

# PIPESTECH

شركة تكنولوجيا الأنابيب ذ.م.م  
PIPES TECHNOLOGY CO. W.L.L.

“Our Clients deserves the highest  
Quality Thermoplastic Systems”



## Introduction

Pipes Technology Co. W.L.L., known as PIPESTECH, was established in the state of Qatar since year 2003. PIPESTECH is registered under new commercial registration number 83608.

PIPESTECH specializes in supplying a wide range of high quality Thermoplastic piping network products, specifically HDPE, PVC, CPVC and PPR pipes fittings and valves for various applications such as water supply, sewage network, sub-surfaces water drainage system, irrigation network system and electrical communication cable protection networks. For industrial, commercial and domestic according to various internationally accredited standards, namely ISO, DIN, SASO, ASTM and BS EN standards.

PIPESTECH has a vast experience in construction market supplies in the State of Qatar through the cooperation of our valued principals namely – FIP (Formatura Iniezione Polimeri) – UPVC, CPVC, PVDF, PP-H pipes, fittings and valves, HDPE for butt welding fittings – Italy; SYSTEM GROUP (SAB PP Channel drains, ITALIANA CORRUGATI - HDPE corrugated pipes and fittings - Italy); Fabco PVC Pipes; PPR Pipes and fittings; FAF VALVES – Turkey; FRIATEC HDPE Electro fusion fittings, machines, tools and accessories – Germany; IPEX PVC, CPVC Pipes & Fittings – USA/CANADA; SPEARS CPVC fittings and valves – USA; RITMO Welding Machines - Italy; FRIATEC Welding Machines - Germany; CANDAN Welding Machines –Turkey; IPS WELDON solvent cements - USA; AKATHERM Dblue - Netherlands; WEFATHERM PPR - Pipe System - Germany and OATEY PVC floor drains –USA



Our products obtained the approvals and passed the standards of major companies namely Qatar Petroleum, PEO, Qatar Ministry of Energy and Industry, Ministry of Municipal and Urban Planning, Qatar Olympic Committee, Public works Authority (ASHGAL), Qatar Foundation, KAHRAMA, NDIA Committee, Ras Gas Company, QAFCO, QAFAC U.S. Army Corps of Engineers (Transatlantic Program), ASTAD, Dar Al Handasah Consultants, KEO International, Khatibb and Alami, AEB, Halcrow , Parsons and QDC. PIPESTECH products are used on huge projects as follows:

- New Doha International Airport (NDIA)
- Khalifa Stadium
- Salwa Resort
- North Gate Mall

- Al Wakra Stadium
- Oryx International School
- Al Jumana Tower
- Doha Festival City
- Al Shahed Tower
- Qetaifan Island Development
- Beverly Hills Lusail
- Lusail Development Project.
- Sheraton Park.
- Musharib Down Town Doha Project
- Al Bidda Park
- Burj Marina - REDCO
- Matta Residential Villa@Al Wajba
- Insha Project
- Lusail Package CP10E1
- Rayyan Road Project
- Diplomat Mesaieed
- Ras Laffan - Fire Station
- Coast Guard Base Bldg.
- Al Messila Resort & VIP SPA
- Duhail & Wind Tunnel Area
- Lagoon Mall Project
- American Base
- Doha East Corridor Landscaping
- Above Car Park & Extension (Landscape 151)
- 548 - Hamad General Hospital Trauma & Emergency expansion

- Barwa Village
- Doha Metro Redline
- The Pearl Villa
- Falcon Tower
- Marriot Hotel.
- Sharq Hotel.
- St. Regis Hotel
- Al Waab City.
- Heart of Doha
- Sheraton Renovation.
- Education City Projects
- North Brave Platform.
- Museum of Islamic Art
- Doha North Sewage Treatment Plant.
- Al Ruwais Port Development Project.
- The Leisure Land (ASPIRE Park) Project
- Cadillacs Project (Al Udeid Military Air Base)
- Ras Laffan Emergency and Safety College
- Development of Al-Sadd Sports Club.
- Doha Expressway Industrial Interchange.
- Development of New Industrial City in Doha.
- Qatar National Olympic Committee Projects.
- Arab Center for Politics Studies and Research.
- The Pearl Qatar (Viva Bahria and Porto Arabia)
- Expansion and Renovation of Hamad Aquatic Centre
- Worker Hospital and Integrated Health Center at Industrial Area



## Our Mission

"To be a regional leader supplier of the highest quality Thermoplastic piping system handling solutions, quality, excellent service and value."

## Our Vision

"To Provide the best quality and highest technology of Thermoplastic piping system ensuring sustainable benefit of customer, employees, shareholders, the community and the environment. With efficiency and respond successfully to the challenges of global economy."



**uPVC** Un-plasticized  
Polyvinyl Chloride **Pipes.**

Applications:-

- Cold Water supplies.
- Casing and screen.
- Irrigation networks.
- Soil, ventilation, waste, Drainage and Sewer system.
- Industrial
- Electrical and Telecommunication Cable Conduits and Ducts.

Standard	Class / Schedule / SDR	Product Size Range
NEMA TC2	EPT, EPC 40 & 80	1/2" – 8"
NEMA TC6 (F 512)	EB 20 & DB 60	2" - 6"
NEMA TC8 (F 512)	EB 35, DB 100 & DB 120	1" – 6"
BS EN 50086-2-1 (BS 6099)	L, M & H	16 – 63mm
QTEL 54D & 56A		53.9 & 96.5mm
QCS	Special wall thickness	110 – 160mm

Pressure

ISO 161/1	2,3,4 and 5	16 – 710mm
DIN 8061 /62	2,3,4 and 5	16 – 710mm
BS EN 1452-2 (BS 3505)	C, D and E	1/2" – 10"
ASTM D 1785	40 & 80	1/2" – 8"
ASTM D 2241	SDR 32,26,21 and 17	

Low Pressure (Drainage)

ASTM D 2665	DWV	1/2 – 8"
BS EN 1401-1	(Under Ground) SDR 51 and 41 (SN2 & SN4)	110 – 400mm
BS EN 1329	(Above Ground) Application Area B	36(1.1/4") – 315mm (12")
BS 4660	Underground	110 -160mm
BS 5481	Gravity Sewer	200 – 400mm
BS 5255	Waste	36(1.1/4") – 55mm(2")
BS 4514	Soil	82(3") – 160mm(6")



## uPVC Un-plasticized Polyvinyl Chloride Fittings.

Applications:-

- Cold Water supplies.
- Irrigation networks.
- Soil, ventilation, waste, Drainage and Sewer system.
- Industrial
- Electrical and Telecommunication.

Standard	Class / Schedule / SDR	Product Size Range
DIN 8063	PN16	16 -500mm
BS EN1452 (BS 4346)	PN15 (E)	1/2" – 12"
ASTM D 2467 / 2464	SCH80	1/2" – 12"
ASTM D 2466 / 2665	SCH40	1/2" – 8"
ASTM D 2665	DWV	1.1/4" – 8"
BS EN 1401(BS 4660)	(Under Ground) SDR 51 and 41 (SN2 & SN4)	110 – 500mm
BS EN 1329(BS 5255 & 4514)	(Above Ground) Application Area B	36 -400mm
BS EN 50086-2-1 (BS 6099)		20-63mm



### FITTINGS PVC-U

The range of PVC-U products includes a complete series of solvent weld, threaded and adaptor fittings or pipes conveying fluids under pressure at maximum working temperatures not exceeding 60 °C.

# uPVC Drainage System



**CHARLOTTE**  
ASTM DWV SYSTEM

*DRain*  
**PIPESTECH**

Range of uPVC above and below ground full range of Fittings in both Solvent Weld and Rubber Ring Joint according to the European Standards BS EN 1401 & BS EN 1329.



## VALVES

### ACTUATED & MANUAL VALVES

In U-PVC, PP-H, C-PVC, and PVDF Electrically and Pneumatically Actuated.

**CPVC** | Manual Valves (True Union Ball, True Union Ball Check, Swing Check, Diaphragm, Three Way and Butterfly) manufactured to ASTM F 1970, conforming to ASTM D 1784 cell classification 23567-A and 23447

**PVC-U** | Manual, True Union Ball, Butterfly, Diaphragm, Threeway, Angel Seat, Check and Air Release Valves Complying with the standards UNI EN 1452 and observance to the requirements of DIN 8063 and EN ISO 15493 for the use of plastic pipes in industrial process and to ASTM D 1784 A.



## PE | Polyethylene (HDPE, MDPE & LDPE)

High, Medium and Low Density Polyethylene Pipes and Fittings.  
Butt welding (segmented & molded) Electro fusion and compression

Applications:

- Potable Water supply.
- Gas distribution.
- Drainage Networks
- Treated sewage water
- Fire systems.
- Electrical and Telecommunication ducts.
- Irrigation networks.



Standard	Class / Schedule / SDR	Product Size Range
DIN 8074, 8075 PE100	SDR 41,26,17,13.6,11&9	16 – 1600mm
DIN 8074, 8075 PE80	SDR 41,33,22,13.6,11&9	16 – 1600mm
UNI EN 12201-2 PE100	SDR 26,17,13.6,11 & 7.4	25 – 1000mm
UNI EN 12201-2 PE80	SDR 17 & 12.5	20- 110mm



## Technical Characteristics of Polyethylene Pipelines

Within the plastic materials tested for the water distribution, only Polyethylene got with the best results, thanks to its excellent characteristics which can offer improving solutions to different and typical problems regarding these applications.

- Its flexibility guarantees a perfect adaptability to the laying bed and to the ground movements: therefore these characteristics make it the ideal material for the construction of pipelines in seismic areas
- The limited degree of superficial roughness makes the PE pipelines very interesting for the reduced pressure losses.
- Thanks to the good impact strength characteristics, the PE products offer good shocks resistance also at temperatures below 0°C (brittleness temperature is at about -100°C).
- The PE material has a high electrical resistance which grants insulating and dielectrical characteristics, able to make it indifferent to flowing currents and to other electrolyte corrosion forms.
- The PE material has an excellent resistance comparing to acid and/or basic ambients and comparing to organic elements which can be present in the subsoil. Furthermore, the material is not a nutritive substratum for the various micro-organisms and parasites (fungus, spores, bacteria) present in the soil.
- The wide European experience proved the maximal reliability of the jointing, showing that PE networks are those with the lowest leakage rate.
- The PE is used for special laying techniques “relining” for the renewal of old pipelines.
- The equipment – electrofusion welding units – necessary for the jointing are easy to use.

The main advantages which established the success of Polyethylene are here detailed:

CHARACTERISTICS	ADVANTAGES
Flexibility and Lightness	easy installation and handling adaptability to ground movements
Installation speed	cost reductions
Jointing and repairing ease	quick on-site consulting reduced costs
Jointings safety	leak-free system network life
Wide fittings range	Maximum flexibility in the pipeline installation
Chemical resistance	installation on aggressive soils submarine applications
Material developments	wall thickness reduction lifetime warranty





**CORZAN**<sup>®</sup> Hot & Cold water systems  
INDUSTRIAL SYSTEMS  
TemperFIP100<sup>®</sup>



**PIPE, FITTINGS  
AND MANUAL VALVES**  
PVC-C

The TemperFIP100<sup>®</sup> PVC-C line consists of a comprehensive range of pipes, fittings and manual valves for use in the construction of process and service lines for conveying pressurised fluids at maximum operating temperatures of no more than 100 °C.

**CPVC|Chlorinated Polyvinyl Chloride Pipes, Fittings and Valves.**

Applications:

- For domestic hot and cold water distribution system.
- Industrial.
- Labs drainage systems.
- Fire fighting, sprinkler system.

Standard	Class / Schedule / SDR	Product Size Range
ASTM F 441	Sch80	1/2" – 8"
ASTM F 437 / F 439	Sch80	1/2" – 8"
ASTM F 442	SDR 13.5	3/4"- 3"
DIN 8079 / 8080	PN 10, PN 16	20 - 200 mm

## Specialist Water Supply Systems PP-R pipe system

### Quality Products

The Wefatherm PP-R pipe systems is developed and manufactured within an ISO 9001 Quality Assurance system and complies with the ISO15874 and DIN8077/8078 standards. And they are certified by DVGW and carries numerous international recognized approvals.

### Quality Systems

Naturally, you want peace of mind after the design and installation of your water supply systems. Wefatherm's combination of up-front training of consulting engineers and installers, together with on-site project support and on-site inspections (if required), means that working with Wefatherm provides you with maximum quality installed.

Wefatherm water supply systems ensure:

- hygienic reliable drinking water
- long term undisrupted system use
- avoiding nuisance like noise
- preventing loss of water or wasting energy

## Setting the standard

### PP-R

For more than 30 years, Polypropylene Random Copolymer (PP-R) has been applied successfully for hot and cold water applications in countries worldwide. The combination of properties such as resistance to internal pressure, flexibility and impact have made PP-R the material of choice for a safe and reliable long-lasting installations. No wonder that PP-R has been continuously replacing traditional materials like copper and galvanized steel over the last decades.

### PP-RCT

PP-RCT is the abbreviation for Polypropylene Random Copolymer with modified crystalline structure and enhanced temperature performance. The special fine and homogenous crystal structure of the PP-RCT material improves the mechanical characteristics of the material.

### Benefits of PP-RCT:

- PP-RCT material has an improved stress resistance at elevated temperatures with a minimum required strength (MRS) value of 11,2 MPa. And more importantly, the critical required strength (CRS) at 70°C and 50 years is 5 MPa compared to 3,2 MPa for standard PP-R. PP-RCT pipe systems can be operated at higher operating pressures, ranging from factor 1,25 to 2,5 at temperatures >60°C.
- The improved long-term strength of the PP-RCT material leads to a more economic set of dimensions of the pipe system. It enables designers to select thinner wall pipes with an increased flow capacity or smaller diameter pipes.

### Quality People

With a clear focus on meeting the demanding specifications of consulting engineers, the Wefatherm team is a key element in the successful delivery of our knowledge through consultation, support processes and the application of leading technologies.

Wefatherm is focused on delivering quality is focused on delivering quality all the way from product to support.

### Benefits of PP-R:

- Service life according to tests performed under ISO 15874
- No contact corrosion when exposed to iron particles
- Taste and odor neutral
- Bacteriologically neutral
- Fast and easy installation
- Entire plastic systems available
- Good chemical resistance
- Low tendency to incrustations



Lighter pipe systems are easier and quicker to install.

- Not least important, the substantially lower material usage provides an additional contribution to the conservation of resources supporting a sustainable environment.



## ITALIANA CORRUGATI

### COMPLETE SYSTEM FOR UNDER GROUND

Applications:

- Sewer, Water Pipes.
- Cable Protection Ducts.
- Drainage Water.



Ø ext. mm	*125	160	200	250	315	400	500	630	800	1000	1200
Ø int. mm	105	137	172	218	272	347	433	535	678	852	1030

#### EXTERIOR DIAMETERS - SPECIFICATIONS

Supply and installation of high density polyethylene pipes (HDPE) for non pressure underground pipelines, made through the continuous coextrusion of two layers; the internal layer is smooth and of light blue colour to facilitate visual inspection with telecameras, while the external layer must be corrugated and of black colour.

The system (pipe+ joint) is fully compliant with EN 13476 standard and certified with product quality label issued by an accredited, certifying third body, exterior nominal diameter DN/OD\_\_\* mm, annular rigidity class SN\_\_\*\* (equal to\_\_\*kN/square metres) measured according to EN ISO9969 standard. The pipe is produced by a company operating in compliance with the production quality system set forth by EN ISO 9001/2015 standard and with the environmental quality system according to EN ISO 14001/2015.

Each length of pipes must be equipped with socket connection or exterior sleeve with relative EPDM compliant sealing gaskets in accordance to EN 681-1 standard, to position in the first groove between two following.

The pipe carries the label as foreseen by EN 13476 standard and the following must be shown:

- Test certifications on annular flexibility according to EN 13476 standard, using the testing method described in EN 1446 standard
- Certification of compliance with the environmental quality system (EN ISO 14001:2015)
- Certification of production compliant with the corporate quality system (EN ISO 9001:2015)
- Test certification on the hydraulic seal of the gaskets, according to EN 13476, using the test method described in EN 1277.
- Test certification on resistance to abrasion, varied according to DIN EN 295-3 standard
- IIP certification of the connection system
- Cable protection pipe conforms to IEC EN 50086-2-4/A1 (IEC 23-46/V1), and is IMQ and CE marked as class N with crush resistance higher than 750N

PE Manholes

**Futura**

**BIG-DREN**



## Specialist Water Supply Systems PP-R pipe system



### This is Specialist Water Supply.

Wefatherm believes that acknowledging the specific challenges you face - and identifying and resources that are required to overcome them - is the first step to protect this source.

**Together we can help you to ensure reliability.**

### Maintaining your reputation

As a Consulting Engineer, your reputation depends on ensuring the water supply system you want installed delivers the expected quality and comfort.

When installing water supply systems, your position near the completion of a project increases the pressure on getting the job done on time and on budget.

Through specialist water supply Wefatherm offers you the reassurance of providing the right solution to tackle even the most complex challenges and realise the outcome you want - without being a slave to the services or limited by the cost of high performance components.

For confidence, not compromise.

### \*The Wefatherm PP-R pipe systems can be applied for typical domestic water supply systems:

#### Drinking water

Drinking water is considered fresh water up to a temperature of 25°C for drinking and preparing food.

#### Hot tap water

Hot tap water is heated drinking water up to a temperature of 60°C.

#### Sanitary applications

For domestic appliances, such as sanitary flush systems, washing and irrigation, drinking water quality is not required.

### Ensure reliability

Wefatherm PP-R water supply systems have been used for many years in areas of application where the pipe system has to meet high standards of durability and reliability. Numerous prestige buildings have been equipped with a Wefatherm system. Over 25 years of experience in water supply systems, focussing on innovation, quality and dedication: that is Wefatherm GmbH.

### Leading the way through innovation and quality

Wefatherm has always been focussed on innovation and quality, making 'made in Germany' more than just a phrase by really living up to it. Offering a full range PP-R system and our latest development of injection moulded large bore fittings are the living proof of this.



## Akatherm dBlue designed for noise reduction

The Akatherm dBlue system is made from a state-of-the-art combination of plastic and sound absorbing mineral filler (PP-MD) to maximize absorbance of sound. The material formula is developed by the Aliaxis R&D laboratory and offers a unique combination of acoustic performance, weight, resistance and mechanical strength.

The triple-layer pipe structure is produced using the latest co-extrusion technology. Each layer has its own function optimised to reduce sound levels, increase mechanical characteristics and improve the drainage flow.

Used in conjunction with dBlue acoustic brackets, the system effectively uncouples the vibrations and greatly reduces noise and acoustic vibrations down to a level of 18 dB. This makes it ideal for residential housing, multi occupancy apartments as well as hospitals, hotels and other commercial buildings, where reduced noise levels are required.

### Comfort of living

End users gain more comfort of living with Akatherm dBlue. The system is optimised for acoustic conform using the latest production techniques, ensuring an installation that meets the most stringent noise regulations.

### Freedom of application

It's high resistance against heat and chemicals, unique products for high-rise, underground approval and dimension up to 200mm enable Akatherm dBlue to be used as a single system installation in a broad range of applications.

### Speed of installation

A distinctive benefit of Akatherm dBlue is the fast installation. Easy to use and secured socket connections minimize installation time of each joint without further use of electrical tools.

### Proven systems

Akatherm dBlue is a high quality acoustic soil & waste system produced in conformity with the En1451. It meets national and international quality and safety standards.



State-of-the-art material formula



Latest co-extrusion technology



High noise reduction



## Best placed in the race

Robust, complete and installation friendly

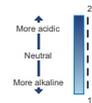
### + Material advantages



High noise reduction without insulation



High resistance to waste water temperatures up to 90°C (peak 95°C)



High chemical resistance ranging from pH2 to pH12



Triple layer pipe is rigid, noise-attenuated with a smooth bore that resists incrustation and blockages



Sustainable system  
100% recyclable  
ISO 14001 certified company



Installation possible at temperatures down to -10°C

### + System advantages



dBlue acoustic brackets with rubber lining reduce acoustic vibrations to a minimum



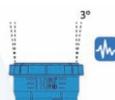
Fast installation of rubber ring joints without additional tools



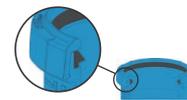
No vent stack required in multi-storey buildings using the Akavent single stack system



Transitions to PVC, PP-HT and HDPE possible without additional transition fittings required



Rubber ring joint increases flexibility of the pipe system during ground movement or earthquake



Snap cap technology with tight rubber ring containment and installation angle indication

## Proven results meeting strictest requirements

Tests and measurements of noise emitted by the Akatherm dBlue system were conducted according to the European standard EN 14366 'Laboratory measurement of noise from waste water installations'.

The Akatherm dBlue system is certified at a noise transmission level of 18dB at a water flow of 4 l/s using dBlue acoustic brackets with rubber lining.

The 18 dB is measured at the bottom floor in the room next to the downpipe where the soil & waste flow and resulting noise levels are highest, especially in multi-storey living apartments or high-rise buildings that have a combined soil & waste flow.

All tests were carried out in the accredited institute for buildings physics Fraunhofer in Germany. Results are available in test report P-BA 26/2016e.

### Quality and certification

Akatherm dBlue is developed and manufactured within an ISO 9001 Quality Assurance system and complies with the EN 1451 and other relevant international standards as well as meeting numerous national approved quality and safety standards.



Germany



Australia



Sweden



Ukraine



Czech Republic



Poland



EN14366  
Noise measurement



EN13501  
Fire class measurement



ISO 9001  
Quality management system



ISO 14001  
Environmental management system

## Water Drainage System

- Channel Drains (PP) body, in compliance with EN 1433 standard and defined by EN 1433 "type M".



## Sabdrain



- Residential Drains (PVC) body fit to Sch40 and DWV fittings.
- Commercial Drains (PVC) body Comply with ASTM D 2665.
- General Purpose Drain Bases (PVC) body Comply with ASTM D 2665.

## Oatey



All Low VOC, All the time.



### Solvent Cement, Cleaners and Primers

**PVC** Medium and Heavy and Extra Heavy Bodied Solvent cement, Clear and Gray and to be used for small and large sizes PVC pipes and fittings for all classes and schedule, meets ASTM D 2564.

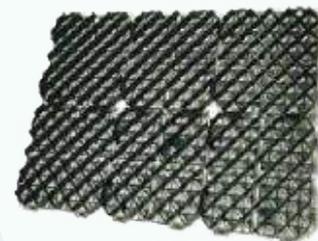
**CPVC** solvent cement for use on CPVC pipes and fittings in all classes and schedule meets ASTM D 2846 and F493

**Cleaners and Primers** are used for surface preparation of plastic pipes and fittings. Meets ASTM F 656



### Irrigation Accessories

- Dripline PE Tubes and Fittings
- On Line Drippers
- Irrigation Compression Fittings
- Filters
- Valve Box, Quick Coupling Valves and Grabs



**Y-STRAINER / 2500**



**PN 16**  
DN15 → DN400

**PRODUCTION STANDARDS**

DESIGN	TS 11494
END CONNECTION	FLANGED TS EN 1092-2 / ISO 7005-2
FACE TO FACE	TS 11494 / TS EN 558 Ser1 1 / DIN 3202 F1
TEST	TS 11494 / TS EN 12266-1
MARKING	TS EN 19

**COUPLING / 3920**



**PN 16**  
DN40 → DN600

**PRODUCTION STANDARDS**

DESIGN	TS EN 1171
END CONNECTION	FLANGED TS EN 1092-2 / ISO 7005-2
FACE TO FACE	TS EN 558 Ser1 15 / DIN 3202 F5
TEST	TS EN 12266-1
MARKING	TS EN 19

**FLANGE ADAPTOR / 3910**



**PN 16**  
DN40 → DN600

**PRODUCTION STANDARDS**

DESIGN	TS 3148 / DIN387
END CONNECTION	FLANGED TS EN 1092-2 / ISO 7005-2
FACE TO FACE	TS3148 Sheet2
TEST	DN15: DN150 TS EN 558 Ser1 14 / DIN3202 F4 DN200: DN200 TS EN 558 Ser1 27 / DIN3202 F5
MARKING	TS EN 12266-1 TS EN 19 / TS 3148

**GATE VALVE / 6100  
RESILIENT SEATED - CAST IRON (F4)**



**PN 10-16**  
DN40 → DN600

**PRODUCTION STANDARDS**

DESIGN	TS EN 1171
END CONNECTION	FLANGED TS EN 1092-2 / ISO 7005-2
FACE TO FACE	TS EN 558 Ser1 14 / DIN 3202 F4
TEST	TS EN 12266-1
MARKING	TS EN 19

**GATE VALVE / 6200  
RESILIENT SEATED - DUCTILE IRON (F5)**



**PN 10-16**  
DN50 → DN600

**PRODUCTION STANDARDS**

DESIGN	TS EN 1171
END CONNECTION	FLANGED TS EN 1092-2 / ISO 7005-2
FACE TO FACE	TS EN 558 Ser1 15 / DIN 3202 F5
TEST	TS EN 12266-1
MARKING	TS EN 19

**BALL VALVE / 1100  
PN10/16 - FLANGED**



**PN 10-16**  
DN15 → DN250

**PRODUCTION STANDARDS**

DESIGN	TS 3148 / DIN387
END CONNECTION	FLANGED TS EN 1092-2 / ISO 7005-2
FACE TO FACE	TS3148 Sheet2
TEST	DN15: DN150 TS EN 558 Ser1 14 / DIN3202 F4 DN200: DN200 TS EN 558 Ser1 27 / DIN3202 F5
MARKING	TS EN 12266-1 TS EN 19 / TS 3148

**BUTTERFLY VALVE / 3800  
FLANGED - DOUBLE ECCENTRIC**



**PN10-16-25**  
DN100 → DN2000

**PRODUCTION STANDARDS**

DESIGN	TS EN 593
END CONNECTION	FLANGED TS EN 1092-2 / ISO 7005-2
FACE TO FACE	TS EN 558 Ser1 14 / DIN 3202 F4
TEST	TS EN 12266-1
MARKING	TS EN 19

**TILTING CHECK VALVE / 2280**



**PN10-16**  
DN200 → DN1600

**PRODUCTION STANDARDS**

DESIGN	TS EN 12334
END CONNECTION	FLANGED TS EN 1092-2 / ISO 7005-2
FACE TO FACE	TS EN 558 Ser1 14 / DIN 3202 F4
TEST	TS EN 12266-1
MARKING	TS EN 19

**FOOT VALVE / 7200**



**PN 16**  
DN100 → DN600

**DISMANTLING JOINT / 3900**



**PN 10-16-25**  
DN100 → DN2000

**PRODUCTION STANDARDS**

END CONNECTION	FLANGED TS EN 1092-2 / ISO 7005-2
TEST	TS EN 12266-1
MARKING	TS EN 19

**DUAL CHECK VALVE / 2350**



**PN 16**  
DN40 → DN400

**PRODUCTION STANDARDS**

DESIGN	TS EN 12334
END CONNECTION	WAFER TYPE TS EN 1092-1 / ISO 7005-1
FACE TO FACE	TS EN 558 Ser1 16
TEST	TS EN 12266-1
MARKING	TS EN 19

**AIR RELEASE VALVE / 7300**



**PN 16**  
DN15 → DN250

**KNIFE GATE VALVE / 6500**



**PN 10-16**  
DN50 → DN600

**PRODUCTION STANDARDS**

END CONNECTION	FLANGED TS EN 1092-2 / ISO 7005-2
TEST	TS EN 12266-1
MARKING	TS EN 19

**FLEXIBLE RUBBER JOINT / 5050**



**PN 10-16**  
DN25 → DN600

**PRODUCTION STANDARDS**

DESIGN	TS 10879 / DIN 30680
END CONNECTION	FLANGED TS EN 1092-1 / ISO 7005-1
FACE TO FACE	TS 10879
TEST	TS 10879
MARKING	TS 10879 / TS EN 19

**BALL VALVE / 4000**



**PN 16-25**  
DN15 → DN100

**PRODUCTION STANDARDS**

DESIGN	TSE GEN / TS 13547
END CONNECTION	THREADED / TS EN ISO 228-1
FACE TO FACE	TSE GEN / TS 13547
TEST	TSE GEN / TS 13547
MARKING	TSE GEN / TS 13547

**Y-STRAINER / 2500**



**PN 16**  
DN15 → DN400

PRODUCTION STANDARDS	
DESIGN	TS 11494
END CONNECTION	FLANGED TS EN 1092-2 / ISO 7005-2
FACE TO FACE	TS 11494 / TS EN 558 Ser1 1 / DIN 3202 F1
TEST	TS 11494 / TS EN 12266-1
MARKING	TS EN 19

**COUPLING / 3920**



**PN 16**  
DN40 → DN600

PRODUCTION STANDARDS	
DESIGN	TS EN 1171
END CONNECTION	FLANGED TS EN 1092-2 / ISO 7005-2
FACE TO FACE	TS EN 558 Ser1 15 / DIN 3202 F5
TEST	TS EN 12266-1
MARKING	TS EN 19

**FLANGE ADAPTOR / 3910**



**PN 16**  
DN40 → DN600

PRODUCTION STANDARDS	
DESIGN	TS 3148 / DIN387
END CONNECTION	FLANGED TS EN 1092-2 / ISO 7005-2
FACE TO FACE	TS3148 Sheet2
	DN15, DN150 TS EN 558 Ser1 14 / DIN3202 F4
	DN200, DN250 TS EN 558 Ser1 27 / DIN3202 F5
TEST	TS EN 12266-1
MARKING	TS EN 19 / TS 3148

**GATE VALVE / 6100**  
RESILIENT SEATED - CAST IRON (F4)



**PN 10-16**  
DN40 → DN600

PRODUCTION STANDARDS	
DESIGN	TS EN 1171
END CONNECTION	FLANGED TS EN 1092-2 / ISO 7005-2
FACE TO FACE	TS EN 558 Ser1 14 / DIN 3202 F4
TEST	TS EN 12266-1
MARKING	TS EN 19

**GATE VALVE / 6200**  
RESILIENT SEATED - DUCTILE IRON (F5)



**PN 10-16**  
DN50 → DN600

PRODUCTION STANDARDS	
DESIGN	TS EN 1171
END CONNECTION	FLANGED TS EN 1092-2 / ISO 7005-2
FACE TO FACE	TS EN 558 Ser1 15 / DIN 3202 F5
TEST	TS EN 12266-1
MARKING	TS EN 19

**BALL VALVE / 1100**  
PN10/16 - FLANGED



**PN 10-16**  
DN15 → DN250

PRODUCTION STANDARDS	
DESIGN	TS 3148 / DIN387
END CONNECTION	FLANGED TS EN 1092-2 / ISO 7005-2
FACE TO FACE	TS3148 Sheet2
	DN15, DN150 TS EN 558 Ser1 14 / DIN3202 F4
	DN200, DN250 TS EN 558 Ser1 27 / DIN3202 F5
TEST	TS EN 12266-1
MARKING	TS EN 19 / TS 3148

**BUTTERFLY VALVE / 3800**  
FLANGED - DOUBLE ECCENTRIC



**PN10-16-25**  
DN100 → DN2000

PRODUCTION STANDARDS	
DESIGN	TS EN 593
END CONNECTION	FLANGED TS EN 1092-2 / ISO 7005-2
FACE TO FACE	TS EN 558 Ser1 14 / DIN 3202 F4
TEST	TS EN 12266-1
MARKING	TS EN 19

**TILTING CHECK VALVE / 2280**



**PN10-16**  
DN200 → DN1600

PRODUCTION STANDARDS	
DESIGN	TS EN 12334
END CONNECTION	FLANGED TS EN 1092-2 / ISO 7005-2
FACE TO FACE	TS EN 558 Ser1 14 / DIN 3202 F4
TEST	TS EN 12266-1
MARKING	TS EN 19

**FOOT VALVE / 7200**



**PN 16**  
DN100 → DN600

**DISMANTLING JOINT / 3900**



**PN 10-16-25**  
DN100 → DN2000

PRODUCTION STANDARDS	
END CONNECTION	FLANGED TS EN 1092-2 / ISO 7005-2
TEST	TS EN 12266-1
MARKING	TS EN 19

**DUAL CHECK VALVE / 2350**



**PN 16**  
DN40 → DN400

PRODUCTION STANDARDS	
DESIGN	TS EN 12334
END CONNECTION	WAFER TYPE TS EN 1092-1 / ISO 7005-1
FACE TO FACE	TS EN 558 Ser1 16
TEST	TS EN 12266-1
MARKING	TS EN 19

**AIR RELEASE VALVE / 7300**



**PN 16**  
DN15 → DN250

**KNIFE GATE VALVE / 6500**



**PN 10-16**  
DN50 → DN600

PRODUCTION STANDARDS	
END CONNECTION	FLANGED TS EN 1092-2 / ISO 7005-2
TEST	TS EN 12266-1
MARKING	TS EN 19

**FLEXIBLE RUBBER JOINT / 5050**



**PN 10-16**  
DN25 → DN600

PRODUCTION STANDARDS	
DESIGN	TS 10879 / DIN 30680
END CONNECTION	FLANGED TS EN 1092-1 / ISO 7005-1
FACE TO FACE	TS 10879
TEST	TS 10879
MARKING	TS 10879 / TS EN 19

**BALL VALVE / 4000**



**PN 16-25**  
DN15 → DN100

PRODUCTION STANDARDS	
DESIGN	TSE GEN / TS 13547
END CONNECTION	THREADED / TS EN ISO 228-1
FACE TO FACE	TSE GEN / TS 13547
TEST	TSE GEN / TS 13547
MARKING	TSE GEN / TS 13547

Since 1979 RITMO S.P.A. is a world leader in manufacturing of plastic welding equipment. All products are designed and built according to international standards and directives (UNI, ISO, CEE). Since the very beginning, quality and technology innovation are RITMO's milestones, and time after time, this philosophy is always more recognized by the global market. RITMO strong points are its ideas to design and produce accurate, fast, versatile, modular and easy-to-use welding machines. Products range includes butt fusion, electrofusion and extrusion equipment. Ritmo is also providing a complete line of accessories and useful instruments for pipe cutting and weld preparation such as the band saws. RITMO's regards towards the client has brought to the new-born "RITMO FUSION OPERATOR SCHOOL", which is a welding school with the goal of building qualified personnel and spread the knowledge about the technical potentiality of RITMO's equipment: TECHNOLOGY MADE IN ITALY.

ELEKTRA 500



ELEKTRA 1000



DELTA 500/630 EASY LIFE



DELTA DRAGON CNC



MUSTANG 160 V1



UNIVERSAL 315



XTR 400/800



ELEKTRA 315



SME 2 PLUS



PIPE CUTTERS



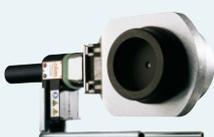
INTERNAL DEBEADER



RTC 315



R 125 Q



ROLLERS 355



TP 125/45



Electrofusion of HDPE piping systems is invariably associated with FRIATEC products. FRIALEN, FRIAFIT, FRIATOOLS and, not least of all, FRIAMAT fusion units have been shaping the standards of this technology for over thirty years. And – this will remain so in future.

The new FRIAMAT fusion units have received yet another boost in performance. This can be seen especially in continuous operation and when large fittings are processed. Here, ultra modern converter technology and active, flow optimised cooling reduce the process and downtimes.

The FRIAMAT fuses and fuses and fuses. And that reliably and free of problems in the working temperature range of -20 °C to +50 °C. Every FRIAMAT can meet the harsh requirements of everyday work on the most diverse building sites. The new, wear resistant Bi-mat housings and the excellent workmanship of all components together present a robust design that virtually eliminates failure owing to mechanical effects.

With every FRIAMAT you acquire access to our network of global service stations. With specialists who solve your problems quickly, safely and competently.

The sum of acquisition, operating, and maintenance costs makes it clear: A FRIAMAT is an investment that makes perfect economic sense.

FRIAMAT BASIC



FRIAMAT PRIME



FRIAMAT PRIME ECO



FRIAMAT XL



Established as an unlimited company under the name Ercan Pres Dokum San. In 1979, and then institutionalized changing its name to Candan Makina Yedek Parça San. ve Tic.Ltd.Şti. is the leading manufacturer of welding machines for PPR and PE pipes in Turkey. The production is diversified in 4 lines; Welding machines and accessories for plastic pipes, Brass Valves, Aluminum injection & Casting, Production of customized parts for Power Transmission Sector / High & Low Voltage.

Our products are tested by our quality control department and placed on the market under international standards and norms at competitive prices.

With exceeding 30 years experience and know-how, CANDAN MAKINA took its leading place among the manufacturing companies in TURKEY. Customized production is focused mainly on Power Transmission Unit parts. For High & Middle & Low Voltage transmission, CANDAN MAKINA has been producing more than 1000 different spare parts.

Since established in 1979 up to nowadays, CANDAN MAKINA has been doing aluminum injection and casting for its own manufacturing needs, as well as for outsourcing spare parts needs of Automotive and Electrical Power sectors. After Injection Processes are cutting , sandblasting, vibration, lathe, CNC processing, washing and drying. Aluminum raw material has been tested by Spectro Metal Analyzer and then given to production for further manufacturing processes.

CM-05 ONLY



CM-01-SET-V



**PIPESTECH**



**straub**   
**the right connection**

an OAliaxis company

**50** YEARS

COMBINED SAFETY  
AND RESPONSIBILITY  
**STRAUB PIPE COUPLINGS**

[www.straub.ch](http://www.straub.ch)

# THE RIGHT CONNECTION STRAUB PIPE COUPLINGS

The name STRAUB stands for the production of first class couplings and pipe coupling solutions which are used in various industries throughout the world.

STRAUB is synonymous with expertise, quality and reliability. As an internationally leading manufacturer of pipe couplings, STRAUB invented the "original".

Our unique pipe coupling concept is based on more than 40 years of experience and consistent further development. Comprehensive engineering competency and the proverbial Swiss precision work guarantee maximum quality and absolute reliability of permanent connections.

Whether for water management, renewable energy sectors, industry, ship building and offshore: STRAUB, with its top-quality products, client orientated engineering competence and high service and support readiness, stands for sophisticated coupling solutions for pipe systems made from all materials.



## STRAUB SOLUTIONS PROVIDE ADDED VALUE

Based on the well-proven STRAUB coupling technology, which can be found in millions of pipe connections worldwide, we combine pipematerials for optimum solutions for customers permanent pipe couplings which meet customers' requirements to the full extent and can be found in a variety of special applications.

Especially for sophisticated and specific challenges that require more than just standard solutions, you will benefit from our experience and various additional services related to the technique of positioning pipes. From consultancy and planning to extensive project support and proper documentation we will assist you in completing your projects successfully.



### WATER

Drinking water treatment  
Irrigation



### RENEWABLE ENERGIES

Hydro power plants  
Wastewater energy  
Solar energy



### INDUSTRY

Transportation  
Shipbuilding  
Offshore

## YOU CAN RELY ON OUR PRODUCTS: STRAUB PIPE COUPLINGS



### STRAUB-METAL-GRIP

**Pull out resistant pipe coupling for all metal pipes to meet the highest standards**

Diameter: 30.0 to 609.6 mm



### STRAUB-GRIP

**Pull out resistant pipe coupling for all metal pipes**

Diameter: 21.3 to 711.2 mm



**STRAUB-FIRE-FENCE**

For use wherever fire protection is required by law

Diameter: 25.0 to 457.2 mm

**STRAUB-ECO-GRIP**

Economical, pull out resistant pipe coupling for use in low pressure and temperature areas with metal pipes, PVC, ABS, CPVC

Diameter: 26.9 to 168.3 mm

**STRAUB-COMBI-GRIP**

Pull out resistant pipe coupling for transitions from plastic to metal piping

Diameter: 40.0/38.0 to 355.0/355.6 mm

**STRAUB-PLAST-GRIP**

Pull out resistant pipe coupling for plastic pipes

Diameter: 40.0 to 355.0 mm

**STRAUB-REP-FLEX**

Complete repair coupling for damaged water pipes

Diameter: 46.0 to 429.0 mm

**STRAUB-SQUARE-FLEX**

Axially flexible pipe coupling for square pipes

Diameter: 60.0, 80.0 and 100.0 mm

**STRAUB-PLAST-PRO**

Axial restraint connection of pressure pipes made of polyethylene (PE)

Diameter: 63.0 to 355.0 mm

**STRAUB-CLAMP SCE (one-piece)**

Axially flexible repair clamp for pipes of all materials

Diameter: 44.0 to 330.0 mm

**STRAUB-CLAMP SCZ (two-piece)**

Axially flexible repair clamp for pipes of all materials

Diameter: 88.0 to 440.0 mm



### STRAUB-OPEN-FLEX 1 GT

**Axially flexible pipe coupling for pipes of all materials with side outlet**

Diameter: 73.0 to 168.3 mm

### STRAUB-STEP-FLEX

**Axially flexible pipe coupling for all pipe materials to compensate different pipe diameters**

#### STRAUB-STEP-FLEX 2

Diameter: 219.1 to 812.8 mm

#### STRAUB-STEP-FLEX 3

Diameter: 914.4 to 2032.0 mm

### STRAUB-FLEX

**Axially flexible pipe coupling for pipes of all materials**

#### STRAUB-FLEX 1

Diameter: 48.3 to 168.3 mm

#### STRAUB-FLEX 2

Diameter: 172.0 to 2032.0 mm

#### STRAUB-FLEX 3

Diameter: 219.1 to 2032.0 mm

#### STRAUB-FLEX 3.5

Diameter: 323.9 to 1219.2 mm

#### STRAUB-FLEX 4

Diameter: 323.9 to 812.8 mm

### STRAUB-OPEN-FLEX

**Hinged, axially flexible pipe coupling for the repair of pipes of all materials**

#### STRAUB-OPEN-FLEX 1

Diameter: 48.3 to 168.3 mm

#### STRAUB-OPEN-FLEX 2

Diameter: 172.0 to 2032.0 mm

#### STRAUB-OPEN-FLEX 3

Diameter: 219.1 to 4064.0 mm

#### STRAUB-OPEN-FLEX 3.5

Diameter: 323.9 to 4064.0 mm

#### STRAUB-OPEN-FLEX 4

Diameter: 323.9 to 4064.0 mm

The temperature ranges indicated are based on the use of EPDM sealing sleeves. EPDM and NBR sealing sleeves are used by default; various coupling sizes also available with FPM/FKM sealing sleeves (temperature range: -20°C to 180°C).

All diameters and designs available plus accessories (strip inserts, stiffening rings, STRAUB-OPEN-FLEX fitting tool, tensioning straps) can be obtained from the technical manual STRAUB.

Construction and design of the STRAUB pipe couplings comply with the directives of DIN 86128-1 and 86128-2.



## OUR QUALITY PRODUCTS YOUR BENEFIT

The results of various endurance tests and inspections prove it and our customers satisfaction around the whole world reflects it every single day - STRAUB pipe couplings can be trusted. They offer immense customer benefit, convince through practice-tested safety and consequent cost-effectiveness.



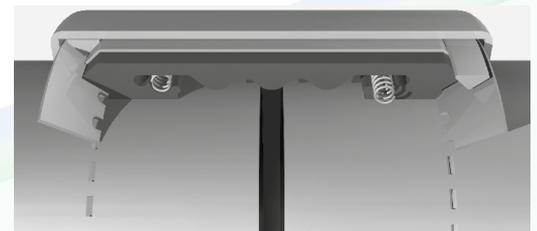
### THE PRINCIPLES:

#### Progressive sealing effect

If the pressure in the pipe rises, the contact pressure on the sealing lips also increases due to the flow through the pressure equalization channel.

#### Progressive anchoring effect

If the axial tensile load on the pipe rises due to increased internal pressure or external influence, the teeth continuously penetrate deeper into the surface of the pipe to compensate.



- **SYSTEM INDEPENDENCE**  
connects the most varied pipe materials
- **FLEXIBLE PIPE CONNECTION**  
stress-free, compensates for tolerances
- **EASY ASSEMBLY**  
light, space-saving, no pipe-end preparation

- **SAFE ASSEMBLY WITHOUT RISK OF FIRE OR EXPLOSION**  
no protective measures required
- **DAMPING CHARACTERISTICS**  
noise, vibration, movement
- **ECONOMICAL**  
cost-saving thanks to short assembly times



STRAUB couplings are approved for virtually all pipeline systems



# Certificate Of Registration

Awarded to

## PIPES TECHNOLOGY CO W.L.L

at

P.O.BOX NO:23783, OFFICE NO: 21, BUILDING NO: 05, BARWA VILLAGE,  
AL WAKRA ROAD, DOHA, QATAR

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### ISO 9001:2015

Quality Management Systems

#### Scope of work

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- TRADING OF BUILDING MATERIALS
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Originally Registered: 05 APR 2015  
Latest Issue: 25 APR 2018  
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This is an accredited certificate authorized for issue by Accreditation Service for Certifying Bodies (Europe) Limited who have assessed QRS as a Certifying Body for compliance with ISO 17021:2015 'Conformity Assessment - Requirements for bodies providing audit and certification of management systems. This certificate is only valid when confirmed by the register listed in the quality registrar system ( qrsyst.com)





**PIPESTECH**

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