(PE)管件

承接管件(Socket Pipe Fittings)

PE					PE				
等径直接 Straight Connectors with the Same Diameter	等径三通 Equal-diameter Tee	45°弯头 45° Elbow	90°弯头 90° Elbow	截止阀 Stop Valve	分水器 Water Manifold	内丝三通 Female Threaded Tee	外丝三通 Male Threaded Tee	90°内丝弯头 90° Female Threaded Elbow	90°外丝弯头 90° Male Threaded Elbow
									
Φ20 Φ25 Φ32 Φ40 Φ50 Φ63 Φ75 Φ90 Φ110				Φ20 Φ25 Φ32 Φ40Φ50 Φ63	Φ40 Φ50 Φ63 Φ75	Φ20x1/2 Φ25x1/2 Φ25x3/4 Φ32x1			

PE			PE				
管堵 Pipe Plug	异径直接 Straight Connectors with Different Diameters	异径三通 Reducing Tee	承插法兰 Socket Flange	外丝活接 Male Union	内丝活接 Female Union	内丝直接 Female Threaded Connector	外丝直接 Male Threaded Connector
							
Φ20 Φ25 Φ32 Φ40 Φ50 Φ63 Φ75	Φ25x20 Φ32x20 Φ32x25 Φ40x20 Φ40x25 Φ40x32 Φ50x20 Φ50x25 Φ50x32 Φ50x40 Φ63x20 Φ63x25 Φ63x32 Φ63x40 Φ63x50		Φ40 Φ50 Φ63 Φ75 Φ90 Φ110	Φ20x1/2 Φ20x3/4 Φ50x1.1/2 Φ63x2 Φ25x1/2 Φ25x3/4 Φ32x1 Φ40x1.1/4		Φ20x1/2 Φ25x1/2中25x3/4 Φ32x1 Φ40x1.1/4 Φ50x1.1/2 Φ63x2	

对接管件(Butt Fusion Fittings)

PE					PE	
对接法兰 Butt Fusion Flange	注塑90°弯头 Injection Molded 90° Elbow	注塑45°弯头 Injection Molded 45° Elbow	注塑正三通 Injection Molded Straight Tee	管帽 Pipe Cap	注塑异径直接 Injection Molded Reducing Connector	注塑异径三通 Injection Molded Reducing Tee
						
Φ63 Φ75 Φ90 Φ110 Φ125 Φ160 Φ200 Φ250 Φ315 Φ400 Φ450 Φ500 Φ560 Φ630 Φ710 Φ800 Φ900 Φ1000 Φ1200				Φ90 Φ110 Φ160 Φ200 Φ250 Φ315 Φ355 Φ400 Φ500 Φ630 Φ710 Φ800 Φ1000 Φ1200	Φ75x50 Φ75x63 Φ90x50 Φ90x63 Φ90x75 Φ110x50 Φ110x63 Φ110x75 Φ110x90 Φ125x90 Φ125x110 Φ160x63 Φ160x75 Φ160x90 Φ160x110 Φ4200x90	Φ75x50 Φ75x63 Φ90x63 Φ90x75 Φ110x50 Φ110x63 Φ110x75 Φ110x90 Φ125x90 Φ125x110 Φ160x90 Φ160x110 Φ160x125 Φ200x90 Φ200x110 Φ200x160 Φ250x110 Φ250x160 Φ250x200 Φ315x110 Φ315x160 Φ315x200 Φ315x250 Φ400x200 Φ400x250 Φ400x315 Φ500x400 Φ630x500 Φ710x630 Φ800x630 Φ900x90 Φ900x160 Φ900x200 Φ900x250 Φ900x315 Φ900x400 Φ900x500 Φ900x630 Φ900x710 Φ900x800 Φ1000x160 Φ1000x200 Φ1000x250 Φ1000x315 Φ1000x400 Φ1000x500 Φ1000x630 Φ1000x710 Φ1000x800 Φ1000x900 Φ1200x160 Φ1200x200 Φ1200x250 Φ1200x315 Φ1200x400 Φ1200x500 Φ1200x630 Φ1200x710 Φ1200x800 Φ1200x900 Φ1200x1000

BODA PIPES INDUSTRY

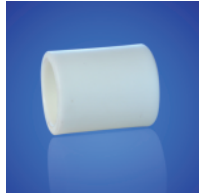
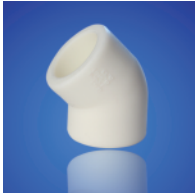
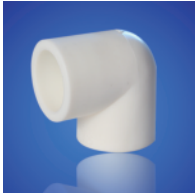
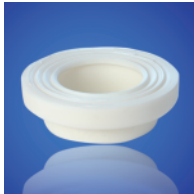
聚乙烯(PE)管件

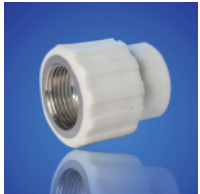
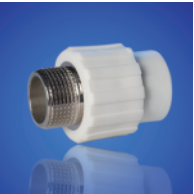
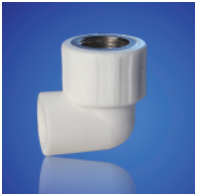
电熔管件(Электроплавильный фитинг)

PE				PE	
电熔直接 Electrofusion Connector	电熔法兰 Electrofusion Flange	电熔90°弯头 Electrofusion 90° Elbow	电熔45°弯头 Electrofusion 45° Elbow	电熔异径直接 Electrofusion Reducing Connector	电熔异径三通 Electrofusion Reducing Tee
					
Φ32 Φ40 Φ50 Φ63 Φ75 Φ90 Φ110 Φ160 Φ200 Φ160 Φ250 Φ315 Φ400 Φ315Φ500 Φ630 Φ710 Φ800 Φ1000		Φ32 Φ40 Φ50 Φ63 Φ75 Φ90 Φ110 Φ160 Φ200 Φ250 Φ315 Φ400 Φ315 Φ400 Φ500 Φ630 Φ800		Φ32x25 Φ40x32 Φ50x32 Φ50x40 Φ63x32 Φ63x50 Φ75x50 Φ90x50 Φ90x63 Φ90x75 Φ110x50 Φ110x63 Φ110x75 Φ110x90 Φ125x110 Φ140x110 Φ160x50 Φ 160x63 Φ160x75 Φ160x90 Φ160x110 Φ160x125 Φ160x140 Φ200x50 Φ200x63 Φ200x75 Φ200x90 Φ200x110 Φ200x140 Φ200x160 Φ225x110 Φ225x160 Φ225x200 Φ250x110 Φ250x160 Φ250x200 Φ315x160 Φ315x200 Φ315x250 Φ355x200 Φ400x250 Φ400x315 Φ400x355 Φ450x315 Φ450x40 Φ500x315 Φ500x400 Φ630x400 Φ630x500	

BODA PIPES INDUSTRY

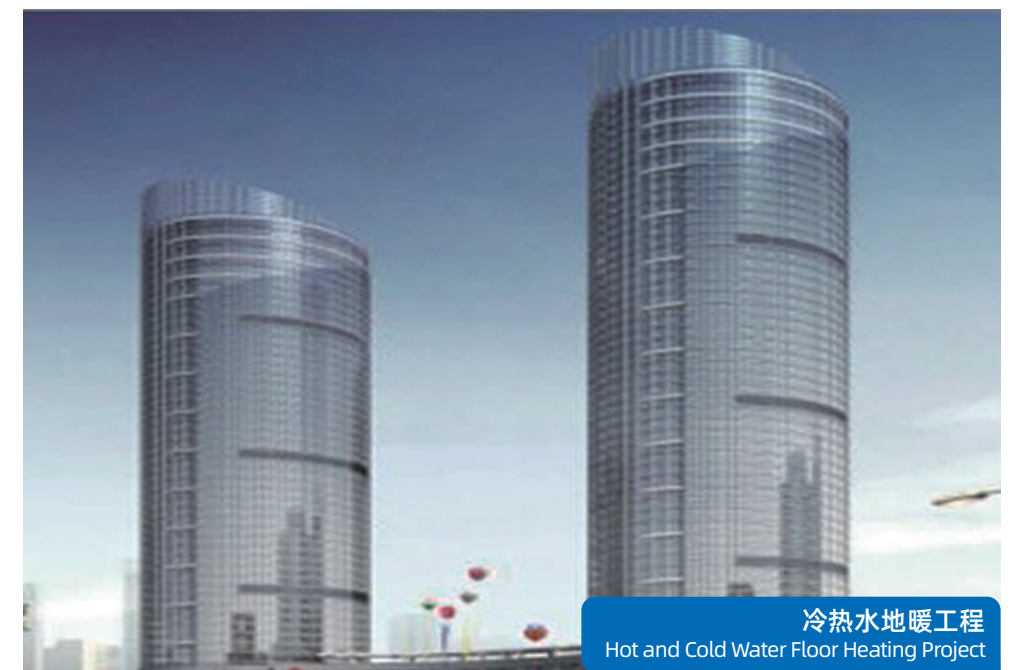
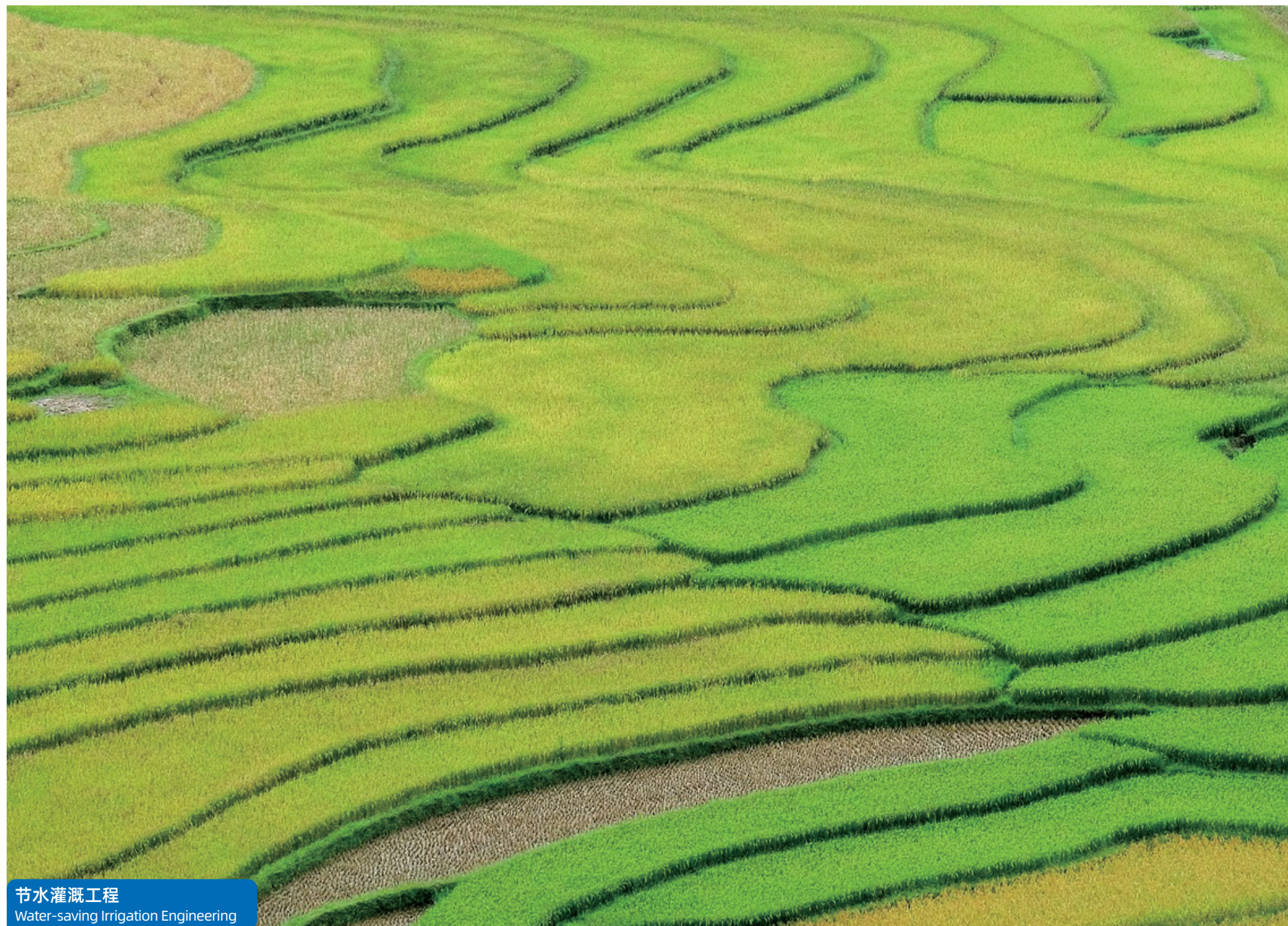
无规共聚聚丙烯(PP-R)管件

PP-R						PP-R			
直接	等径三通	管堵	45°弯头	90°弯头	截止阀	双活接球阀	法兰	内丝活接	外丝活接
Straight Connector	Equal-diameter Tee	Pipe Plug	45° Elbow	90° Elbow	Stop Valve	Double Union Ball Valve	Flange	Female Union	Male Union
									
Φ20 Φ25 Φ32 Φ40 Φ50 Φ63 Φ75 Φ90 Φ110						Φ20 Φ25 Φ32 Φ40 Φ50 Φ63	Φ40 Φ50 Φ63 Φ75 Φ90 Φ110	Φ20x1/2 Φ25x1/2中25x3/4 Φ32x1 Φ40x1.1/4 Φ50x1.1/2 Φ63x2	

PP-R						PP-R	
内丝直接	外丝直接	内丝弯头	外丝弯头	内丝三通	外丝三通	异径三通	异径直接
Female Threaded Connector	Male Threaded Connector	Female Threaded Elbow	Male Threaded Elbow	Female Threaded Tee	Male Threaded Tee	Reducing Tee	Reducing Connector
							
Φ20x1/2 Φ20x3/4 Φ25x1/2 Φ25x3/4 Φ32x1 Φ40x1.1/4 Φ50x1.1/2 Φ63x2						Φ25x20x25 Φ32x20x32 Φ32x25x32 Φ40x20x40 Φ40x25x40 Φ40x32x40 Φ50x32x50 Φ50x20x50 Φ50x25x50 Φ50x40x50 Φ63x20x63 Φ63x25x63 Φ63x32x63 Φ63x40x63 Φ63x50x63 Φ75x32x75 Φ75x40x75 Φ75x50x75 Φ75x63x75 Φ90x40x90 Φ90x50x90 Φ90x63x90 Φ90x75x90 Φ110x50x110 Φ110x63x110 Φ110x75x110 Φ110x90x110	

ENGINEERING EXAMPLES

工程实例



ENGINEERING EXAMPLES

工程实例

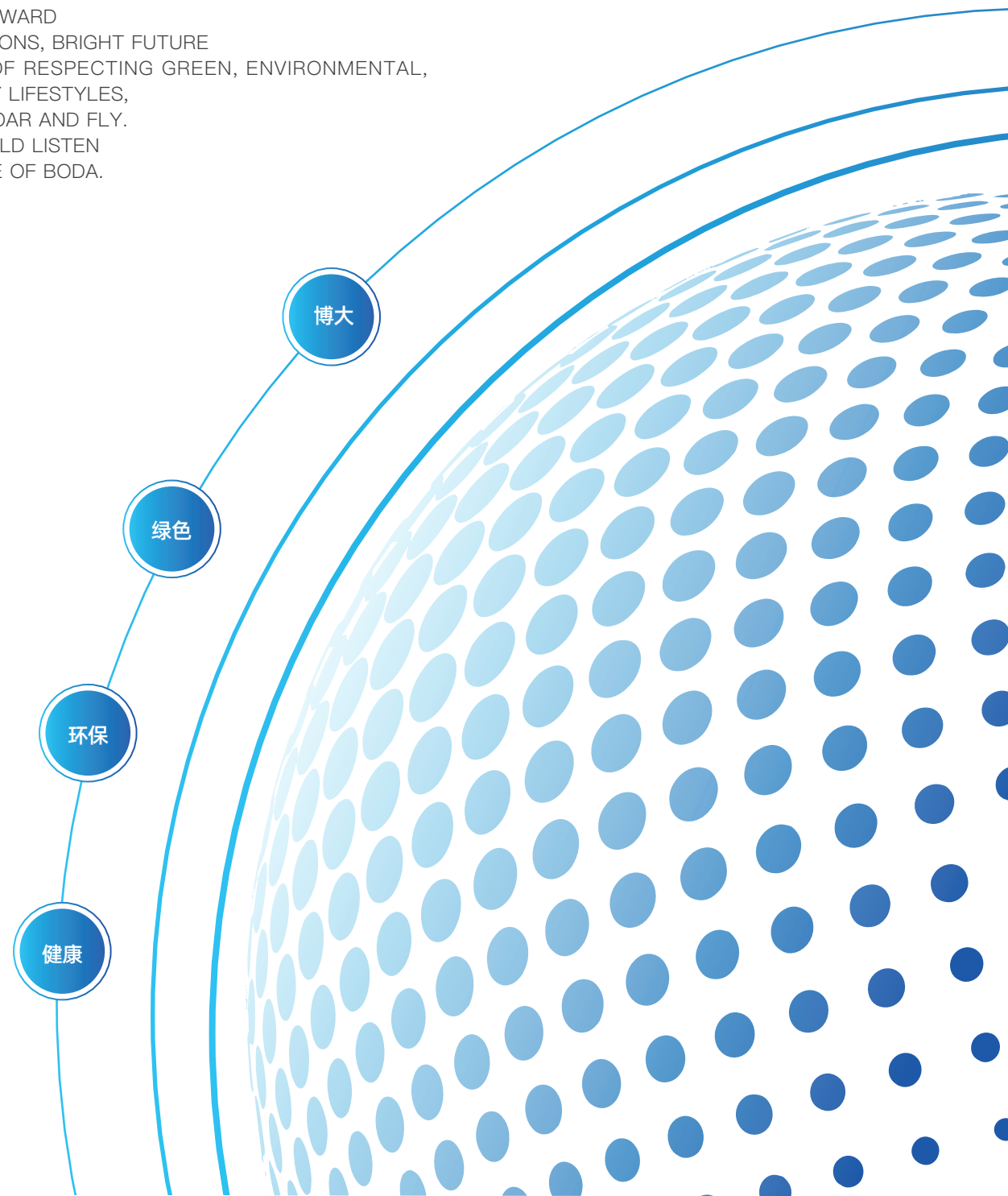


BODA PIPES INDUSTRY

展望未来

放眼未来
博大辉煌在崇尚绿色、环保、健康的人文时代
博大将展翅翱翔
让世界聆听
来自博大的声音

LOOKING FORWARD
BROAD HORIZONS, BRIGHT FUTURE
IN THE ERA OF RESPECTING GREEN, ENVIRONMENTAL,
AND HEALTHY LIFESTYLES,
BODA WILL SOAR AND FLY.
LET THE WORLD LISTEN
TO THE VOICE OF BODA.



SALES NETWORK

销售网络



公司坚持以华东为中心, 以重点地区为突破口, 辐射全国乃至海外市场的营销策略, 经过多年的努力, 建立了广泛的营销网点和强大的物流配送体系。在全国各地设立了博大办事处, 产品畅销国内并出口海外, 优质的产品, 先进的营销方式, 训练有素的销售队伍, 实现了销售服务工作的标准化, 专业化, 赢得了广大客户的信赖和好评。

CENTERED ON THE EASTERN CHINA REGION, OUR COMPANY FOCUSES ON KEY GEOGRAPHICAL AREAS AS LAUNCHPADS, EXPANDING OUR REACH ACROSS THE NATION AND BEYOND, INTO OVER-SEAS MARKETS. THROUGH YEARS OF DILIGENT EFFORT, WE HAVE SUCCESSFULLY ESTABLISHED AN EXTENSIVE NETWORK OF MARKETING OUTLETS AND A ROBUST LOGISTICS DISTRIBUTION SYSTEM. WITH BROAD OFFICES ESTABLISHED THROUGHOUT THE COUNTRY, OUR PRODUCTS ENJOY ROBUST DOMESTIC SALES AND ARE EXPORTED TO VARIOUS INTERNATIONAL MARKETS. OUR COMMITMENT TO DELIVERING HIGH-QUALITY PRODUCTS, ADOPTING CUTTING-EDGE MARKET-ING TECHNIQUES, AND MAINTAINING A HIGHLY TRAINED SALES TEAM HAS ENABLED US TO STANDARDIZE AND PROFESSIONALIZE OUR SALES SERVICES. THIS DEDICATION HAS EARNED US THE TRUST AND ACCOLADES OF A VAST CUSTOMER BASE.

AFTER-SALES SERVICE

售后服务

公司安装设备齐全, 共有Φ160—Φ1200 对接焊机、电熔焊机 120 多台, 可以满足各种情况下的管道安装, 公司拥有一支 60 多人的安装队伍, 技术精湛, 服务周到, 安全意识强, 能够严格按照规范组织施工。近年来承揽了多项大型管道安装工程, 受到社会各界的高度评价。

OUR COMPANY BOASTS A COMPREHENSIVE RANGE OF INSTALLATION EQUIPMENT, ENCOMPASSING OVER 120 BUTT FUSION AND ELECTROFUSION WELDERS, WITH DIAMETERS RANGING FROM Φ160 TO Φ1200. THIS EXTENSIVE INVENTORY ENABLES US TO CATER TO A WIDE ARRAY OF PIPELINE INSTALLATION SCENARIOS. FURTHERMORE, WE HAVE A SKILLED INSTALLATION TEAM OF OVER 60 PROFESSIONALS WHO EXCEL IN TECHNICAL PROFICIENCY, PROVIDE ATTENTIVE SERVICE, AND MAINTAIN A STRONG SAFETY MINDSET. THEY ADHERE STRICTLY TO CONSTRUCTION SPECIFICATIONS, ENSURING THE HIGHEST STANDARDS OF QUALITY. IN RECENT YEARS, OUR COMPANY HAS SUCCESSFULLY EXECUTED NUMEROUS LARGE-SCALE PIPELINE INSTALLATION PROJECTS, GARNERING WIDESPREAD PRAISE AND RECOGNITION FROM VARIOUS SECTORS OF SOCIETY.

培训指导

TRAINING AND GUIDANCE

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ENTERPRISE QUALIFICATION

企业资质

