



الاتحاد لصناعة الأنابيب
Union Pipes Industry

Driving Bigger Visions Forward

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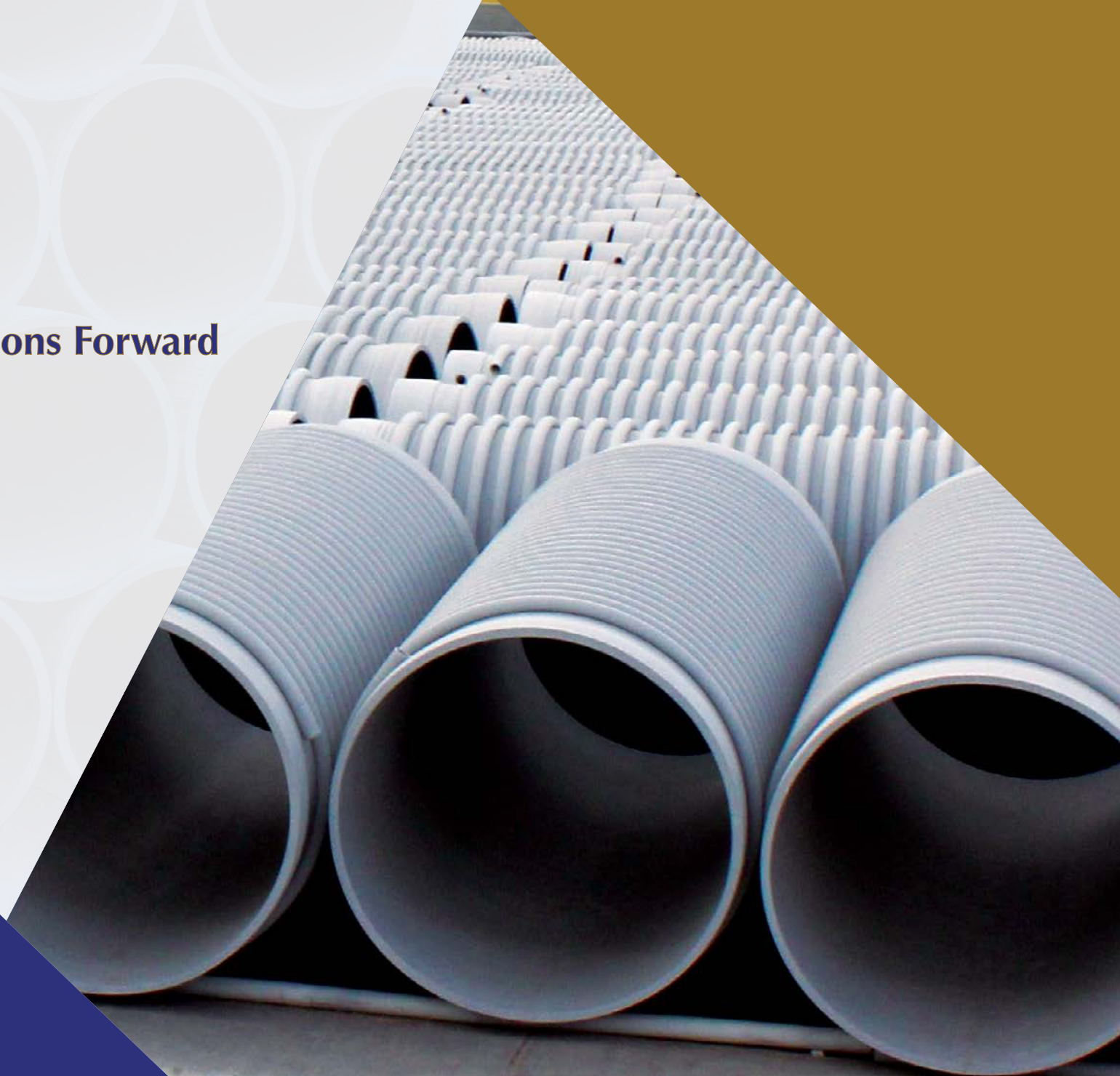




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INTRODUCTION

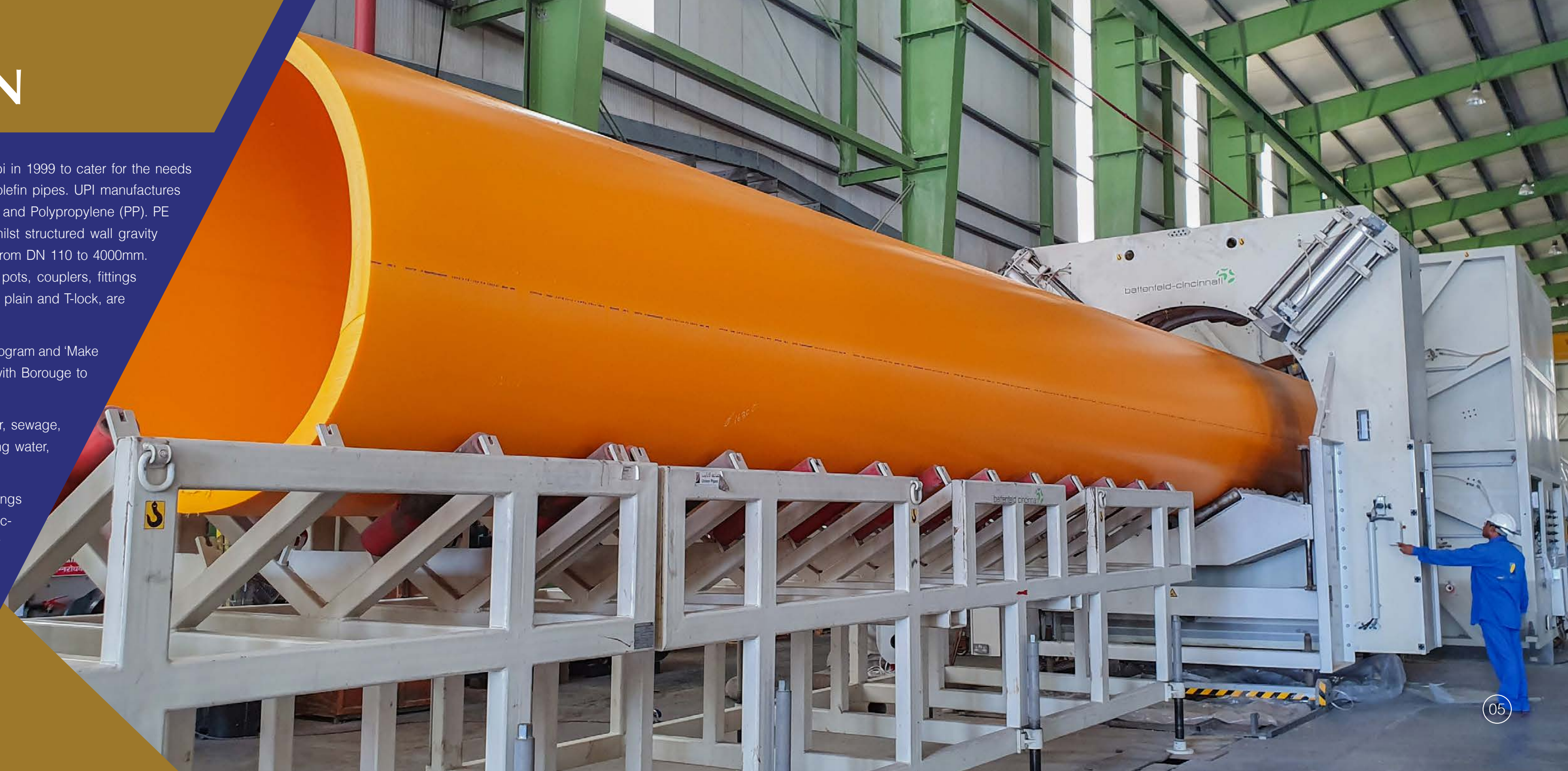
Union Pipes Industry LLC (UPI) was established in Abu Dhabi in 1999 to cater for the needs of the UAE and MENA regional markets for high quality Polyolefin pipes. UPI manufactures a range of rugged and durable pipes from Polyethylene (PE) and Polypropylene (PP). PE pressure pipes are manufactured from OD 10 to 2700mm whilst structured wall gravity pipes are manufactured up to DN 4000mm and DWC pipes from DN 110 to 4000mm. Injection molding machine products such as pallets, crates, pots, couplers, fittings and more are also manufactured at the UPI plant. Liners, both plain and T-lock, are produced up to 8 mm thick.

As part of our commitment to support UAE's In-Country Value program and 'Make it in the Emirates' national strategy. We are pleased to work with Borouge to develop the polyolefin industries in the UAE.

Polyolefin pipes have been widely specified for potable water, sewage, irrigation, gas distribution, and are now being used for cooling water, sea-water intakes and oilfield applications.

UPI manufactures and supplies a comprehensive range of fittings including reducers, bends, manifolds, diffusers, tees and connections to all other pipe materials. UPI pipes are approved by various federal and local government departments, utilities and oil companies.

To support the Client, UPI has an experienced engineering team and can supply site services ranging from hiring of welders and welding machines to full EPC services.



PIPES & FITTINGS



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Polyethylene (PE) Pressure Pipes

UPI manufactures solid wall Polyethylene and Polypropylene Pressure pipes using the most up-to-date extrusion machinery supported by technologically advanced automation systems and ultrasound thickness controls.

The production range is from 10mm to 2700mm outside diameter (OD) with a pressure range from 3.2 bar (45 psi) to 25 bar (360 psi), and higher for special circumstances.

The standard lengths of the pipes are 12, 18 and 24 meters. However, we can supply any length on customer request. Small diameter pipes from 16mm to 180mm can be supplied in coils from 100 to 500 meters.

Pipes with special diameters and thickness can be manufactured for different uses such as re-lining of oil pipes and industrial application.

Our pipe production is according to the international standards ISO 4427 and ISO 4437.



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Polyethylene (PE) Pressure Pipes

Applications:

- Potable water
- Irrigation
- Sewerage : new / relining
- Storm water
- Industrial piping
 - Desalination
 - Petrochemical
 - Nuclear
 - Chilled / cooling water
 - Fire water mains
- Gas distribution
- Crude oil flow lines & liners
- Dredging and slurry pipelines
- Underwater piping Intakes & Outfalls



Advantages:

- 50 year design life
- Resistant to corrosion
- Chemically inert
- Welded joints
- Very smooth
- Light
- Durable
- Non-polluting
- Resists UV attack
- Non-toxic
- No anchor blocks
- Flexible
- Long lengths
- Narrow trench
- Absorbs surge
- Does not fatigue
- Available in coils
- Non-destructive methods
- Relining
- Abrasion resistant
- Locally available
- Fittings available locally



Polypropylene (PP) & Polyethylene (PE) Gravity Pipes



UPI manufactures Spiral Wound Gravity Pipes by using Bauku technology to produce these huge pipes for sea-water projects. The material and manufacturing technology can in fact be used to manufacture any diameter of gravity pipe up to 4000mm.

Applications:

Sewerage
Stormwater drainage
Seawater intake & outfalls
Manholes
Silos
Water tanks
Industrial Applications

Advantages:

50-year design life
Resistant to corrosion
Chemically inert
Welded joints
Very smooth
Light
Durable
Non-polluting
Resists UV attack
Non-toxic



Corrugated Pipes PE & PP

Double wall corrugated (DWC) pipes are manufactured from DN 110 mm to 1000 mm and consists of an Outer Corrugated layer designed to enhance pipe stiffness, absorb external load and reduce overall weight and an internal smooth wall, to ensure good transmission of the fluids with a low friction coefficient and has very good resistance to abrasion.



Applications:

Drainage pipes to EN 13476-3

Sewerage

Stormwater drainage

Industrial discharge

Land drainage

Cable Conduit to EN 50086-2-4

Power distribution

Telecommunications

Industrial control systems



Advantages:

- Easy joint by Butt-Fusion welding, socket spigot connection or coupler with rubber gasket.
- Manufactured with polyolefin prime material ensuring all high properties of polyethylene and polypropylene pipes.
- Light, easier to transport and Installation
- Smooth internal surface and low coefficient of Friction allows longer cable pulling in single cycle.
- Resistant to impact and impermeable to both water and dust.
- Resistant to corrosion, abrasion and UV
- Durable and long service life with low maintenance cost.
- It can be laid in minimum soil cover and can easily withstand natural settlements without suffering cracks or leakages.
- Used at temperature -200C up to +600C.
- Flexible and work with the surrounding soil to carry the load and avoid load by deflection. The surrounding soil takes the load and determines the stiffness of the complete system.
- All types of fittings available (Elbows, Tee's, Reducer's etc.) for connection by butt fusion or rubber ring gasket.
- Higher stiffness strength to weight ratio, this allows deeper installation at low cost.



Fittings Fabrication

UPI produce PE & PP fabricated, machined and other customized fittings to meet the requirement of international standards.

UPI manufactures and supplies a comprehensive range of fittings including reducers, bends, tees, manifolds, diffusers and connections to all other pipe materials. The fittings are suitable for both butt-fusion and electrofusion joints."



Manholes & Chambers

PP & HDPE

Applications:

Sewerage Systems
Irrigation Systems
Stormwater Systems
Potable Water Systems
Industrial Applications

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HDPE / PP Manholes and Chambers complying with the requirements of BS EN 13598-2: 2009.

Manholes & Chambers are available in various internal diameters ranging from 300mm up to 4000 mm. The typical depths to invert can range from 1 meter to 6 meters and deeper in special cases. These units are provided with required inlet and outlet pipe, benching, lifting lugs and also with PE I PP ladder (if required).

The versatility of UPI's HDPE I PP manholes & chambers makes them the ideal choice for housing, municipal and industrial applications. The maintenance free material offers the following advantages over the conventional types (e.g. Concrete coated I lined, GRP):

- Sustainable / Estidama compliant
- Environment friendly
- Custom built products
- Wide range of sizes
- Light weigh - time & cost saving
- High chemical resistance
- High abrasion resistance
- Non-corrosive components
- 100 % leak free joints / impervious
- Walls
- Tested prior to installation
- Longer shaft length
- Smooth flow, low friction loss
- Safe under traffic
- HDPE-UV resistant
- No waterproofing or coating
- Required
- Long life / durable (min. 50 years)
- Maintenance free
- 100% local product
- Approved by government (e.g. ADSSC, AAM)



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Manholes & Chambers

PP & HDPE



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Manufacturing

HDPE/PP manholes and chambers are produced using an automated spiral extrusion process that creates a smooth internal surface and reduces stress by cooling in open space. The base is welded and reinforced, followed by the installation of customized fittings. This prefabrication ensures efficient, cost-effective site installation with minimal additional work.

Concept

These units are engineered to withstand radial and axial loads from soil, groundwater, and traffic. Their wall thickness and stiffness are tailored per project requirements and must comply with BS EN 13598-2 or other relevant standards. Key factors like installation depth, load conditions, soil type, and groundwater levels are considered, with anti-flotation measures added if needed.



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Tanks & Reservoirs

PP & HDPE

UPI manufactures robust HDPE / PP storage tanks and reservoirs that serve the storage needs of the housing, municipal and industrial sectors. Individual tanks' capacity ranges from 100 gallons to 40,000 gallons or above. Tank units can be assembled in series to form reservoirs with total capacity exceeding 2 million gallons depending on space availability. Tanks / Reservoirs can be installed above the ground or underground and are provided with required inlet, outlet pipe, manhole entry, vent pipes, and PE / PP ladder (if required).

The versatility of UPI's HDPE / PP Tanks makes them the ideal choice for the storage of water and a diverse range of chemicals, grains, effluents and corrosive materials. The maintenance free material offers the following advantages over the conventional types (e.g., Concrete, Steel, GRP):

- Sustainable / Estidama compliant
- Environment friendly
- Inert and non-toxic materials
- Custom built products
- Wide range of sizes
- Light weight – time & cost saving
- High chemical & abrasion resistance
- Noncorrosive components
- 100 % leak free joints / impervious walls
- Hydro tested prior to installation
- No waterproofing or coating
- Safe under traffic
- UV resistant
- Easily cleaned, no algae growth
- Long life/ Durable (Min. 50 years)
- Maintenance free
- 100% local product
- Approved by government

Applications:

- Sewerage Tanks
- Irrigation Water Tanks
- Potable Water Tanks
- Stormwater Retention
- Detention Tanks
- Waste / Septic Tanks
- Industrial Tanks
- Chemical Storage Tanks • Silos



TANKS & RESERVOIRS

PP / HDPE



Manufacturing

Tanks are produced using an automated spiral extrusion process, where hot plastic material is wound onto a preheated mandrel to form a smooth, stress-minimized body. After cooling, end caps, manholes, and stiffeners are welded on, followed by the installation of customized fittings. This prefabricated design ensures precise, cost-effective, and time-saving installation with minimal on-site work required.



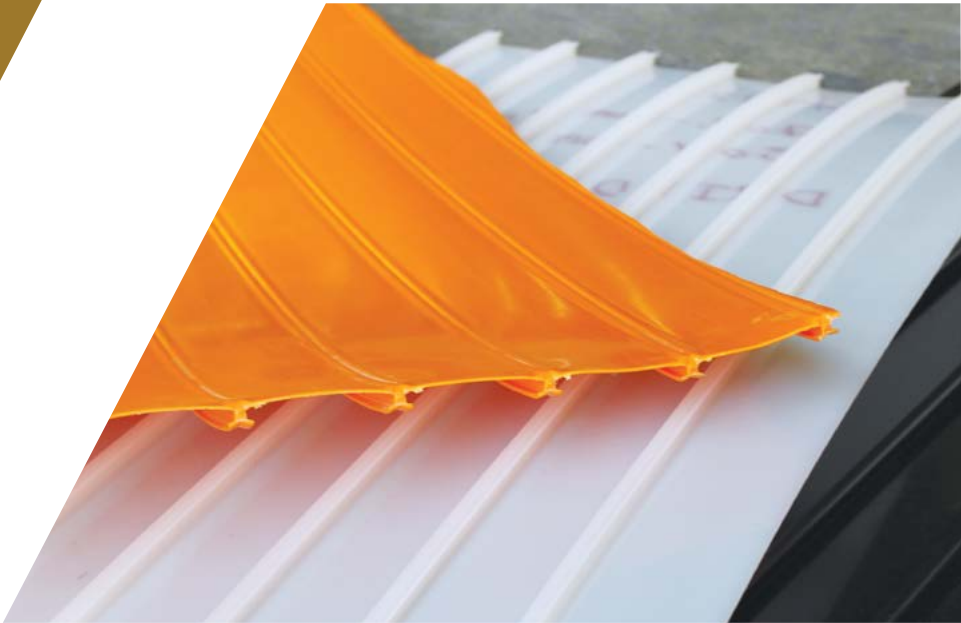
Concept

Tanks are engineered to withstand static horizontal and vertical pressures, with wall thickness and stiffness tailored to resist radial and axial loads. Vertical tanks over 6m high can be optimized with variable wall thickness. For underground horizontal tanks, stiffness and buckling resistance must comply with BS EN 1295 or equivalent standards. Key considerations include installation depth, loads, groundwater, soil conditions, and anti-floatation measures when necessary.

PE Liner (T-Lock & Plain)

Utilizing years of experience with polyethylene pipe extrusion, Union Pipes Industry LLC now manufactures PE Liner (T-Lock & Plain) as permanent protection for concrete pipes, other structures and applications. PE is the most chemical resistant member of the polyolefin family on account of its dense configuration.

Nowadays, it is the most commonly used membrane in various applications. It offers great ultraviolet protection and ageing resistance from the severe stresses of weather, and it is manufactured from the high-quality resins following a rigorous QA/QC program.

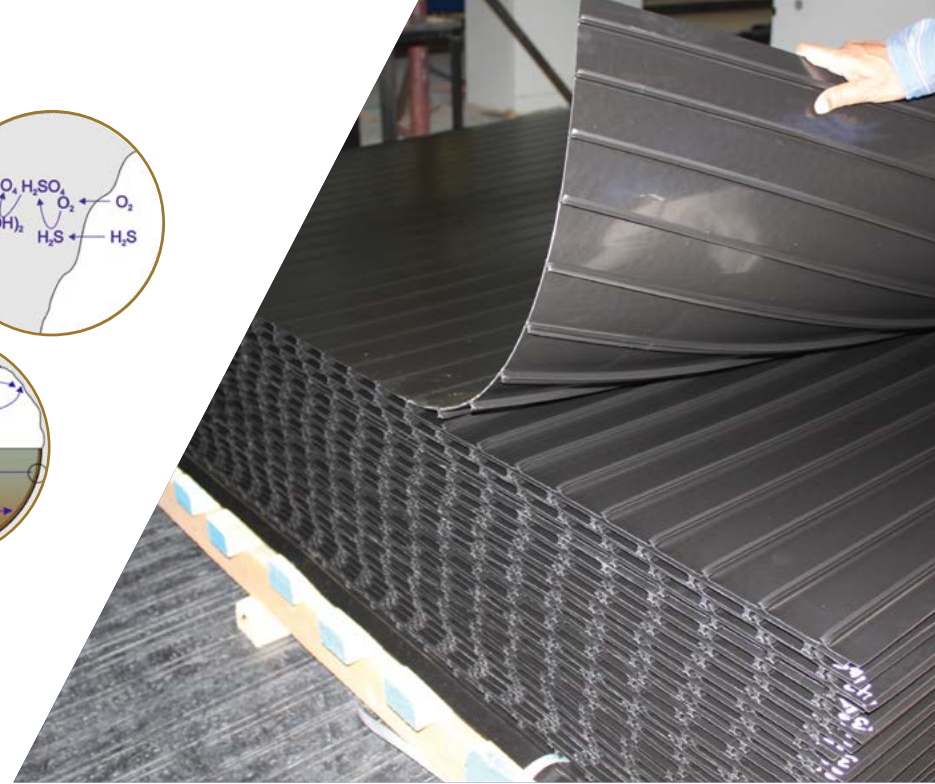


Properties	Description
Material	POLYETHYLENE (PE)
Thickness	Plain – 1.6mm to 8mm with T-lock 1.6mm to 3.5mm
Colors	Black (Other colors on request)
Applications	Lining of RC Pipes, PCC Units Underground Structures, Foundations, Culverts, Reservoirs and Tanks, Under Roads etc.

PE Liner

Applications:

- Internal protection concrete sewers, manholes and drainage pipes
- External protection foundations and sub-structures
- Internal / external protection culverts
- Concrete structures containing corrosive liquids
- Fertiliser storage
- Internal lining of reservoirs



Advantages

- Environmental Friendly (Estidama)
- Selected polyethylene resins providing flexibility and strength
- Easily cut to suit any shape or form
- Ideal protection against corrosive elements
- Suitable for potable water applications
- Low coefficient of friction
- High resistance to abrasion
- Perfectly weldable for complete sealing
- Perfect water proof performance
- Seepage and humidity resistance
- No chloride and sulphates attacks
- No Hydrogen Sulphide attacks
- Excellent physical and mechanical performance
- High tearing resistance
- Good deformation adaptability
- High puncture resistance
- High aging resistance
- High UV resistance
- Anti-acid & alkali
- Excellent low high temperature resistance
- Safe, long life span



Properties

PE Material

Test	Units	Value	Standard
Density	g/cc	≥0.93	ISO 1183 / ASTM D792
Color	-	Black	Other colors on request
Carbon Black Content	%	2.00 - 3.00	ASTM D1603
Melt Flow Index(2.16kg)	g/10min	≤1.30	ISO 1133 / ASTM D1238
OIT	min.	>20 @200° C	ASTM D3895

Sheet Dimensions

Thickness (T-Lock)	mm	1.60 - 3.50	ASTM D4801
Thickness (Plain)	mm	1.60 - 8	ASTM D4801
Length	m	As required	-

Physical properties

Test	Units	Value	Standard
Durometer Hardness -1sec	Shore-D	≥50	ASTM D2240
Durometer Hardness -10sec	Shore-D	≥40	ASTM D2240
Tensile Strength @ yield	MPa	≥12	ASTM D638
Tensile Strength @ break	MPa	≥20	ASTM D638
Elongation at break	%	>600	ASTM D638
Tear resistance	N	≥150	ASTM D1004
Puncture resistance	N	≥300	ASTM D4833
Water Absorption	%.	≤0.4	ASTM D570

Injection Molding

Industrial Pallets

Through injection moulding, we have been able to supply high performance plastic pallets. They all meet the dynamic consumer needs. Our injection moulded pallets are durable, strong, dimensionally stable and have a perfect finish. To achieve this, we use sophisticated moulding technology and high-grade HDPE & PP material. It is for this reason that UPI injection moulded pallets are highly recommended for all storage and transportation applications. Injection moulded plastic pallets have precise dimensions, strong structure and high impact resistance.



Plastic Crates

UPI's Plastic Crates are designed specifically to integrate supply chain activities while assuring costs and environmental impacts. UPI uses advanced injection-moulding technology to produce customized, material handling products (Pallets, Crates, Containers etc.) made of durable and impact-resistant plastics.

Plastic Planters & Pots

UPI's Planters and Pots is suitable for both indoor and outdoor use and it's great for combining with small and medium-sized trees and flower plants. The Planters and Flowerpots are made of high-quality plastic using high-pressure injection moulding technology, which makes it strong and durable. It's easy to clean, weather-resistant and UV stabilized. And comes with Matte texture finish for scratch and fingerprint resistance.



Custom Moulding Services

The injection moulding process is used to manufacture a wide range of customized products like industrial pallets, crates, pails, buckets, bins, planters and pots, plastic utensils, tables and chairs, shopping trolleys and baskets, food and beverages containers, industrial and collapsible containers, storage and logistic boxes, building material products, toys and many more.



Wood Plastic Composite (WPC)

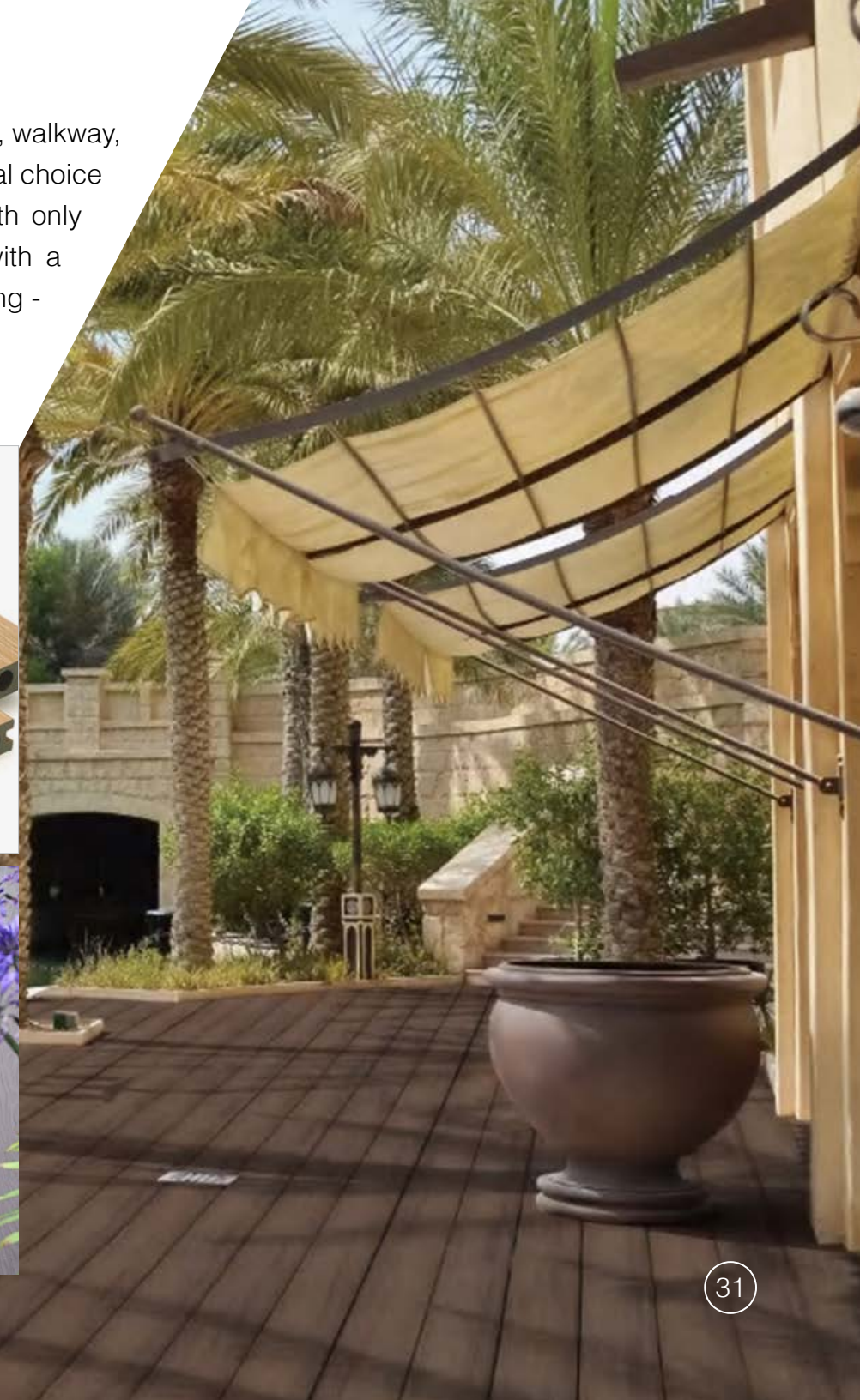
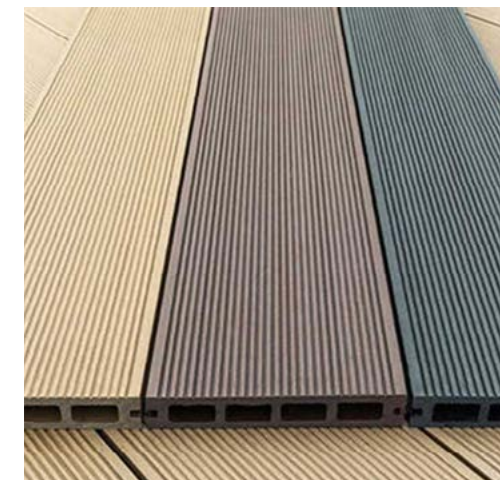
WPC offers sustainable and versatile decking solutions to meet the evolving needs of our customers. Our journey began with a passion for creating products that not only enhance outdoor spaces but also contribute to a greener environment. Through continuous innovation and a commitment to excellence, we will position ourselves as a leader in the industry.

WPC is a relatively new environmentally friendly material that utilizes wood flour and plastic (HDPE) to produce a range of attractive decking boards which combine the appearance of real hardwood with outstanding durability. Unlike timber decking, WPC has a low water absorption rate, will not rot, splinter, or require the expense of ongoing painting or staining treatments to retain its attractive appearance. It is resistant to attack by insects, does not promote algae growth, mold or fungus - and importantly, will not become slippery when wet.



UPI WPC has the ability to transform any garden, patio, pool surround, walkway, roof garden or balcony - its outstanding longevity also makes it an ideal choice for commercial landscaping, aquatic and riverside installations. With only minimal maintenance, UPI WPC decking provides the end user with a robust solution to the age-old problems associated with timber decking - providing years of trouble-free use.

For other details and specifications, please refer our brochure.



Quality, Health, Safety & Environment Commitment

UPI's Integrated Management System is a management tool that integrates quality, occupational safety & health and environment management components of our business into coherent system. IMS is designed to ensure quality products, employees' safety, the promotion and maintenance of highest degree of physical and social well-being of employees by preventing work related injuries, ill health, controlling risks, adaptation of work to people and people to their job.



Quality Assurance and Quality Control

UPI ensures that the quality requirements of the client are met at every stage. This is typically by way of project-specific Inspection & Test Plan, agreed with the client. In all situations, UPI has a comprehensive Quality Control system that monitors every stage of production, from receipt of raw material to delivery of the product. UPI is certified as complying with ISO 9001:2015.



Health & Safety

UPI management is committed to provide safe workplace, protection of employees, visitors, customers, suppliers, nearby communities and public. UPI has appointed dedicated HSE team. There is a positive relationship & partnership between HSE experts and line managers. UPI is certified and approved for complying with requirements of OSHAD SF and ISO 45001:2018.

Environment

UPI management is committed to prevent environment from pollution. Welded plastics pipes are recognized as one of the major factors in reducing water leakage around the world. UPI ensures that their facilities do not pollute the environment and aims to re-cycle over 90% of the waste produced. UPI is certified as complying with ISO 14001:2015.



Support

Technical Support

UPI provides specialist technical support to utilities, consultants and contractors. Site services range from welder testing to full supply and install contracts. **UPI's experienced professional staff can provide comprehensive technical support regarding:**

- Material selection
- Design criteria; methods and Standards
- Application of Specifications and Standards
- Pipe selection and approvals
- Jointing techniques
- Selection of fittings and fixings
- Installation techniques
- Testing methods

UPI maintains a comprehensive technical reference library which includes most relevant current International Standards.



Site Services

UPI has established a full range of site services which can be tailored to suit the requirements of the Client and the Project. UPI has a wide range of site welding, installation and testing machinery covering all pipe sizes from 63mm to 4000mm diameter.

Options include:

- Supply of pipe and fittings only + technical support
- Supply of pipe and fittings + welding supervision
- Supply of pipe and fittings + welders and welding machines
- Weld and welder testing
- Supply and Installation of pipes and fittings, including testing
- Full EPC Contract Service



Customer Service

UPI's professional staff provides unrivalled customer care and support throughout all stages of any project.

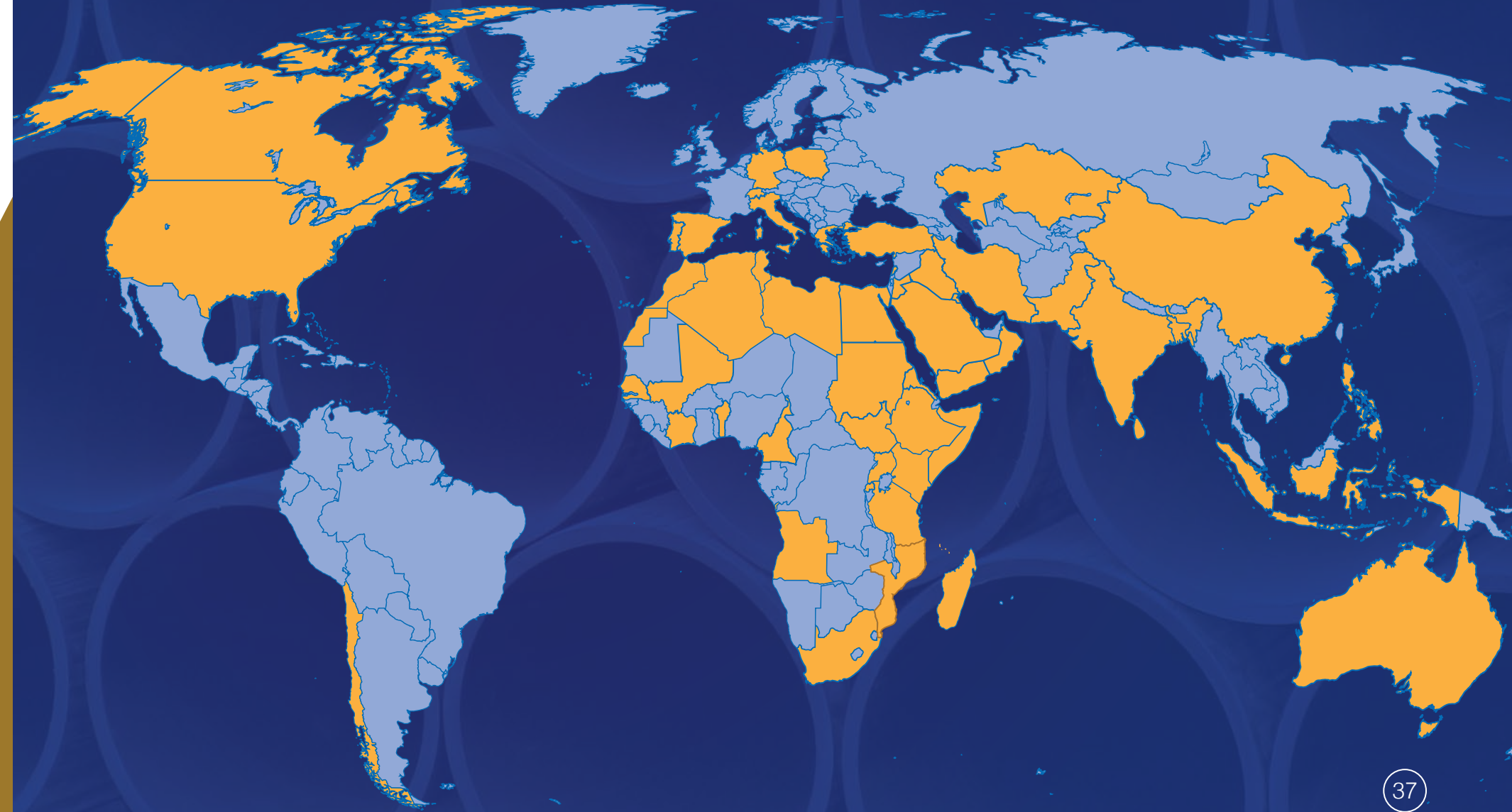
UPI has invested in staff recruitment and training to provide unrivalled customer care and support. UPI's customers are assured of the company's full support in all aspects of PE pipeline technology from pipe selection and design through installation and testing.

Each production run is tailored to our customers' requirements and pipe lengths can be adjusted to maximize transport and installation efficiencies.



UPI EXPORTS

UPI Worldwide: Enhancing Our Presence in Global Markets with UAE-Made Polyolefin Products



Awards & Approvals

Awards

UPI is awarded by Gulf Petrochemicals and Chemicals Association (GPCA) for excellence in plastic products and processes for development of various pioneering and innovative products manufactured first time in the world;

- Fully rated HDPE reducing Tee – 2000 mm diameter (Excellence Award – 2012)
- Butt fusion welding of PP (Block Co-polymer) pipes – ID 3000 mm (Excellence Award first runner-up – 2014)
- Large diameter GRP-PE-GRP coupling spool – OD 2167 mm (Excellence Award – 2016)



Approvals

We’ve achieved results for our clients in Infrastructure, building and Oil and Gas works. Our clients find real value in working with us because of the quality of product that we manufacture with innovative technologies and world-class machinery. Most of all, it’s because our focus is on client outcomes.

Product Certificates & Approvals

1	Water Regulation Advisory Scheme - HDPE Pipes	WRAS	England
2	Water Regulation Advisory Scheme - MDPE Pipes	WRAS	England
3	PE Pipes & Fittings for UG Fire Protection Service	FM	USA
4	Bodycote Polymer Testing Certificate ISO 4427	ISO 4427	Sweden
5	Quality & Conformity Council - PE 100 Pipes	Certificate of Conformity	Abu Dhabi
6	Civil Defense Permit - PE Pipes & Fittings	Material Approval	Abu Dhabi
7	Environment Permit - PO Pipes & fittings	IND-82	Abu Dhabi
8	Ministry of Energy & Industry Permit - PO Pipes & Fittings	Products Approval	UAE
9	In Association with ISCO Industries – HDPE Pipes & Fittings	ASME Code Case N-755-1	USA



Major EPC Projects



Barakah Nuclear Power Plant

Client: ENEC
Main Contractor: ISCO
Size: 914mm, SDR17
Quantity: 6,480 m
Material: HDPE
Scope: Supply & Welding of Safety Related HDPE Pipes & Fittings



Borouge Two Expansion (B2) Project

Client: Borouge
Main Contractor: Tecnicas Reunidas
Size: 1600mm, SDR 26
Quantity: 26,000 m
Material: HDPE
Scope: Seawater Supply & Return – Supply, Welding, Installation & Testing



Polypropylene Fifth Unit (PP-5)

Client: Borouge
Main Contractor: Tecnimont
Size: 1600mm, SDR 11
Quantity: 11,172 m
Material: HDPE
Scope: Cooling Water Supply & Return and Potable & Fire Water



Effluent Oily Water Supply to Oil Production Platform

Client: ZADCO
Main Contractor: APS
Size: 560mm, SDR 7.25
Quantity: 6,400 m
Material: HDPE
Scope: EPC Contract



15 MIGD SWRO Desalination Plant

Client: Federal Electricity & Water Authority (FEWA)
- Ras Al Khaimah

Main Contractor: Actco

Size: 1800mm, SDR17

Quantity: 1,600m

Material: HDPE

Scope: Supply, Installation & Testing



Hydroelectric project

Client: Alaska Energy Authority, USA

Main Contractor: Orion

Size: 1600mm, SDR 21

Quantity: 2,500m

Material: HDPE

Scope: Supply



Al Hair Sewage Treatment Plant (STP)

Client: National Water Co. – Riyadh, KSA

Main Contractor: Saudi Tumpene Company

Size: 3000mm x 100mm thickness

Quantity: 1,324 m

Material: HDPE

Scope: Supply



Supply of Slurry Water HDPE Pipelines for New Phosphate Plant (Wa'ad Al Shamal)

Client: MAADEN MINES – KSA

Main Contractor: Kepco

Size: 710mm-1200mm, SDR 11 and 1400mm-1600mm, SDR 26

Quantity: Total 15,400 m

Material: HDPE

Scope: Supply



1320 MW Thermal Power Plant SWIO – Gayathri Power - 2013

Client:	NCC Power Projects - Krishnapatnam, Nellore Dist., Andhra Pradesh, India
Main Contractor:	Gayatri Lt.
Size:	1400mm & 1600 mm, SDR 26
Quantity:	3,100 m
Material:	HDPE
Scope:	Supply



55 MW Methane Gas Power Project

Client:	Shema Power Lake Kivu Ltd. (SPLK) - Rwanda
Main Contractor:	ISCO
Size:	315mm, 400mm, 800mm, 1200mm and 1400 mm
Quantity:	Total 32,970 m
Material:	HDPE
Scope:	Supply



Sea Water Intake for RRE Project

Client:	Takreer
Main Contractor:	Samsung
Size:	3,000mm
Quantity:	4,150 metres (Offshore)
Material:	Polypropylene Pipe (PP)
Scope:	EPC Contract



Sea Water Intake for Borouge 3 Project

Client:	Borouge
Main Contractor:	Hyundai
Size:	3,000mm
Quantity:	15,400 metres (Offshore)
Material:	Polypropylene Pipe (PP)
Scope:	EPC Contract



Underground HDPE Onshore for Borouge 3 Project (U&O)

Client: BOROUGE
Main Contractor: Hyundai
Size: 2,000mm to 63mm PN20 to PN6.3
Quantity: 110,000 Metres
Material: HDPE
Scope: Supply & Installation



Underground HDPE Onshore for Borouge 3 Project (LDPE & PO Plant)

Client: BOROUGE
Main Contractor: TSJ
Size: 2,000mm to 63mm PN20 to PN6.3
Quantity: 18,000 Metres
Material: HDPE
Scope: Supply & Installation



Deep Tunnel Storm Water System Terminal Pumping Station & Sea Outfall Project

Client: Dubai municipality
Main contractor: Archirodon
Size: OD 2000mm SDR 26
Quantity: Pipes length 1,445 m + 3500mm + Diffusers and Fittings
Material: Borouge 3490 ELSH
Scope: Supply



Polypropylene (PP) Water Tank

Al Rawdha in Al Ain, UAE

Capacity: 1.5 million litres
Material: Polypropylene Pipe (PP)
Scope: Supply & Installation



Irrigation Mains in Abu Dhabi Industrial City

Client: ADSSC
 Project: Irrigation Mains to 450mm diameter PN16
 Material: HDPE
 Total Length: 85kms
 Scope: Supply of pipes, welders, welding machinery



Sewage Effluent Mains in Al Ain

Client: ADSSC
 Project: Sewage Effluent Mains 1200mm diameter PN10
 Material: HDPE
 Total Length: 22kms
 Scope: Supply of pipes, welders, welding machinery



Sewage Rising Mains in Mafraq

Client: ADSSC
 Project: Sewage Rising Mains 630mm diameter PN16
 Material: HDPE
 Total Length: 72kms
 Scope: Supply of pipes, welders, welding machinery



Irrigation Mains in Abu Dhabi

Client: ADSSC
 Project: Irrigation Mains 900mm diameter PN10
 Material: HDPE
 Total Length: 9kms
 Scope: Supply of pipes, welders, welding machinery



Qurayyat Independent Water Plant (QIWP), Oman

Main Contractor: Hani Archirodon
 Size: OD 2500mm SDR 26 (1,877m), OD 1800mm SDR 26 (1,720m) & Fittings & Diffusers 87 No's
 Material: Borouge 3490 ELSH
 Scope: Supply & Welding of HDPE Pressure Pipes & Fittings (SWI & O)



El-Hammam Wastewater Treatment Plant - Egypt

Client: Engineering Authority Water Management
 Main Contractor: Hassan Hussein
 Size: Profile Pipe ID 3 m, SN \geq 4, PN 3 Bar, Length 3000 m & Profile Pipe ID 2.5 m, SN \geq 4, PN 3 Bar, Length 3000 m
 Material: Borouge 3490 ELSH
 Scope: Supply & Installation



Occidental Petroleum, Qatar

Client: APS
 Project: Effluent Water Line 630mm diameter PN22
 Material: HDPE
 Total Length: 6kms
 Scope: Supply of pipes and fittings



Abu Dhabi Corniche Development

Client: Abu Dhabi Municipality
 Project: Corniche Development, Surface Water Drainage up to 1200mm diameter PN10
 Material: HDPE
 Total Length: 10KM
 Scope: Supply of pipes, welders, welding machinery

Technical Data Sheet

HDPE Water Pipes as per ISO - 4427, PE 100, Design Stress 8.0 Mpa

Size Designation DN	Wall Series											
	S-12.5 (SDR 26)			S-8 (SDR 17)			S-5 (SDR 11)			S-4 (SDR 9)		
	Nominal Pressures											
	PN 6.3			PN 10			PN 16			PN 20		
de mm	e mm	di mm	kg/m*	e mm	di mm	kg/m*	e mm	di mm	kg/m*	e mm	di mm	kg/m*
16	-	-	-	-	-	-	-	-	-	2.0	12.0	0.10
20	-	-	-	-	-	-	2.0	16.0	0.12	2.3	15.4	0.14
25	-	-	-	-	-	-	2.3	20.4	0.18	3.0	19.0	0.22
32	-	-	-	2.0	28.0	0.20	3.0	26.2	0.29	3.6	24.8	0.34
40	-	-	-	2.4	35.2	0.31	3.7	32.6	0.45	4.5	31.0	0.53
50	2.0	46.0	0.32	3.0	44.0	0.47	4.6	40.8	0.69	5.6	38.8	0.82
63	2.5	58.0	0.48	3.8	55.4	0.75	5.8	51.4	1.09	7.1	48.8	1.30
75	2.9	69.2	0.69	4.5	66.0	1.05	6.8	61.4	1.53	8.4	58.2	1.83
90	3.5	83.0	0.99	5.4	79.2	1.52	8.2	73.6	2.20	10.1	69.8	2.64
110	4.2	101.6	1.45	6.6	96.8	2.24	10.0	90.0	3.26	12.3	85.4	3.91
125	4.8	115.4	1.87	7.4	110.2	2.87	11.4	102.2	4.23	14.0	97.0	5.05
140	5.4	129.2	2.36	8.3	123.4	3.59	12.7	114.6	5.26	15.7	108.6	6.34
160	6.2	147.6	3.09	9.5	141.0	4.69	14.6	130.8	6.91	17.9	124.2	8.25
180	6.9	166.2	3.85	10.7	158.6	5.92	16.4	147.2	8.73	20.1	139.8	10.40
200	7.7	184.6	4.77	11.9	176.2	7.31	18.2	163.6	10.80	22.4	155.2	12.90
225	8.6	207.8	5.99	13.4	198.2	9.28	20.5	184.4	13.60	25.2	174.6	16.30
250	9.6	230.8	7.41	14.8	220.4	11.40	22.7	204.6	16.70	27.9	194.2	20.10
280	10.7	258.6	9.24	16.6	246.8	14.30	25.4	229.2	21.00	31.3	217.4	25.10
315	12.1	290.8	11.80	18.7	277.6	18.00	28.6	257.8	26.60	35.2	244.6	31.70
355	13.6	327.8	14.90	21.1	312.8	23.00	32.2	290.6	33.70	39.7	275.6	40.30
400	15.3	369.4	18.80	23.7	352.6	29.00	36.3	327.4	42.80	44.7	310.6	51.20
450	17.2	415.6	24.30	26.7	396.6	36.80	40.9	368.2	54.30	50.3	349.4	64.70
500	19.1	461.8	30.00	29.7	440.6	45.30	45.4	409.2	66.90	55.8	388.4	79.90
560	21.4	517.2	37.70	33.2	493.6	56.90	50.8	458.4	83.80	62.5	435.0	97.00
630	24.1	581.8	47.70	37.4	555.2	71.90	57.2	515.6	106.00	70.5	489.0	126.00
710	27.2	655.6	60.50	42.1	625.8	91.40	64.5	581.0	133.9	-	-	-
800	30.6	738.8	76.70	47.4	705.2	116.00	72.6	654.8	170.1	-	-	-
900	34.4	831.2	97.00	53.3	793.4	147.00	81.7	736.6	215.2	-	-	-
1000	38.2	923.6	120.00	59.3	881.4	181.00	90.2	819.6	265.7	-	-	-
1200	45.9	1108.2	172.00	67.9	1064.2	256.04	-	-	-	-	-	-
1400	53.5	1293.0	234.00	82.4	1235.0	348.00	-	-	-	-	-	-
1600	61.2	1477.6	306.00	94.1	1411.0	453.00	-	-	-	-	-	-
1800	69.1	1661.8	392.00	105.9	1588.2	587.00	-	-	-	-	-	-
2000	76.9	1846.2	485.00	117.6	1764.8	724.00	-	-	-	-	-	-
2300	88.5	2123.0	646.00	135.3	2029.4	-	-	-	-	-	-	-
2500	96.2	2307.6	763.00	-	-	-	-	-	-	-	-	-
2700	103.8	2492.4	889.00	-	-	-	-	-	-	-	-	-

SDR: Standard Dimension Ratio

e: Wall Thickness

PN: Nominal Pressure Rating (bar)

de: Outside Diameter of Pipe

di: Inside Diameter of Pipe

We also manufacture HDPE Pipes to all other International Standards and Liner Pipes to Client's Specification and Requirements

*Indicative

Technical Data Sheet

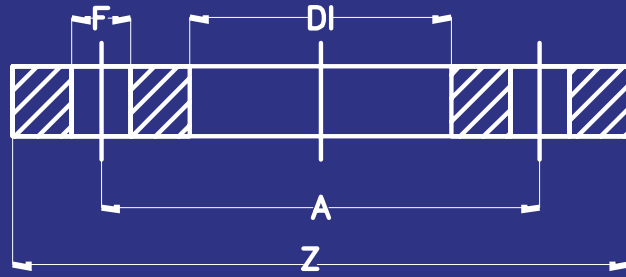
HDPE Gas Pipes as per ISO - 4437, PE 100, Design Stress 5.0 Mpa

Size Designation DN	Wall Series											
	S-12.5 (SDR 26)			S-8 (SDR 17)			S-5 (SDR 11)			S-4 (SDR 9)		
	Nominal Pressures											
	PN 3.9			PN 6.3			PN 10			PN 12		
de	e	di	kg/m*	e	di	kg/m*	e	di	kg/m*	e	di	kg/m*
mm	mm	mm		mm	mm		mm	mm		mm		
16	-	-	-	-	-	-	-	-	-	2.0	12.0	0.10
20	-	-	-	-	-	-	2.0	16.0	0.12	2.3	15.4	0.14
25	-	-	-	-	-	-	2.3	20.4	0.18	3.0	19.0	0.22
32	-	-	-	2.0	28.0	0.20	3.0	26.2	0.29	3.6	24.8	0.34
40	-	-	-	2.4	35.2	0.31	3.7	32.6	0.45	4.5	31.0	0.53
50	2.0	46.0	0.32	3.0	44.0	0.47	4.6	40.8	0.69	5.6	38.8	0.82
63	2.5	58.0	0.48	3.8	55.4	0.75	5.8	51.4	1.09	7.1	48.8	1.30
75	2.9	69.2	0.69	4.5	66.0	1.05	6.8	61.4	1.53	8.4	58.2	1.83
90	3.5	83.0	0.99	5.4	79.2	1.52	8.2	73.6	2.20	10.1	69.8	2.64
110	4.2	101.6	1.45	6.6	96.8	2.24	10.0	90.0	3.26	12.3	85.4	3.91
125	4.8	115.4	1.87	7.4	110.2	2.87	11.4	102.2	4.23	14.0	97.0	5.05
140	5.4	129.2	2.36	8.3	123.4	3.59	12.7	114.6	5.26	15.7	108.6	6.34
160	6.2	147.6	3.09	9.5	141.0	4.69	14.6	130.8	6.91	17.9	124.2	8.25
180	6.9	166.2	3.85	10.7	158.6	5.92	16.4	147.2	8.73	20.1	139.8	10.40
200	7.7	184.6	4.77	11.9	176.2	7.31	18.2	163.6	10.80	22.4	155.2	12.90
225	8.6	207.8	5.99	13.4	198.2	9.28	20.5	184.4	13.60	25.2	174.6	16.30
250	9.6	230.8	7.41	14.8	220.4	11.40	22.7	204.6	16.70	27.9	194.2	20.10
280	10.7	258.6	9.24	16.6	246.8	14.30	25.4	229.2	21.00	31.3	217.4	25.10
315	12.1	290.8	11.80	18.7	277.6	18.00	28.6	257.8	26.60	35.2	244.6	31.70
355	13.6	327.8	14.90	21.1	312.8	23.00	32.2	290.6	33.70	39.7	275.6	40.30
400	15.3	369.4	18.80	23.7	352.6	29.00	36.3	327.4	42.80	44.7	310.6	51.20
450	17.2	415.6	24.30	26.7	396.6	36.80	40.9	368.2	54.30	50.3	349.4	64.70
500	19.1	461.8	30.00	29.7	440.6	45.30	45.4	409.2	66.90	55.8	388.4	79.90
560	21.4	517.2	37.70	33.2	493.6	56.90	50.8	458.4	83.80	62.5	435.0	97.00
630	24.1	581.8	47.70	37.4	555.2	71.90	57.2	515.6	106.00	70.5	489.0	126.00
710	27.2	655.6	60.50	42.1	625.8	91.40	64.5	581.0	133.9	-	-	-
800	30.6	738.8	76.70	47.4	705.2	116.00	72.6	654.8	170.1	-	-	-
900	34.4	831.2	97.00	53.3	793.4	147.00	81.7	736.6	215.2	-	-	-
1000	38.2	923.6	120.00	59.3	881.4	181.00	90.2	819.6	265.7	-	-	-
1200	45.9	1108.2	172.00	67.9	1064.2	256.04	-	-	-	-	-	-
1400	53.5	1293.0	234.00	82.4	1235.0	348.00	-	-	-	-	-	-
1600	61.2	1477.6	306.00	94.1	1411.0	453.00	-	-	-	-	-	-

Note: Other SDR available on request.

Technical Data Sheet

FLANGES

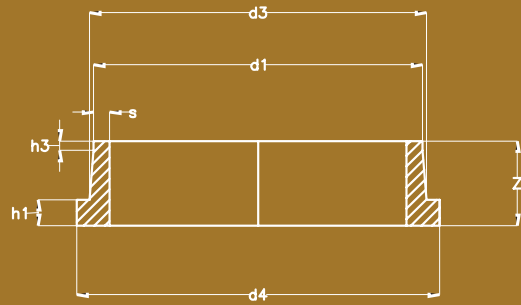


Pipe	Z	10 BAR					Z	16 BAR				
Size		DI	A	F	Thick	No. of		DI	A	F	Thick	No. of
mm	mm	mm	mm	Dia.	mm	Holes	mm	mm	mm	Dia.	mm	Holes
50	165	66	125	18	16	4	165	66	125	18	16	4
63	185	78	145	18	16	4	185	78	145	18	16	4
75	200	90	160	18	16	8	200	90	160	18	16	8
90	200	110	160	18	16	8	200	110	160	18	16	8
110	220	128	180	18	16	8	220	128	180	18	16	8
125	250	135	210	18	16	8	250	135	210	18	16	8
140	285	158	210	22	16	8	285	158	210	22	16	8
160	285	178	240	22	16	8	285	178	240	22	16	8
180	285	188	240	22	17	8	285	188	240	22	17	8
200	340	235	295	22	17	8	340	235	295	22	17	12
225	340	238	295	22	19	8	340	238	295	22	19	12
250	395	288	350	22	19	12	405	288	355	26	19	12
280	395	294	350	22	21	12	405	294	355	26	21	12
315	445	338	400	22	21	12	460	338	410	26	21	12
355	505	376	460	22	23	16	520	376	470	26	23	16
400	565	430	515	26	24	16	580	430	525	30	24	16
450	615	520	565	26	26	20	640	520	585	30	26	20
500	670	533	620	26	28	20	715	533	650	33	28	20
560	780	600	725	30	28	20	840	600	770	36	28	20
630	780	650	725	30	31	20	840	650	770	36	31	20
710	895	743	840	30	35	24	910	743	840	36	35	24
800	1015	845	950	33	38	24	1025	845	950	39	38	24
900	1115	947	1050	33	42	28	1125	947	1050	39	42	28
1000	1230	1050	1160	36	45	28	1255	1050	1170	42	45	28
1200	1455	1260	1380	39	52	32	1485	1260	1390	48	52	32
1400	1675	1470	1590	42	55	36	1685	1470	1590	48	55	36
1600	1915	1680	1820	48	60	40	1930	1680	1820	56	60	40

Note: Other SDR available on request.

Technical Data Sheet

STUB ENDS

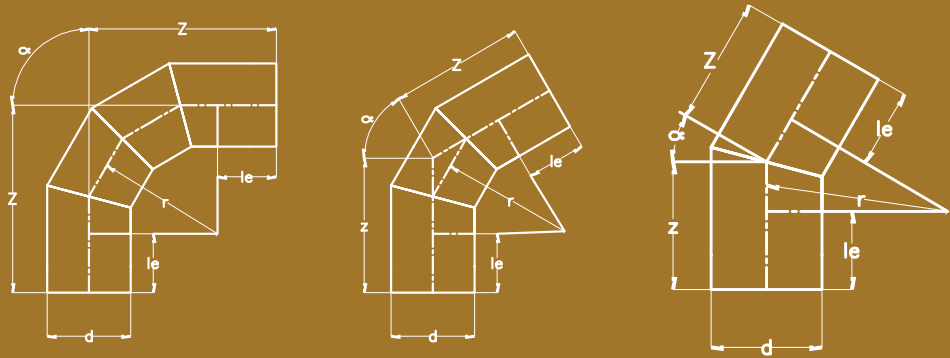


d1	SDR - 11						SDR - 17					
	s	d3	d4	z	h1	h3	s	d3	d4	z	h1	h3
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
20	2.0	27.0	45.0	50.0	7.0	30.0	-	-	-	-	-	-
25	2.3	33.0	58.0	50.0	9.0	28.0	-	-	-	-	-	-
32	3.0	40.0	68.0	50.0	10.0	27.0	-	-	-	-	-	-
40	3.7	50.0	78.0	50.0	11.0	24.0	-	-	-	-	-	-
50	4.6	61.0	88.0	50.0	12.0	23.0	3.0	61.0	88.0	50.0	12.0	23.0
63	5.8	75.0	102.0	50.0	14.0	16.0	3.8	75.0	102.0	50.0	14.0	16.0
75	6.9	89.0	122.0	50.0	16.0	14.0	4.5	89.0	122.0	50.0	16.0	14.0
90	8.2	105.0	138.0	80.0	17.0	43.0	5.4	105.0	138.0	80.0	17.0	43.0
110	10.0	125.0	158.0	80.0	18.0	37.0	6.6	125.0	158.0	80.0	18.0	37.0
125	11.4	132.0	158.0	80.0	25.0	35.0	7.4	132.0	158.0	80.0	18.0	42.0
140	12.8	155.0	188.0	80.0	25.0	27.0	8.3	155.0	188.0	80.0	18.0	34.0
160	14.6	175.0	212.0	80.0	25.0	27.0	9.5	175.0	212.0	80.0	18.0	34.0
180	16.4	180.0	212.0	80.0	30.0	20.0	10.7	180.0	212.0	80.0	20.0	30.0
200	18.2	232.0	268.0	100.0	32.0	28.0	11.9	232.0	268.0	100.0	24.0	36.0
225	20.5	235.0	268.0	100.0	32.0	38.0	13.4	235.0	268.0	100.0	24.0	46.0
250	22.8	285.0	320.0	100.0	35.0	25.0	14.8	285.0	320.0	100.0	25.0	35.0
280	25.5	291.0	320.0	100.0	35.0	35.0	16.6	291.0	320.0	100.0	25.0	45.0
315	28.7	335.0	370.0	100.0	35.0	25.0	18.7	335.0	370.0	100.0	25.0	35.0
355	32.3	373.0	430.0	120.0	40.0	40.0	21.1	373.0	430.0	120.0	30.0	50.0
400	36.4	427.0	482.0	120.0	46.0	29.0	23.7	427.0	482.0	120.0	33.0	42.0
450	41.0	500.0	550.0	130.0	60.0	10.0	26.7	500.0	550.0	120.0	46.0	14.0
500	45.5	530.0	585.0	120.0	60.0	10.0	29.7	530.0	585.0	120.0	46.0	24.0
560	51.0	615.0	685.0	130.0	60.0	10.0	33.2	615.0	685.0	120.0	50.0	10.0
630	57.3	642.0	685.0	120.0	60.0	20.0	37.4	642.0	685.0	120.0	50.0	30.0
710	64.5	737	800	120.0	50.0	20.0	42.1	737.0	800.0	120.0	50.0	20.0
800	72.6	840	905	120.0	52.0	18.0	47.4	840.0	905.0	120.0	52.0	18.0
900	81.7	944.0	1005.0	120.0	55.0	15.0	53.3	944.0	1005.0	120.0	55.0	15.0
1000	90.2	1047.0	1110.0	140.0	60.0	10.0	59.3	1047.0	1110.0	140.0	60.0	10.0
1200	-	-	-	-	-	-	67.9	1245.0	1330.0	170.0	70.0	70.0
1400	-	-	-	-	-	-	82.4	1450.0	1570.0	210.0	110.0	40.0
1600	-	-	-	-	-	-	94.1	1650.0	1780.0	220.0	120.0	40.0
1800	-	-	-	-	-	-	105.9	1850.0	1970.0	230.0	130.0	40.0
2000	-	-	-	-	-	-	117.6	2050.0	2200.0	250.0	150.0	40.0

Note: Other SDR available on request.

Technical Data Sheet

BENDS

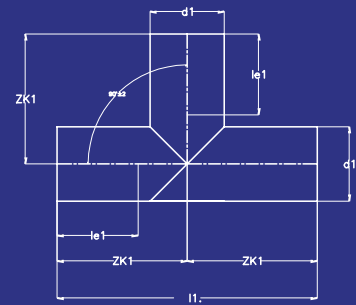


90 Deg bend							60 & 45 Deg bend					30 & 22.5 Deg bend						
Pipe size	Outer Diameter(d)		Wall thickness mm				le	r	Angle \propto (+/ -2°)						Pipe size			
	Min.	Max.	SDR 17		SDR 11		Min		Z (+/- 5%)									
									90°	60°	45°	30°	22.5°					
mm	mm	mm	Min.	Max.	Min.	Max.	mm	mm	mm	mm	mm	mm	mm	mm				
90	90	90.9	5.4	6.3	8.2	9.5	150	135	315	245	218	194	194	90				
110	110	111.0	6.6	7.6	10.0	11.5		165	315	245	218	194	194	110				
125	125	126.2	7.4	8.6	11.4	13.2		188	338	258	228	200	200	125				
140	140	141.3	8.3	9.6	12.7	14.7		210	360	271	237	206	206	140				
160	160	161.5	9.5	11.0	14.6	16.8		240	390	288	249	214	214	160				
180	180	181.7	10.7	12.4	16.4	19.6		270	420	305	262	222	222	180				
200	200	201.8	11.9	13.7	18.2	21.8		300	450	323	274	230	230	200				
225	225	227.1	13.4	15.5	20.5	24.5		338	488	345	290	241	241	225				
250	250	252.3	14.8	17.1	22.7	27.2	250	375	625	466	412	350	350	250				
280	280	282.6	16.6	19.9	25.4	30.4		420	670	492	424	362	362	280				
315	315	317.9	18.7	22.4	28.6	34.3	300	473	773	576	498	428	428	315				
355	355	358.2	21.1	25.3	32.2	38.6		533	833	608	520	443	443	355				
400	400	403.6	23.7	28.4	36.3	43.5		600	900	646	548	461	461	400				
450	450	454.1	26.7	32.0	40.9	49.0	350	675	975	689	580	481	481	450				
500	500	504.5	29.7	35.6	45.4	54.4		750	1100	783	665	551	551	500				
560	560	565.0	33.2	39.8	50.8	60.7		840	1190	835	698	575	575	560				
630	630	635.7	37.4	44.8	57.2	67.1		945	1295	896	741	603	603	630				
710	710	716.4	42.1	50.5	64.6	76.9		1065	1415	965	792	636	636	710				
800	800	807.2	47.4	56.8	72.8	86.7	400	1200	1550	1043	847	672	672	800				
900	900	908.1	53.3	63.2	81.9	97.5		1350	1750	1179	960	762	762	900				
1000	1000	1009.0	59.3	69.2	91.0	108.3		1500	1900	1266	1022	802	802	1000				
1200	1200	1210.0	70.6	80.5	109.1	129.9		1800	2100	1400	1200	900	900	1200				
1400	1400	1412.6	82.4	98.1	127.3	151.5		2100	2500	1650	1440	1200	1200	1400				
1600	1600	1614.0	94.2	112.1	145.5	173.2		2400	3100	1400	1670	1450	1450	1600				
1800	1800	1816.2	105.9	116.6	-	-	600	2700	3300	2160	1730	1330	1130	1800				
2000	2000	2018	117.6	129.5	-	-	750	3000	3750	2490	2000	1560	1340	2000				

Note: Other SDR available on request.

Technical Data Sheet

EQUAL TEE



Pipe Size	Outer Diameter(d1)		Wall thickness mm				le 1	l1	Zk1	Pipe size
	Min.	Max.	SDR 17		SDR 11					
mm	mm	mm	Min.	Max.	Min.	Max.	+/- 5%	+/- 5%	+/- 5%	mm
50	50	50.5	3	3.5	4.6	5.3	150	350	175	50
63	63	63.6	3.8	4.4	5.8	6.7	150	370	185	63
75	75	75.7	4.5	5.2	6.8	7.9	150	400	200	75
90	90	90.9	5.4	6.3	8.2	9.5	150	410	205	90
110	110	111.0	6.6	7.6	10.0	11.5	150	410	205	110
125	125	126.2	7.4	8.6	11.4	13.2	150	430	215	125
140	140	141.3	8.3	9.6	12.7	14.7	150	440	220	140
160	160	161.5	9.5	11.0	14.6	16.8	150	460	230	160
180	180	181.7	10.7	12.4	16.4	19.6	150	480	240	180
200	200	201.8	11.9	13.7	18.2	21.8	150	500	250	200
225	225	227.1	13.4	15.5	20.5	24.5	150	530	265	225
250	250	252.3	14.8	17.1	22.7	27.2	250	750	375	250
280	280	282.6	16.6	19.9	25.4	30.4	250	780	390	280
315	315	317.9	18.7	22.4	28.6	34.3	340	1000	500	315
355	355	358.2	21.1	25.3	32.2	38.6	375	1300	650	355
400	400	403.6	23.7	28.4	36.3	43.5	450	1400	700	400
450	450	454.1	26.7	32.0	40.9	49.0	475	1500	750	450
500	500	504.5	29.7	35.6	45.4	54.4	530	1560	780	500
560	560	565.0	33.2	39.8	50.8	60.7	520	1600	800	560
630	630	635.7	37.4	44.8	57.2	67.1	585	1800	900	630
710	710	716.4	42.1	50.5	64.6	76.9	595	1900	950	710
800	800	807.2	47.4	56.8	72.8	86.7	600	2000	1000	800
900	900	908.1	53.3	63.2	81.9	97.5	650	2200	1100	900
1000	1000	1009.0	59.3	69.2	91.0	108.3	700	2400	1200	1000
1200	1200	1210.0	70.6	80.5	109.1	129.9	950	3100	1550	1200
1400	1400	1412.6	82.4	98.1	127.3	151.5	1050	3500	1820	1400
1600	1600	1614.0	94.2	112.1	145.5	173.2	1200	4000	2080	1600
1800	1800	1816.2	105.9	116.6	-	-	1400	4500	2500	1800
2000	2000	2018	117.6	129.5	-	-	16 00	5000	2600	2000

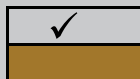
Note: Other SDR available on request.

Technical Data Sheet

POLYETHYLENE (PE) PIPES PRODUCTION POSSIBILITY CHART AS PER ISO 4427-2

Pipe Series	SDR 6	SDR 7.4	SDR 9	SDR 11	SDR 13.6	SDR 17	SDR 21	SDR 26	SDR 33	SDR 41
	S 2.5	S 3.2	S 4	S 5	S 6.3	S 8	S 10	S 12.5	S 16	S 20
	Nominal Pressure, PN in Bar									
PE 100	-	PN 25	PN 20	PN 16	PN 12.5	PN 10	PN 8	PN 6	PN 5	PN 4
Nom. Size	Wall Thicknesses									
16	✓	✓	✓	✓						
20	✓	✓	✓	✓						
25	✓	✓	✓	✓	✓					
32	✓	✓	✓	✓	✓	✓				
40	✓	✓	✓	✓	✓	✓	✓			
50	✓	✓	✓	✓	✓	✓	✓	✓		
63	✓	✓	✓	✓	✓	✓	✓	✓		
75	✓	✓	✓	✓	✓	✓	✓	✓		
90	✓	✓	✓	✓	✓	✓	✓	✓		
110	✓	✓	✓	✓	✓	✓	✓	✓		
125	✓	✓	✓	✓	✓	✓	✓	✓		
140	✓	✓	✓	✓	✓	✓	✓	✓		
160	✓	✓	✓	✓	✓	✓	✓	✓		
180	✓	✓	✓	✓	✓	✓	✓	✓		
200	✓	✓	✓	✓	✓	✓	✓	✓		
225	✓	✓	✓	✓	✓	✓	✓	✓		
250	✓	✓	✓	✓	✓	✓	✓	✓		
280	✓	✓	✓	✓	✓	✓	✓	✓		
315	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
355	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
400		✓	✓	✓	✓	✓	✓	✓	✓	✓
450		✓	✓	✓	✓	✓	✓	✓	✓	✓
500		✓	✓	✓	✓	✓	✓	✓	✓	✓
560		✓	✓	✓	✓	✓	✓	✓	✓	✓
630		✓	✓	✓	✓	✓	✓	✓	✓	✓
710			✓	✓	✓	✓	✓	✓	✓	✓
800				✓	✓	✓	✓	✓	✓	✓
900				✓	✓	✓	✓	✓	✓	✓
1000				✓	✓	✓	✓	✓	✓	✓
1200					✓	✓	✓	✓	✓	✓
1400					✓	✓	✓	✓	✓	✓
1600					✓	✓	✓	✓	✓	✓
1800						✓	✓	✓	✓	✓
2000						✓	✓	✓	✓	✓

Note:



- Production Applicable

- Feasibility study on request

Non standard SIZES/SDR on request

Above pressure classes are based on 20 Deg temperature.

Technical Data Sheet

POLYETHYLENE (PE) FITTINGS - MACHINED REDUCING TEES - PRODUCTION CHART

PE 100		SDR 7.4	SDR 9	SDR 11	SDR 13.6	SDR 17	SDR 21	SDR 26
Nominal Size DN/OD	Upto Reduced Size DN/OD							
2000	1200						✓	✓
1800	1000					✓	✓	✓
1600	900				✓	✓	✓	✓
1400	800				✓	✓	✓	✓
1200	710				✓	✓	✓	✓
1000	630			✓	✓	✓	✓	✓
900	560			✓	✓	✓	✓	✓
800	500			✓	✓	✓	✓	✓
710	450			✓	✓	✓	✓	✓
630	400	✓	✓	✓	✓	✓	✓	✓
560	355	✓	✓	✓	✓	✓	✓	✓
500	315	✓	✓	✓	✓	✓	✓	✓
450	225	✓	✓	✓	✓	✓	✓	✓
400	200	✓	✓	✓	✓	✓	✓	✓
355	180	✓	✓	✓	✓	✓	✓	✓
315	160	✓	✓	✓	✓	✓	✓	✓
280	140	✓	✓	✓	✓	✓	✓	✓
250	125	✓	✓	✓	✓	✓	✓	✓
225	110	✓	✓	✓	✓	✓	✓	✓
200	90	✓	✓	✓	✓	✓	✓	✓



الاتحاد لصناعة الأنابيب
Union Pipes Industry



**Industrial City of Abu Dhabi - ICAD1
Plot No# 37HI**

GPS Coordinate (N 24° 19' 18", E 54° 30' 30")

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