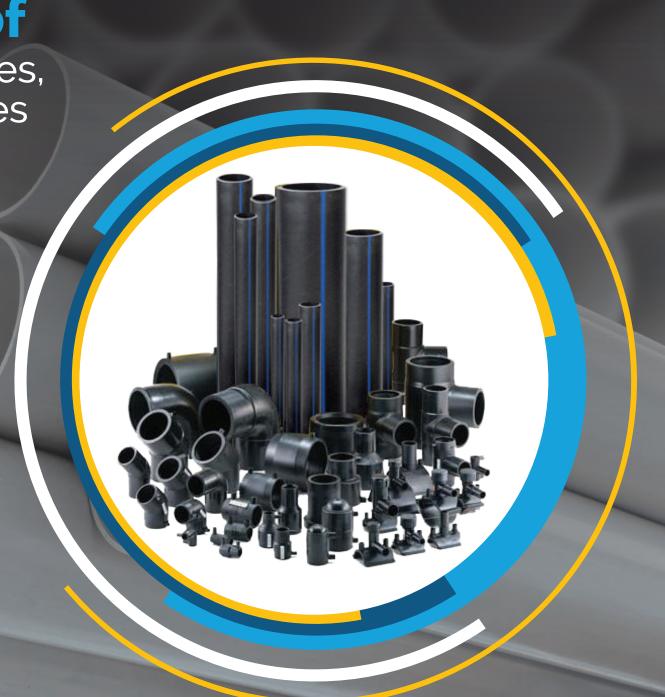
# **Manufacturer of**

HDPE Pipes, MDPE Pipes, UPVC Pipes, PPRC Pipes Fittings & Accessories







#### **History**

1995	Established
2000	Registration with FBR
2002	ICCI Membership
2005	Licence from PSQCA
2006	Registered as Importer / Exporter
2006	Registration with PEC as C4/E
2012	Registration with MES
2012	Registered with Registrar of Firms
2014	ISO-9001 Certification
2015	APPPPM Membership
2019	PEC Registration Ugraded to C2/E

#### **Certifications/Registrations**

#### CERTIFICATIONS









#### **OUR PRINCIPALS**







#### **OUR CLIENTS**









WASA





optcl future



SUI NORTHERN GAS



PHE Punjab









FAZAIA HOUSING











#### **CEO Message**

Starting from scratch in the year 1995, we have put vigorous efforts in making NEWTECH pipes a well-known brand as what it is today. Following the tag-line that we decided at the start of our company "**Committed to Excellence**", we transformed this spirit to our Team Members to remain committed to provide best quality products in the market and live up to customer expectations. This determination has resulted in NEWTECH becoming the leading manufacturer of synthetic pipes & fittings in Pakistan.

Our vision in transforming the NEWTECH into its shape of today and taking it to the next level, in coming years – is to remain "Committed to Excellence" to embark on a journey of Modernism & Brilliance.

We, as a pipe manufacturing company has expectation to become a leading innovator amongst others within the plastic industry through continuous incorporation of feedback from our valued clients that we keep at our utmost priority as quality is our priority.

At NEWTECH, let us take you to advance levels and take care of your future generations by providing durable and reliable pipe system. Let NEWTECH enlighten you with excellence and competence along the way.

Thank you.

**Muhammad Kazim Abbas** CEO & Founder



#### Who Are We?

NEWTECH is one of the leading names in Plastic pipes industry in Pakistan. From a humble beginning in 1995 and with lots of efforts and hard work, the company soon grew into a multi-million revenue generating manufacturing unit with customers spread nationwide. The company uses well equipped state of art manufacturing unit, well established marketing network, a team of dedicated professionals, well defined management hierarchy and a portfolio consisting of piping products. From its inception the company adopted a continuous improvement attitude that insured dependable customer service, honest communication and tremendous employee participation.

The company manufactures the HDPE, UPVC, PPRC & MDPE Pipes and Fittings as well allied accessories under the popular brand name NEWTECH. It accomplishes the quality of its products through an adopted and certified integrated quality management system in accordance with ISO 9001:2015 Standards and production control system in accordance with the ISO-4427/DIN-8074/DIN-8075/BS-3505 through

ISO-4427/DIN-8074/DIN-8075/BS-3505 through Standards as well as periodic tests in accredited laboratories.

various technologically advanced range of piping products. From its inception the company adopted a continuous improvement attitude that insured dependable customer service, honest communication and tremendous employee participation.

The raw materials for production are imported from first-class World suppliers, which ensure the high quality of our products. Our products are specially used in Water Distribution, gas conveyance, protection of optical cables, Construction,

Government Enterprises, Irrigation, Agriculture, Industry and other sectors as well as in mega projects.



# Our Mission and Vision

Our mission is to provide prime quality products according to National and International Standards and excellent services to the customer's entire satisfaction. We sincerely feel that there is no limit to the high standard of quality; one can meet and beat the competition when the product quality is commendable.





#### **Our Quality Standards**

The sizes and specifications of all our products are in accordance with ISO, DIN, BS, ASTM and National Standards (PS). Our Unit is equipped with a modern test laboratory, which comprises of state-of-the-art lab testing equipment's and managed by qualified technical staff.

- ◆ HDPE Pipes are manufactured in compliance with the ISO-4427, DIN 8074/75 standards.
- MDPE Pipes are manufactured in compliance with the ISO-4437, ASTM D2513 & DIN-807 standards
- ◆ PPRC Pipes are manufactured in compliance with DIN-8077/78 standards
- ◆ UPVC Pipes are manufactured in compliance with BS-3505 & PS-3051 standards.
- ◆ UPVC Electrical Conduit Pipes are manufactured according to BS-6099 standards.
- ♦ HDPE Butt-Fusion Fittings are manufactured according to ISO-4427 standards
- ◆ UPP layered pipes for liquid fuel conforms to EN 14125 standards
- Compressions Fittings are imported from World Renowned brands.

#### **Our Services**

Complete Project Support on Turn-Key Basis.

Complete Technical Support & services.

Pipe Network Laying & Testing Services

Trouble Shooting & Repairing.

Consultancy & Advisory Services.

#### State-of-the-art Lab Equipment

We have in-house testing for the following:

Melt Flow Rate (MFR) Index

Heat Reversion Test

A universal testing machines

Dichloromethane test

Impact Test

Hydrostatic Pressure Test

















#### HDPE (High Density Polyethylene) Pipeline & Fitting Systems:

HDPE Pipes is a cost-effective solution for several piping problems in Metropolitan, Municipal, Industrial, Underwater, Mining, Landfill Gas extraction, Cable duct and agricultural applications. Our pipes are well tested and proven, effective for underground, above ground, surface, under water as well as floating pipe applications.

Polyethylene pipes can carry potable water, wastewater, slurries, chemicals, hazardous wastes, cables and compressed gases as well as oils. PE pipes have the lowest repair frequency per Kilometer of pipe per year compared with all other pipe materials used for urban water and gas distribution.

Our HDPE pipes will meet all your requirements of long service, trouble-free installation, flexibility, resistance to corrosion and chemicals. NEWTECH'S HDPE pipes are strong, robust, non-toxic, light in weight and resistance to corrosion and have been widely adopted in a variety of piping system and are replacing most pipes of conventional materials.

#### **Benefits of HDPE Pipe:**

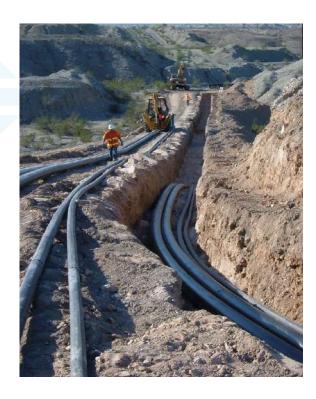
- Light in weight
- More flexible than other metal-based pipe, such as -GI, Stainless Steel, Black Iron, and Copper etc.
- Coating of the HDPE pipe is quite smooth
- Capable to resist from environmental effects
- It can defy pipeline Corrosion
- Can protect form Frost & Rodent
- Hygienically Safe (Food Grade)
- Easy to install and handle
- There is a least chance to conduct heat
- Abrasion free
- Has Long Life (approx. 50 Years)
- Saves Energy

#### **Applications:**

- Water supply
- Telecommunication Industry for Cable Protection
- Sewerage & Drainage
- Irrigation/farming/Tube wells
- Sprinkler Irrigation Systems & Drip Irrigation Systems
- Construction Industry
- Gas and oil Transmission
- Industrial Effluents
- Chemical Industries

## Our HDPE Pipe Range & Production Capacity:

Our pipes are available in outer diameters from 20mm - 90mm (in rolls – Long Lengths) and in the diameter from 110mm to 630 mm in straight lengths of 6 & 12 Meter for pressure series PN-6, PN-8, PN-10 PN-12.5, PN-16, & PN-20. PN-25 and higher can be manufactured on special order.



#### **Physical Properties of PE-100 Pipe Material:**

Characteristics	Units	Value
Density	gm/cm3	0.95
Design Stress	MPa	8
Tensile Strength At Yield	N/mm2	23-25
Flexural Modules (Bend Creep)	N/mm2	1000-1200
Elongation At Break	%	> 600
Crystallite Melt Range	° C	128-132
Surface Resistance	Ο	> 1014
Coefficient Of Linear Expansion	mm/m*k	0.13
Heat Conductivity At 20° C	W/m*K	0.38
Impact Strength At 23 Deg C	Kj/m2	83
Brittleness Temperature	°C	<-70
Shore Hardness	D	62
Melt Flow Rate (Melt Flow Index)	g/10min	0.15
Water Absorption	%	0.01-0.04





#### **Technical Specifications:**

PE 100 Pipe Dimension as per ISO 4427, DIN 8074/8075 Specifications:

Outer	SDR 21	SDR 17	SDR 13.6	SDR 11	SDR 9
Diameter	PN 8	PN 10	PN 12.5	PN 16	PN 20
	W.T.	W.T.	W.T.	W.T.	W.T.
mm	mm	mm	mm	mm	mm
20mm	-	-	-	2.0	2.3
25mm	-	-	2.0	2.3	3.0
32mm	-	2.0	2.4	3.0	3.6
40mm	2.0	2.4	3.0	3.7	4.5
50mm	2.4	3.0	3.7	4.6	5.6
63mm	3.0	3.8	4.7	5.8	7.1
75mm	3.6	4.5	5.6	6.8	8.4
90mm	4.3	5.4	6.7	8.2	10.1
110mm	5.3	6.6	8.1	10.0	12.3
125mm	6.0	7.4	9.2	11.4	14.0
140mm	6.7	8.3	10.3	12.7	15.7
160mm	7.7	9.5	11.8	14.6	17.9
180mm	8.6	10.7	13.3	16.4	20.1
200mm	9.6	11.9	14.7	18.2	22.4
225mm	10.8	13.4	16.6	20.5	25.2
250mm	11.9	14.8	18.4	22.7	27.9
280mm	13.4	16.6	20.6	25.4	31.3
315mm	15.0	18.7	23.2	28.6	35.2
355mm	16.9	21.1	26.1	32.2	39.7
400mm	19.1	23.7	29.4	36.3	44.7
450mm	21.5	26.7	33.1	40.9	50.3
500mm	23.9	29.7	36.8	45.4	-
560mm	260	32.2	41.2	50.8	-
630mm	630.	37.4	46.3	57.2	-

**SDR** – Standard Dimension Ratio

W.T. – Wall Thickness

**PN** – Nominal Pressure

#### NOTE:

2. Pipe size above 315mm can be supplied on special request

<sup>1.</sup> Pipes are available in outer diameters from 20mm to 90mm in Rolls and from 110mm to 630mm in straight lengths of 6 & 12 Meter



#### **HDPE FITTINGS**

NEWTECH is Authorized Agent for Internationally well-established fitting manufacturers. We import, stock & provide the fittings (Compression and Butt-Fusion) to our customers, as & when required.

On the other hand, for Butt-Fusion fittings, we are proud to be the first manufacturers of these fittings in Pakistan under the brand name of "PLAST-1"





#### **About PLAST-1:**

PLAST-1 is one of the new names in Pakistan's Plastic pipes industry being getting immense recognition due to its quality products. The company is USA registered and was established in 2016, after demand for quality HDPE fittings increased systematically. Today, it is a prominent player in the HDPE fittings manufacturing industry and has become synonymous with the term quality assurance.

#### **HDPE ELECTRO-FUSION FITTINGS**

The use of PE electrofusion fittings with polyethylene pipes allows the creation of fully sealed PE pipe networks.

Our Electro Fusion fittings are imported from World Renowned European brands according to international standards. Our electrofusion pipe fitting system offers high performance and ease of installation.





#### **HDPE COMPRESSION FITTINGS**

We have our hands on one of the top compression fittings manufacturers in the world known as **NORMA GROUP** which produces compression fittings under the brand name of **FISH**.

We are proud to be their Sole Distributor in Pakistan due to our brand identity and sales turnover. These fittings are made according to ISO 4427 standards and comply with all international specification. The quality of the materials used makes these FISH fittings resistant to etching by numerous chemical substances and to UV-rays.





#### MDPE (Medium Density Polyethylene) Pipes for Transportation of Gas

NEWTECH Medium Density Polyethylene (MDPE) Pipes are suitable for distribution of natural gas due to their characteristics such as strength, flexibility, inertness, light weight and ease of maintenance and installation. NEWTECH pipes are maintenance free with a design life of over 50 years under normal operating conditions.

MDPE PIPES Technical Specifications according ISO 4437 and ASTM D-2513 Standards: are made in SDR-11. These are available in  $\frac{3}{4}$ ", 1",  $\frac{11}{4}$ ",  $\frac{11}{2}$ , 2" and 4" sizes.

We manufacture these pipes for GAS service as per ISO 4437 standards which undergo rigorous quality checks throughout the entire production process to ensure their reliability and effectiveness for gas transportation. Pipes are available in coils in order to reduce the number of joints to make a cost-effective choice for contractors and clients. Pipes of bigger diameter are available in straight lengths of 6 & 12 meters. The jointing can be done by Butt Fusion jointing methods, providing a completely homogeneous leak free system.







#### **UPVC** (Un-plasticized Poly Vinyl Chloride) **PIPES**

UPVC's intrinsic properties make it suitable for a wide variety of applications. These Pipes have excellent chemical resistance across its operating temperature range, with a broad band of operating pressures. Due to its long-term strength characteristics, high stiffness and cost effectiveness, UPVC systems account for a large proportion of plastic piping installations. These are biologically and chemically resistant, making it the plastic of choice for most household sewerage pipes and other pipe applications where corrosion would limit the use of metal.

UPVC Pipes are manufactured in diameters  $\frac{1}{2}$ " to 24" [in straight length up to 6 Meter] for pressure series Class B [6 Bar], Class C [9 Bar], Class D [12 Bar] and Class E [15 Bar].



#### **Advantages of uPVC Pipes:**

- PVC pipes have clear environmental advantages over traditional materials
- PVC is a low carbon plastic; PVC pipes require less energy and fewer resources to manufacture
- Due to their low weight, less energy is used when transported
- Strong and lightweight
- Low cost and long service life
- Corrosion & Resistance
- ◆ Temperature & Pressure Resistance

#### **Applications:**

- Water Mains & Potable Water Services
- Cold Water Plumbing Services
- Drainage Installations (Domestic & Industrial)
- Effluent lines
- ◆ Chemical Plant Installations
- ◆ Brine lines- Tanning Plant, Ice Rinks
- Non-Explosive Dry Materials Handlings- Sand, Cement, Rock Salt Plastics Compounds
- Emergency Repairs to damaged pipelines in all materials
- Surface Water Drainage
- ◆ Tube well Casing and strainer
- Irrigation Farm and range irrigation-system and sprinkler system
- Horticulture and greenhouse Irrigation System
- Irrigation for golf courses and sports grounds



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#### **Characteristics of UPVC Material:**

Property	Unit	Value
Density	gr/cc	1.4-1.46
Tensile Strength	MPa	45-50
Elongation	%	80-150
Compressive Strength	MPa	59
Modulus of Elasticity	MPa	3000
Specific Heat	Cal/g/°C	0.24
Thermal Conductivity	Kcal/m/h/°C	0.12
Linear Expansion	mm/m/°C	0.08
Volume Resistivity	ohm/cm	10 <sup>15</sup>
Flammability	Self Extinguishing	

#### Thermal & Electrical properties of PVC pipes

Thermal		
Specific Heat at 20C	0.24	Cal/gm/C
Vicat Softening Point	85	оС
Heat Distortion Temperature at 18.5 kgf/cm²	75	оС
Thermal Condictivity	0.12-0.14	cal m/mhc
Coefficient of Linear Expansion	7-8x10	m/m/C
Electrical		
Dielectric Constant (800 Cycle)	3.0	
Dielectric Strength	425	Volts/mil
Inflammability	will not support combustion	
Water Apsorption	0.07	%
(24 Hours at Ambient Temperature)		

#### **UPVC Pipes specifications according to BSS 3505 standards:**

Nominal	Class B (6 bar)	Class C (9 bar)	Class D (12 bar)	Class E (15 bar)
Diameter		Average Wall Thic	kness in mm	
1/2"	-	-	_	2.1
3/4"	-	-	_	2.5
1"	-	-	_	2.7
11/4"	-	-	2.7	3.2
1½"	-	-	3.0	3.7
2"		3.0	3.7	4.5
2½"	-	3.5	4.5	5.5
3"	3.4	4.1	5.3	6.5
4"	4.0	5.2	6.8	8.3
5"	4.4	6.3	8.3	10.1
6"	5.2	7.5	9.9	12.1
7"	6.0	8.7	11.4	13.9
8"	6.1	8.8	11.6	14.1
9"	6.7	9.8	12.9	15.8
10"	7.5	10.0	14.3	17.5
12"	8.8	12.9	17.0	20.8
14"	9.7	14.1	18.6	22.8
16"	10.9	16.2	21.1	26.0
18"	12.3	18.2	23.3	-
20"	13.7	20.2	_	-
22"	15.0	22.1	_	-
24"	16.3	24.1	_	-

### **UPVC Pipes for Underground Drainage & Sewerage System** as per BS EN 1401 Standards:

Nominal	Outer	SN2	SN4	SN8
Size	Diameter	SDR 51	SDR 41	SDR 34
110 (4")	110			3.2 ~ 3.8
160 (6")	160	3.2~ 3.8	4.0 ~ 4.6	4.7 ~ 5.4
200 (8")	200	3.9~ 4.5	4.9 ~ 5.6	5.9 ~ 6.7
250 (10")	250	4.9~ 5.6	6.2 ~ 7.1	7.1 ~ 8.3
315 (12")	315	6.2~ 7.1	7.7 ~ 8.7	8.7 ~10.4
400 (16")	400	7.9~ 8.9	9.8 ~11.0	11.0~13.1



#### PPRC (Poly Propylene Random Copolymer) PIPES AND FITTINGS

PPRC stands for polypropylene random Copolymer, can provide very high performance even under high and low temperatures and pressure conditions. Heating and hot water systems used in freshwater, PPRC pipes have ultra-high molecular structure due to a high level of use and durability.

These pipes are suitable for all sanitary & portable water applications. Our pipes & fittings are made of materials known for its strength & resistance to high temperatures, their properties are ideally suited to the requirements for any carrier of drinking water & hot water transfer. Our PPRC Pipes are manufactured as per the norms of DIN 8077/8078. These pipes are extremely reliable & offer convenient & reliable installation in any plumbing system. Built to perform in tough conditions, they have extremely long service life.

PPRC Pipes are manufactured in diameters 20mm to 110mm [in straight length up to 4 Meters].

#### **Benefits of PPRC Pipes:**

- A service lifetime over 50 years | Environmentally friendly
- Chemical stability
- High temperature resistance
- Higher flow capacities
- Reduces energy losses
- Suitable for potable water and food processing Industries
- Quick & Easy Installation
- Easy connectivity over a complex network
- Safe environment with recyclable ability
- Resistant against heat and chemical effects
- High resistance against chemical substances
- Maintains heat and sound insulation

#### **Applications:**

- Hot / Cold and chilled water piping
- Industrial piping for aggressive fluids
- Compressed Air
- ◆ Air Conditioning / Refrigeration
- ◆ Food and Beverage Processing





# YEARS OF EXCELLENCE

#### **Physical properties of PPRC Pipe materaial**

Category		Unit	Random PP
Melt Index	g/10 min		0.2
Melting Temperature		Celsius	140
Tensile Strength (at Yield)		Kg/cm	270
Elongation (at Break)		Kg/cm	230
Flexural Modulus		%	500
Impact		Kg/cm	8.5
	23		No Breaker
Strength	0	Kg/cm	8
	20		3

### PPRC Pipe Dimensions Conforming to DIN 8077/8078 Specifications

	PN-16 (for Cold Water)		PN-20 (for Hot & Cold Water)	
Outer Dia (mm)	Wall Thickness (mm)	Internal Dia (mm)	Wall Thickness (mm)	Internal Dia (mm)
20	1.9	16.2	3.4	13.2
25	2.3	20.4	4.2	16.6
32	3.0	26.0	5.4	21.2
40	3.7	32.6	6.7	26.6
50	4.6	40.8	8.4	33.2
63	5.8	51.4	10.5	42.0

#### **Comparison of PPRC Pipes with Conventional Pipe Systems**

Pipe Property	G.I. Pipe	Copper Pipe	UPVC Pipe	PPRC Pipe
Service life	5-10 Years	50 Years	30 Years	50 Years
Resistance to High Temperature	Good	Good	Bad	Good
Hygienic Property	Bad	Common	Bad	Good
Recyclable and No Pollution	No	No	No	Yes
Pipe Furring	Yes	Yes	No	No
Corrosion-Resistant	Bad	Bad	Good	Good
Installation	Hard	Hard	Easy	Easy
Price	Low	High	Low	Common
Reliability	Common	Common	Common	Good







# UPVC ELECTRICAL CONDUIT PIPES

An electrical conduit is a tube used to protect and route electrical wiring in a building or structure. Electrical conduit may be made of metal, plastic, fiber, or fired clay. Most conduit is rigid, but flexible conduit is used for some purposes. Our UPVC Electrical Conduit Pipes are manufactured according to BS-6099 standards.

#### **Application**

- Underground and Above
- Ground Electric Supply
- Data Transmission
- Telecommunication
- Power Transmission lines

#### Advantage

- Reliable Joints & easy pull through
- Light weight Easy to Install
- Fire Resistance
- Non Magnetic
- Non Corrosive Safety

# PVC SOLVENT FOR UPVC PIPES JOINTING: A transparent PVC solution which is non-toxic to proven excellent for leak proof and strong jointing.

A transparent PVC solution which is non-toxic to water and is proven excellent for leak proof and strong jointing of UPVC Pipes and fittings network. Our PVC Solvent has become the most popular material for pipe installation as it offers significant benefits compared to alternative materials.

#### **Advantages of NEWTECH PVC Solvent:**

- High Impact Strength
- Damage Resistance
- Abrasion Resistance

- Ease of Installation
- High Flow Capacity
- Long Life







# HDPE BUTT-FUSION WELDING MACHINES

The jointing process of HDPE Pipes is known as Butt Fusion (B/F) welding. The B/F Machines scrape, heat and weld the HDPE pipe together. The B/F Machines come with Manual or Electric Hydraulic. All these machines need a power supply for the heater plate and milling cutter/scraper/facer. Electric Hydraulic machines also use the electricity supply for the hydraulic system, used to hold the pipe while it is being scraped, heated and during cooling.

NEWTECH maintains stock of quality Butt Fusion Machines, imported from well reputed brands, which are readily available for our clients, as per their requirements.

#### **SLUICE VALVE & FIRE HYDRANTS**

Valves are used to regulate the flow of water and to minimize the wastage of water. Valves either start/stop the flow of water or control the speed and capacity of water or direct the flow in one direction only. Sluice Valve functions strictly to either start or stop the flow.

We have our expert team which provides complete installation & provision of these equipment's. Our major clients for Sluice valves & fire hydrant systems are high rise buildings and housing societies.





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