



” TALENT Industrial “

A pioneer and market leader in manufacturing water supply and drainage solutions.

مواصفات عالمية بأيدينا مصرية





Dear Customer ,

It is an honour to be a part of Such Organization and work with valuable Customers, efficient employers and esteemed suppliers like yourself .

Talent is one of the most trusted manufacturers of plastic. Pipes and fittings incorporated in Egypt. The total installed capacity is 1800 Metric Ton per annum. This is being made possible because of our valuable customers who are the back bone of our company in promoting our pipes under the brand name of « Talent-therm ». We have recently installed the latest Technology to cater the growing demand in Domestic & Global Market .

Talent has constantly tried to be the best and our investments in product innovation and R&D have yielded fruitful results. Our skilled technicians and stringent quality checks have produced plastic Pipes to meet all the international quality standards.... My Sincere thanks to my dedicated team with whose support the company has been able to achieve the continuous and consistent growth pattern .

I Feel very happy to inform you that our company is not only on Egyptian map but its presence has also been felt Globally. The outlook of plastic pipes industry is very bright in Egypt because of infrastructure development and the expansion of New cities development , the Consumption of plastic pipes shall be at its peak. With best management practices and every attempt targeted to outdo our self. Talent Assures to be the front runner in its domain & achieve new dimensions of success.

I once again wish to convey my sincere thanks to our valued customer who have shown their dedication and consistent support and expect to keep on getting the same in future .

Thanks & Regards

CEO & Chairman

Ahmed Khalifa



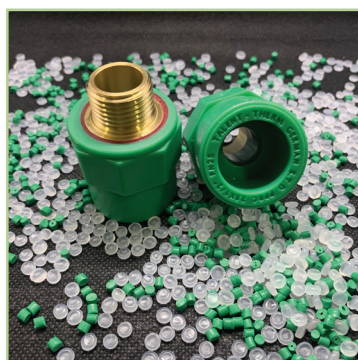
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Talent - Therm

PPRC PIPES & FITTINGS SYSTEMS

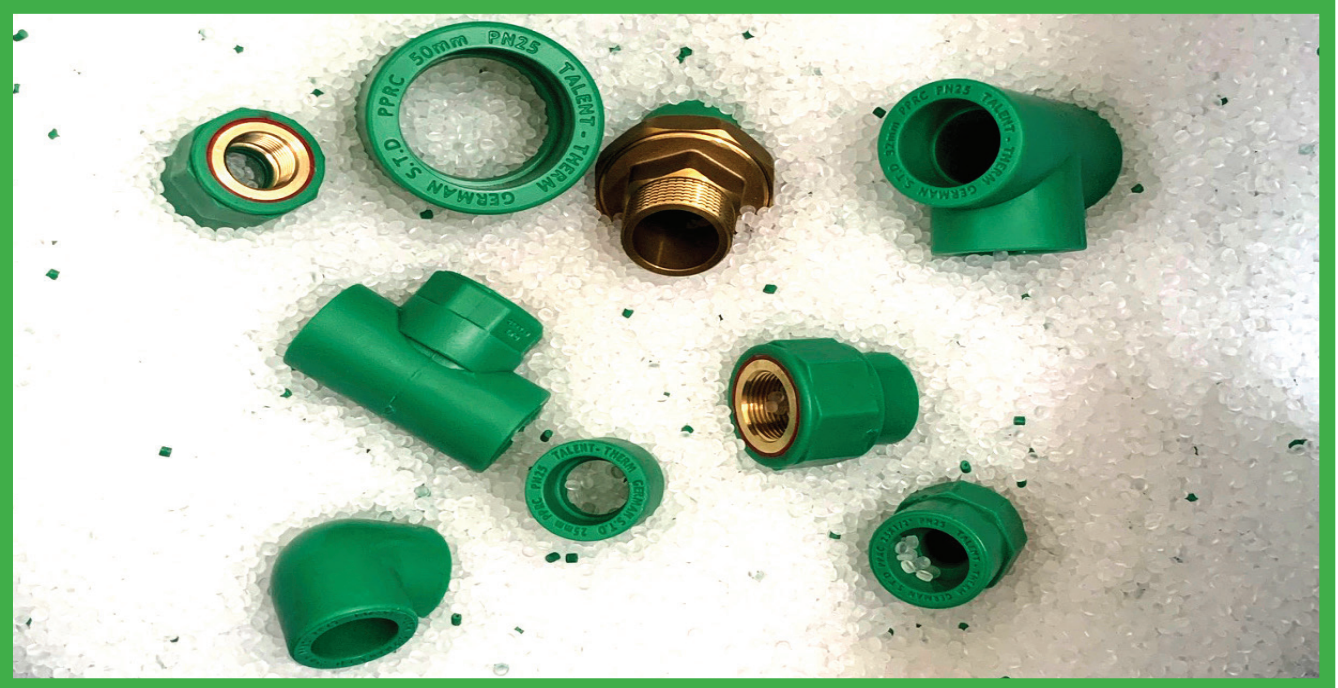




Talent group :

is established to introduce superior global industrials and produce one of the best PP-R systems for the water supply in the Egyptian market .

Talent-Therm® offers professionals a choice of reliable expertly produced plumbing products that will achieve a mutation with the market .



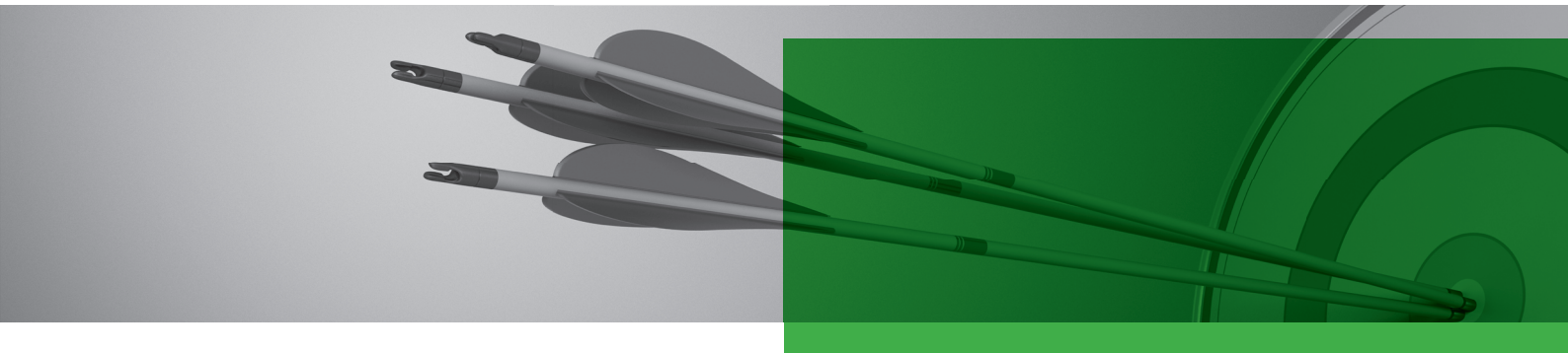
OUR VISION

To be an acknowledged leader in plastic piping industry by exceeding customers' expectations and maximizing bottom line for all our stake holders.



OUR MISSION

To bring a revolution in plastic piping industry through innovative solutions which would create a profitable growth and benefit our customers & the society at large.



OUR CORE VALUES

Respect: We respect & appreciate all individuals and cultural identities. We embrace the differences. We ensure harmonious working environment for all our employees.

Transparency: Transparency is the hallmark of all our business dealings. We communicate openly and sincerely, we appreciate feedback.

Commitment to Quality: We are committed to providing the best quality products to our customers.

Ownership: We believe in accepting responsibility and ownership while embracing common goals, teamwork and collaborative decision making.



Water is the basis of life, an indispensable resource for everyday use, for industry, and for agriculture. In light of increasing demands for water, Talent offers clean, efficient technologies and the highest level of safety for your use .

Because the quality of the system that carries your water can make all the difference in terms of safety , So you should make sure to choose the system that can offer optimum performance even under the most extreme conditions.

Talent-therm® means pure water, from the source to you .



Why you should choose Talent-Therm ?

1 - Our Products are always available

we like knowing that we're doing our absolute best. Your order is always available and ready for quick delivery that means any quantity of any product we offer . Extra-fast order fulfillment .

2 - After sales services & warranty

- **Customer satisfaction** : Talent is committed to maintain a management system with the prime focus on customer satisfaction by meeting their needs & expectations, and continual effective communication with their customers.
- **Services** : Our service doesn't end at delivery and install . Our team will ensure you are satisfied by meeting your needs and expectations , we will support you through our web site, social media pages , call center and customer service team any time you need help especially after sales.
- **Warranty & guarantee** : Because talent is committed to maintain the highest standards of quality for you , we provide guarantee for 10 years to our customers upon testing their plumbing .



3 - High Quality with best price

We use the latest equipment imported from our certified suppliers , We also import raw material from our certified global plants. All our products are produced by the highest qualified employees in compliance with current European and global standards, as shown with quality section below .

Talent doesn't care to how to be a profitable organization, but how to deliver every customer with unbeatable prices within reach of all people.





ليه تختار منتجات TALENT ؟

١ - توافر المنتجات بصفة دائمة : نحن نبذل قصارى جهدنا و نسعى دائما لجعل طلبك متاح دائما و جاهز على التسليم السريع . أيا كانت الكمية المطلوبة من أي نوع ستحصل عليها بسرعة فائقة .

٢ - خدمات ما بعد البيع & الضمان :

- **رضا العملاء:** تتعهد Talent بالتركيز بشكل أساسي على رضا العملاء أولا في نظام ادارتها من خلال تلبية احتياجاتهم وتوقعاتهم ، والتواصل الفعال المستمر معهم .
- **الخدمات :** لا تنتهي خدماتنا عند التسليم والتركيب فقط لكن يعمل فريقنا للتأكد من مدى رضا العميل عن طريق تلبية احتياجاته بل وتوقعاته أيضا ، و نقدم الدعم دائما من خلال موقعنا الرسمي وصفحات وسائل التواصل الاجتماعي والاتصالات الهاتفية بفريق خدمة العملاء في أي وقت تحتاج فيه إلى المساعدة خاصة بعد البيع.
- **الضمان :** نظرا لأن شركتنا تلتزم دائما بالحفاظ على أعلى معايير الجودة بالنسبة لك ، فإننا نقدم ضمانا لمدة ١٠ سنوات لعملائنا عند اختبار السباكة الخاصة بهم عند التركيب .

٣- جودة فائقة وبأفضل الأسعار : نستخدم في مصانعنا أحدث المعدات المستوردة من أكبر الموردين المعتمدين عالميا وكذلك المواد الخام يتم استيرادها من أكفأ المصانع العالمية المعتمدة ، و يتم إنتاج جميع منتجاتنا من قبل أكفأ الموظفين المؤهلين وفقا للمعايير الأوروبية والعالمية الحالية ، كما هو موضح في الجزء الخاص بالجودة لاحقا . ولأن شركة Talent لا تضع الربح غايتها الأولى بل ان تصل منتجاتها لجميع العملاء بأسعار لا تقبل المنافسة و في متناول اليد ، فانك ستجد منتجاتنا بأفضل الاسعار في السوق على الإطلاق .

Characteristics & Properties :

Raw Material :

Talent-Therm[®] products for water supply solutions are produced with superior German quality, All pipes and fittings are made of the purest polypropylene random copolymers , type 3 (PP-R) and the best copper in Egypt for threaded fittings .

Scope and fields of applications:

- Cold and hot potable water
- Swimming pool installation
- Rainwater application
- Heating systems
- Pipelines for industrial use
- Air conditioning system
- Agriculture and Irrigation systems and Industrial use
- Fire Protection Installation .
- Chemical liquids
- Ship building installation



Smooth and Easy to install

The smooth internal surface of PP-R products reduces frictional losses and prevents fouling and scaling in long term . All products are flexible , light , easy to cut and easy to fused for installation.

Resistance to current strays and Fire protection

Talent-Therm[®] system is a poor electrical conductor , So there is no risk of stray current occurring . As Talent-Therm[®] system is normal inflammable and do not produce any toxic gas , So it is no risk of dioxin emission .

Soundproof-ness

Talent-Therm[®] system is highly soundproof because of its ability to absorb and eliminate almost all vibrations.

Non Toxic and environmental harmless

The row material of Talent-Therm[®] products is absolutely non toxic according to national and international standards , All Products are physiologically , environmentally and microbiologically harmless .

UV Resistance

Talent-Therm[®] Products are UV resistant but should not be installed without protection where subject to UV radiation , Pipes and Fittings are equipped with UV stabilizer . However, the maximum storage time in the open air is six months .

Brass

All Talent – Therm[®] fittings with brass have the highest fixation power between brass and PPR material as they are manufactured from the best copper alloy in Egypt, which produced according to the EN12449 standard, which does not interact with water, does not rust, does not corrode or crack after removing and installing the fittings several times.



Low Thermal conductivity

Talent-Therm[®] has low thermal conductivity (0.24 W / m.k) that reduces the heat dispersion of the fluid that it conveys, It also reduces the condensation which normally forms on the outside of pipes under specific hygrometric conditions.

Low Pressure Loss

All our PP-R products have smooth internal surface with very small irregularities (0.0070μ), That reduces frictional losses and prevents fouling and scaling in long term, It also convey significant reduction in pressure loss. As result, Lime stone cannot build up inside the pipe.

Service life time

Talent-Therm[®] systems should last more than 50 years under continuous duty at pressure of 10 bar, and temperature of 60°C for PN 20 pipes.

General Properties

	Characteristic	Method	Value	Unit
Physical Properties	Density 23 ° C	ISO 1183	0.895	g/cm ²
	Vicat softening , Temperature (0.98 N)	ISO 306	130	° C
Rheology	Melt Mass flow rate 230° C/2.16 kg	ISO 1133	0.3	g/10 min
Mechanical Properties	Tensile modules (1 mm / min)	ISO 527-1.2	900	Mpa
	Tensile stress yield (50 mm /min)	ISO 527-1.2	27	Mpa
	Tensile strain yield (50 mm /min)	ISO 527-1.2	13	%
	Charpy impact trength at 23 ° C	ISO 179 /1eU	N.B	K j/m ²
	Charpy impact trength notched at 23 ° C	ISO 179 /1eU	38	K j/m ²
	Charpy impact trength notched at -20° C	ISO 179 /1eU	2	K j/m ²
Thermal Properties	Heat deflection temperature 0.45Mpa(HTD/B)	ISO 75-1.2	88	° C
	Mean coefficient f linear , expansion 0-110 ° C	DIN 53752	1.5×10^{-4}	K ⁻¹
	Thermal conductivity	DIN 526 12-1	0.23	K ⁻¹ M ⁻¹
Electrical Properties	Surface resistance	DIN 53482	$>10^{13}$	Ohm.cm

Chemical Resistance

Due to Talent -Therm PPR material properties , All Pipes and fittings are generally chemical resistant such as acid , lime , etc as shown with the below table .

Signs and symbols :

VL = moderate loosening , mass part $\leq 10\%$

L = moderate loosening , mass part $> 10\%$

GL = saturated (with 20 ° C) , Hydrous solution

TR = Medium rate flow is minimum – technical pure

H = Usual in trade Composition

+ = resistant

0 = limited resistance

- = inconstant

Chemical Resistance

Chemicals	Conc. %	Temperature		
		20 ° C	60 ° C	100 ° C
Acetic Acid (glacial acetic acid)	100	+	0	+
Acetic Acid aq.	50	+	+	-
See also vinegar	10	+	+	
Acetic Acid Anhydride	100	+		0
Acetone (boiling point 56.3° C)	100	+	0	
Alcoholic iodine		+		
Alum	sat	+	+	
Alum aq.	any	+	+	
Aluminium salts aq.	any	+	+	+
Ammonia , gaseous	any	+	+	
Ammonia aq.	Conc.	+	+	
	10	+	+	
Ammonium acetate	any	+	+	+
Ammonium Carbonate aq.	any	+	+	+
Ammonium Chloride aq.	any	+	+	+
Ammonium Nitrate aq.	any	+	+	+
Ammonium phosphate aq.	any	+	+	+
Ammonium sulphate aq.	any	+	+	+
Amyl alcohol, Pure		+	+	
Aniline	100	+	(+)	
Antifreezing agent (cars)		+	+	
Apple juice		+	+	
Batterie Acid		+	+	
Barium Salts	any			
Benzaldehyde	100	+	+	
Benzene	100	+		
Beer	H	+	+	
Bleaching solution	20	0	0	+
Borax	L	+	+	-
Boric acid	GL	+	+	
Bromine, liquide	TR	-	-	+
Bromine ,Vapours	all	0	-	-
Bromine Water	GL	0	-	-
Botane gas	TR	+	+	-
Butyle acetate				
Butyl acetate	TR	0	-	-
Calcium Chloride	GL	+	+	

Temperature	Conc. %	Temperature		
		20 ° C	60 ° C	100 ° C
Calcium nitrate	GL	+	+	+
Castor oil	TR	+	+	
Com oil	TR	+	0	
Coconut oil	TR	+		
Chior, Liquid	TR	-	-	
Chlorine ,gaseous wet	1	-	-	-
Chiorobenzene	TR	0		-
Chloride of lime	All	+	+	
Chloroform	TR	0	-	
Chlorosulphonic acid	TR	-	-	-
Chlorine Water	GL	0	-	-
Chromic sulphuric acid		-	-	
Citric acid ,hydr.	VL	+	+	+
Cresol	90	+	+	
Cyclohexane	TR	+		-
Cyclohexanol	TR	+	0	
Cyclohexanone	TR	0	-	
Dekahydronaphtaline	TR	0	-	-
Detergent	VL	+	+	
Dibutyl Phthalate	TR	0	-	-
Diesel oil	H	+	0	-
Diethylether	TR	+	0	
-1,4 Dixane	TR	0	0	
Ethyl acetate	TR	+	0	-
Ether				
Ethyl Benzene	TR	0	-	-
Ethyl Chloride	TR	-	-	-
Vinegar	H	+	+	
Formic Acid	85 10	+	0	- 0
		+	0	
		+	+	
Formaldehyde,hydr.	40	+	+	
Fruit Juices	H	+	+	+
Fuel oil	H	+	0	
Glycrine	TR	+	+	+
Hydrogen , chloride , gaseous	TR	+	+	-
Hydrochloric acid ,hydr.	Up to 20 36 - 20	+	+	
		+	0	
Hydroggen Peroxide,hydr.	30	+	0	
Hydrofluoric acid solution	40	+	+	
Heptone	TR	+	0	-
Hexane	TR	+	0	
Iso-octane	TR	+	0	-
LANOLINE	H	+	0	

Temperature	Conc. %	Temperature		
		20 ° C	60 ° C	100 ° C
Linseed oil	H	+	+	+
Lactic acid	90	+	+	
Magnesium salts	GL	+	+	
Menthol	TR	+	0	
Mercury	TR	+	+	
Mercury salts	GL	+	+	
Methanol	TR	+	+	
Methylene Chloride	TR	0	-	-
Methyl ethyl Ketone	TR	+	0	
Milk	H	+	+	
Motor oil (Motor Vehicles)	TR	+	0	
Nickle salts ,hydr.	GL	+	+	
Nitric acid hydr.	10	+	0	
Oleum	TR	-	-	-
Olive oil	TR	+	+	0
Oleic acid	GL	+	0	-
Oxalic	GL	+	+	0
Ozone	0.5 ppm	+	0	
Paraffin	H	+	+	
Paraffin oil	TR	+	0	-
Peanut oil	TR	+	+	
Perchloroethylene				
Petroleum ether	TR	+	0	
Petroleum	TR	+	0	
Petroleum jelly	TR	+	0	
Peppermint oil	TR	+		
Phenol (hydr. Phase)	5	+	+	
Phosphoric acid	85	+	+	+
Photographic developer	H	+	+	
Caustic potash solution				
Potassium hydroxide	50	+	+	+
Potassium carbonate(potash)	GL	+	+	
Potassium chlorate	GL	+	+	
Potassium chloride	GL	+	+	
Bichromate of potash	GL	+	+	
Potassium Iodide	GL	+	+	
Potassium nitrate ,hydr.	GL	+	+	
Potassium permanganate	GL	+	-	
Potassium persulphate	GL	+	+	
Pine needle oil	H	+	0	
Propane , gaseous	TR	+	0	
Pyridine	TR	0	0	
Sea water	H	+	+	+

Temperature	Conc. %	Temperature		
		20 ° C	60 ° C	100 ° C
Silver saltes	GL	+	+	
Silicon oil	TR	+	+	+
Succinic acid ,hydr.	GL	+	+	-
Sulphur dioxide	TR	+	+	
Carbonum disulphide	TR	-	-	-
Sulphuric acid , hydr.	80 – TR 80 – 10 10	0	-	
		+	+	+
		+	+	+
Hydrogen Sulphide	TR	+	+	
Sodium carbonate (soda)	50	+	+	0
Sodium chlorate	GL	+	+	
Sodium chloride	VL	+	+	+
Sodium chlorite,hydr.	2-20	+	0	-
Sodium hydrochlorite,hydr.	10	+		
Sodium nitrate	GL	+	+	
Sodium nitrite	G	+	+	+
Sodium phosphate	GL	+	+	
Sodium sulphate	GL	+	+	
Sodium sulphide	GL	+	+	
Sodium sulphite	40	+	+	+
Sodium thiosulphate	GL	+	+	
Caustic soda solution	Up to 60	+	+	+
Soybean oil	TR	+	0	
Strach solution , hydr.	all	+	+	
Sugar sirup	H	+	+	
Stannous Chloride	GL	+	+	
Tartaric acid ,hydr.	10	+	+	
Turpentine oil	TR	-	-	-
Turpentine substitute	TR	+	0	-
Tetrachloroethane	TR	0	-	-
Tetrachloroethylene	TR	0	0	
(Perchlorethylen)				
Carbon Tetrachloride	TR	-	-	-
Tetrachydrofurane	TR	0	-	-
Tetrachydronaphtalene (Tetralin)	TR	-	-	-
Toluene	TR	0	-	-
Transformer oil	TR	0	-	
Trichloroethylene	TR	-	-	-
Tricresyl Phosphat	TR	+	0	
Trioctyl phosphat	TR	+		
Uria , hydr.	GL	+	+	
Water	H	+	+	+
Wine	H	+	+	
Xelene	TR	0	-	-
Zinc salts , hydr.	GL	+	+	

Quality

Quality system

TALENT has total commitment to Quality Management System which forms the frame work for all company activities and processes.

With the pace of change and the rate of innovation, TALENT INDUSTRIAL is aware that a great process today will be imagined in a few months and obsolete shortly thereafter.

Thus, TALENT INDUSTRIAL continuously evaluates, analyze and improve its processes to keep the level of our product competence.

The Quality Management System is used to enable us to continually improve customer satisfaction by meeting their needs and expectations, improve quality performance and the value of our organization. Our quality is based on the firmly anchored quality awareness of our dedicated employees on a positive, creative work ambience, and ensuring their satisfaction at all levels through motivation.

To achieve this, we are reviewing and refining our processes to ensure we are one step ahead in our preparation and when approaching any project or task.

With unwavering commitment to quality, we have implemented controls and procedures proven to meet the quality standards.

You can expect excellence from design to delivery, continuous in-process inspections through final inspections. All of our QC employees are specially trained and regularly lectured to keep them informed with client feedback. This is to find solutions to any problem to make production more efficient and ensure any defects that occur are never repeated.



Quality Control procedures

The production of pipes and fittings requires the supervision, regulation and control of all the working operations.

All results are recorded and documented includes:

- Acceptance testing of raw materials and incoming goods.
- Process control.
- Inspection and testing of products.
- Final inspection and sample tests on the production batches.

This procedure is required by the standard that regulates the Quality Management System (UNI EN ISO 9001) and the relevant protocols for the quality control of piping systems for the transport of water inside buildings (UNI EN ISO 15874, ASTM F2389, etc.).



System Standards

All products are produced in compliance with global standards as we implement international institutes' policies to ensure your absolute satisfaction.

Germany standards

DIN 8063 ,8062 ,8061 & DIN 8080 ,8079 ,8078 , 8077 & DIN 19560, 16962,4102

International Standards

ISO 2-15874 & ISO 3-15874 & ISO 4422

Egyptian standards

ES 848 & ES 1717 & ES 3703 & ES 5232

European Standards

EN 16962 & BS EN 681



Internal Control

A team of highly qualified and skilled employees ensure that all assessments are carried out according to the appropriate regulations and fulfill all technical arrangements in accordance with the quality policy.

All internal quality controls are documented, recorded and stored in accordance with the provisions of law .

Acceptance of incoming goods

All incoming goods are subject to specific tests that guarantee that incoming products conform to the specified requirements.



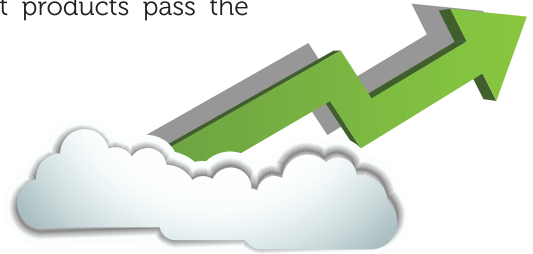
In Progress Inspection and Test

The quality plan adopted by TALENT INDUSTRIAL requires that tests and inspections are carried out before and during the production process.

During the production phase, the quality plan establishes that products pass the following tests:

- Dimensional check .
- Surface check .
- Marking check .
- Control of process parameters .

The samples are collected and sent to the quality department that performs quality checks and performance testing on the products and submits them to various degrees and types of stress (pressure, temperature, oxidation, etc.).



Final Inspection and Testing

The quality plan adopted by TALENT INDUSTRIAL requires that the inspections and tests are carried out on the entire production cycle.

All test results are documented in the test report and the certificate (available on request).

Final tests include:

- Internal pressure test at °95 C (time and pressure are specified in the reference Standard);
- Cold impact test;
- Oxidation induction time;
- Melt flow index;
- Homogeneity test with polarized light microscopy;
- Dimensional checks;
- Elongation test with dynamometer;
- Tensile test ($> 23 \text{ N/mm}^2$) with dynamometer.



After the final tests, more tests are carried out on some batches:

- Thermal cycle: pipes and fittings are subjected to temperature cycles lasting 15 minutes at °95 C and 15 minutes at °20 C with a pressure of 10 bar for a total of 5.000 cycles;
- Oxidation induction time: determining the percentage of antioxidants in the Product after the extrusion process;
- Thermal stability at °110 C for 8.760 hours (= 1 year).

Storage /Packing /Shipping

Upon positive test results, the products are suitably packaged and stored in suitable warehouses.



External Audit

TALENT INDUSTRIAL submits its management and production system to external audits performed by third party certification bodies.

The external audit consists of tests carried out at given intervals.

Audit frequency depends on the procedure established by the specific standard and by each certification body.

The external supervision also provides:

- Verification of the quality system;
- Calibration of test equipment;
- Hygiene and toxicity tests.

The results are confirmed by test certificates obtained by TALENT INDUSTRIAL



Quality policy



TALENT CO.
Industrial Units (24&12),
Factories complex 118,
El-Raswa-South,
Port said, Egypt.
0663723480



At Talent, Quality is an integral part of our business principles and Fostering quality culture is our main objective.

Talent is committed to maintain a management system with the prime focus on customer satisfaction by meeting their needs & expectations.

That will be achieved by continual improvement in respect of:-

- Developing our products and services with zero defects that are trusted and preferred by our consumers.
- Complying with relevant laws and regulations as well as internal requirements.
- Continually effective communication with customers and suppliers
- Ensuring employees satisfaction at all levels and Developing our human resources .

Date

01/02/2019

Signature

Ahmed Khalifa





Our Products



Our Products

Talent-Therm® PP-R Pipes



PPRC PIPE PN 16

ماسورة بولك بروبيلين ١٦

Code	Size (mm)	Packaging (pcs)
TA1620000P1	20	50
TA1625000P2	25	25
TA1632000P3	32	15
TA1640000P4	40	10
TA1650000P5	50	6
TA1663000P6	63	5



PPRC PIPE PN 20

ماسورة بولك بروبيلين ٢٠

Code	Size (mm)	Packaging (pcs)
TA2020000P7	20	50
TA2025000P8	25	25
TA2032000P9	32	15
TA2040000P10	40	10
TA2050000P11	50	6
TA2063000P12	63	5

Talent-Therm® PP-R Fittings



Elbow 90°

كوع لحام ٩٠°

Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2520000F13	20	20	200
TA2525000F14	25	15	120
TA2532000F15	32	10	60
TA2540000F16	40	10	50
TA2550000F17	50	5	25
TA2563000F18	63	5	10



Elbow 45°

كوع لحام ٤٥°

Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2520000F19	20	20	200
TA2525000F20	25	15	120
TA2532000F21	32	10	60
TA2550000F22	50	5	25
TA2563000F23	63	5	10



Tee 90°

مشتك لحام ٩٠°

Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2520000F24	20	20	120
TA2525000F25	25	15	90
TA2532000F26	32	10	50
TA2540000F27	40	5	25
TA2550000F28	50	3	15
TA2563000F29	63	2	10



Reducing Tee 90°

مشترك لحام نقاص ٩٠°

Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2525020F30	25 × 20	15	75
TA2532020F31	32 × 20	10	50
TA2532025F32	32 × 25	10	50
TA2550020F33	50 × 20	4	20
TA2550025F34	50 × 25	4	20
TA2550032F35	50 × 32	4	20
TA2563020F36	63 × 20	3	15
TA2563025F37	63 × 25	3	15
TA2563032F38	63 × 32	3	12
TA2563050F39	63 × 50	2	10



Socket

جلبة لحام

Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2520000F40	20	25	250
TA2525000F41	25	20	200
TA2532000F42	32	15	120
TA2540000F43	40	15	75
TA2550000F44	50	8	48
TA2563000F45	63	5	30



Reducer

مسلوب



Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2525020F46	25 × 20	20	300
TA2532020F47	32 × 20	15	150
TA2532025F48	32 × 25	15	150
TA2550020F49	50 × 20	10	60
TA2550025F50	50 × 25	10	60
TA2550032F51	50 × 32	10	60
TA2563020F52	63 × 20	5	30
TA2550032F53	63 × 25	5	30
TA2563032F54	63 × 32	5	30
TA2563050F55	63 × 50	5	20



End Cap

طبة لحام



Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2520000F56	20	20	300
TA2525000F57	25	15	180
TA2532000F58	32	12	120
TA2550000F59	50	5	40
TA2563000F60	63	4	20



Test Plug

طبة اختبار



Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2520000F61	20	20	300



Long Cross over

كرنك لحام طويل

Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2520000F62	20	5	50
TA2525000F63	25	5	40
TA2532000F64	32	5	25



Short Cross Over

كرنك لحام قصير

Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2520000F65	20	15	120
TA2525000F66	25	10	60
TA2532000F67	32	10	50



Wall Clamp

قفيز

Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2520000F68	20	15	300
TA2525000F69	25	12	240
TA2532000F70	32	10	150



Plastic Union

لاکور لحام بولنی

Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2520020F71	20	10	100
TA2525025F72	25	8	80
TA2532032F73	32	6	60



Double Elbow

کوع مزدوج

Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2520F20F74	20 × ½	5	30
TA2525F20F75	25 × ½	5	30



Adjustable Double Battery

بطارية مزدوجة متغيرة

Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2520F20F76	20 × ½	5	20
TA2525F20F77	25 × ½	5	20



Adaptor With Male Thread

وحلة بسن خارجي

Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2520M20F78	20 × ½"	25	200
TA2520M25F79	20 × ¾"	20	180
TA2525M20F80	25 × ½"	15	120
TA2525M25F81	25 × ¾"	15	90
TA2532M25F82	32 × ¾"	10	70
TA2532M32F83	32 × 1"	8	50
TA2550M50F84	50 × 1½"	5	25
TA2563M63F85	63 × 2"	4	20



Adaptor With Female Thread

وحلة بسن داخلي

Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2520F20F86	20 × ½"	25	200
TA2520F25F87	20 × ¾"	20	180
TA2525F20F88	25 × ½"	20	160
TA2525F25F89	25 × ¾"	15	120
TA2532F25F90	32 × ¾"	10	100
TA2532F32F91	32 × 1"	8	80
TA2550F50F92	50 × 1½"	5	25
TA2563F63F93	63 × 2"	5	25



Union Female Thread

لاکور تجميع بسن داخلي

Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2520F20F94	20 × ½"	10	50
TA2525F25F95	25 × ¾"	10	40
TA2532F32F96	32 × 1"	5	30
TA2550F50F97	50 × 1½"	5	25
TA2563F63F98	63 × 2"	4	20



Union Male Thread

لاکور تجميع بسن خارجي

Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2520M20F99	20 × ½"	10	50
TA2525M25F100	25 × ¾"	10	40
TA2532M32F101	32 × 1"	5	30
TA2550M50F102	50 × 1½"	5	20
TA2563M63F103	63 × 2"	4	16



Male Thread elbow with bracket

كوع بسن نحاس خارجي بقاعدة

Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2520M20F104	20 × ½"	15	90
TA2520M25F105	20 × ¾"	15	75
TA2525M20F106	25 × ½"	10	60
TA2525M25F107	25 × ¾"	10	50
TA2532M25F108	32 × ¾"	5	40
TA2532M32F109	32 × 1"	5	30



Female Thread elbow with bracket

كوع بسن نحاس
داخلي بقاعدة

Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2520F20F110	20 × ½ "	20	100
TA2525F20F111	25 × ½ "	15	90
TA2525F25F112	25 × ¾ "	15	75
TA2532F25F113	32 × ¾ "	8	50
TA2532F32F114	32 × 1 "	6	40



Male Threaded Tee

مشترك تني بسن نحاس خارجي

Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2520M20F115	20 × ½ "	15	75
TA2520M25F116	20 × ¾ "	10	70
TA2525M20F117	25 × ½ "	10	50
TA2525M25F118	25 × ¾ "	9	45



Female Threaded Tee

مشترك تني بسن نحاس داخلي

Code	Size (mm)	Packaging (pcs)	Pcs/Box
TA2520F20F119	20 × ½ "	15	90
TA2520F25F120	20 × ¾ "	10	80
TA2525F20F121	25 × ½ "	10	70
TA2525F25F122	25 × ¾ "	10	60
TA2532F25F123	32 × ¾ "	9	45
TA2532F32F124	32 × 1 "	9	45

Talent–Therm[®] PP-R Valves



Concealed valve

محبس دفن

Code	Size (mm)	Pcs/Box
TA2520000V125	20	15
TA2525000V126	25	15
TA2532000V127	32	15



Ball valve

محبس بلیة

Code	Size (mm)	Pcs/Box
TA2520000V128	20	20
TA2525000V129	25	20
TA2532000V130	32	15
TA2550000V131	50	10
TA2563000V132	63	5



Straight seated Valve

محبس عدل

Code	Size (mm)	Pcs/Box
TA2520000V133	20	15
TA2525000V134	25	15
TA2532000V135	32	15



Welding Machine Set

ماكينة لحام

Code	Size (mm)
TA2532000W136	Up to 32 mm
TA2563000W137	Up to 63 mm



Pipe Cutter

مقص

Code	Size (mm)
TA2563000C138	Up to 63 mm

Welding

The connection of **Talent-Therm®** Pipes system is very easy that done by fusion of the end of two ends to connect product by using connection tools .

Process Of the Fusion:

- Cut the pipe at right angles by using pipe cutter or pliers and take care that the pipe axis is free from burrs of cutting debris .



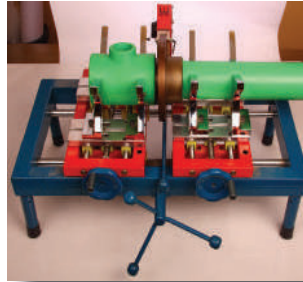
قم بقص الماسورة باستخدام المقص او الكماشة الخاصة بذلك مع اتخاذ الحذر اللازم و مراعاة خلو سطح الماسورة من التلوثات .

- Mark the welding depth at the end of the pipe .



قم بعمل علامة بالعمق المطلوب للحام على نهاية الماسورة .

- Push the fitting and end of the pipe without turning up to the marked welding depth into the welding tool .



ادخل نهاية الماسورة والوصلة معا في ماكينة اللحام دون ان تحركهما .

- After the heating time quickly remove pipe and fitting from the welding tool , Join them immediately without turning until the bead of PPR from the fitting covers the marked welding depth.



بعد وقت التسخين قم بإزالة الأنابيب وقطع الوصلات من أدوات اللحام بسرعة ، و وصلهم في الحال حتى يغطي جزء البولي بروبيلين من الوصلات عمق اللحام المحدد .

Attention

-Do not push the pipe too far into the fitting, as this would reduce the bore and in extreme case close the pipe .

-The joint elements have to be fixed , Never turn the elements or align the connection after the processing time.

-After the cooling period the fused joint is ready for use.



لا تدفع الماسورة بقوة بعيدا داخل قطع الوصلات , لأن ذلك سيقلل التجويف ومن الممكن ان يسد الماسورة او يتلفها .

لا تقم أبدا بتحريك القطع بعد وقت المعالجة باللاحام .

بعد فترة التبريد , يصبح المفصل المنصهر جاهزا للاستخدام .

Note : It Is essential to observe the below mentioned heating times :

Pipe External (mm)	Welding Depth (mm)	Heating Time		Welding Time sec.	Cooling Time min.
		sec. indoor	sec.outdoor		
20	14.0	5	8	4	2
25	15.0	7	11	4	2
32	16.0	8	12	6	4
40	18.0	12	18	6	4
50	20.0	18	27	6	4
63	24.0	24	36	8	6
75	26.0	30	45	8	8
90	29.0	40	60	8	8
110	32.0	50	75	10	8

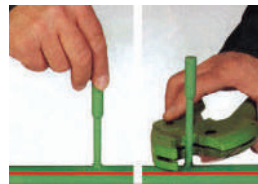
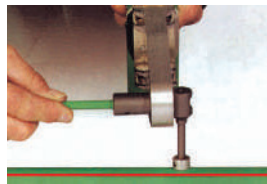
Hole Repair

Damaged or perforated pipes could be repaired by using a special tool, and the repaired part can work again under pressure.

First you should mark the degree of the push –in depth on the repair plug, Distance tool to be fixed according to the wall thickness of the pipe and tighten the screw.

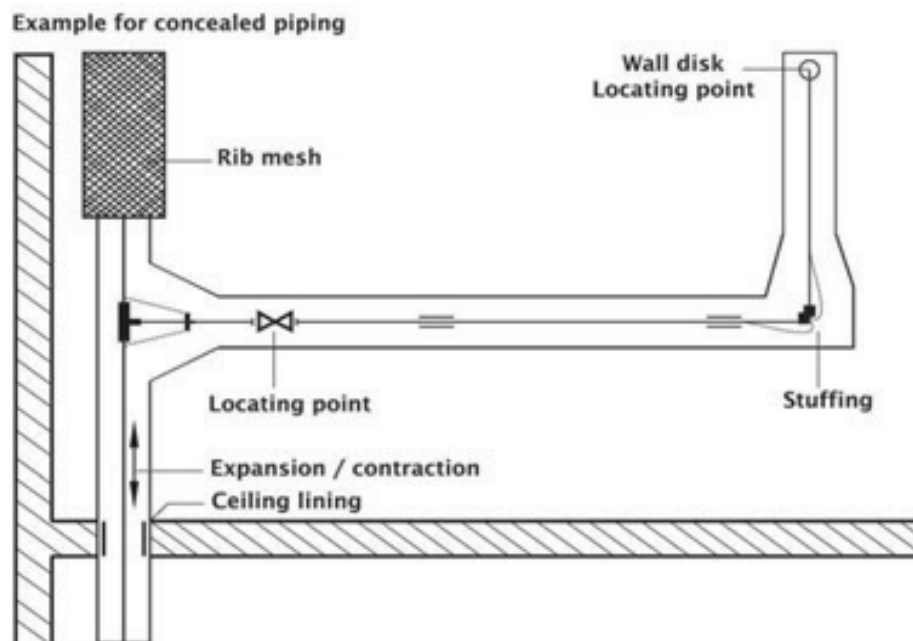
Heat up the borehole and the welding plugs with the repair set for 15 seconds. After removing the welding device, set in the repair plug precisely without twisting it.

After a cooling time of 5 minutes, remove the protruding end of the repair plug.



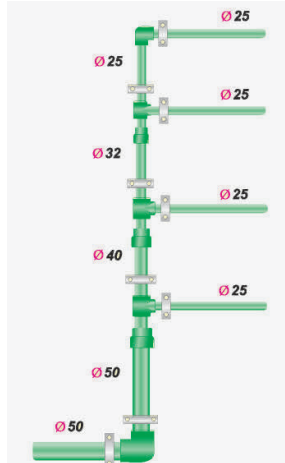
INSTALLATION

As drinkable water systems should be protected from heat and condensation according to DIN 1988 standard. The following diagram shows the standard values for minimum insulation thickness.

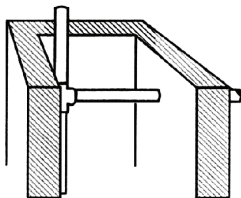


Installation

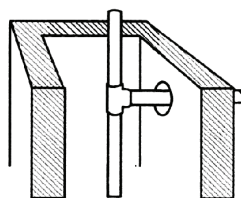
- The pipelines must be divided into individual sections to avoid uncontrolled movements of the pipe .
- The fixed points have to be measured and installed in away that the force of pipes expansion and probable additional are accommodated.
- Risers don't require expansion loops provided that fixed points are located immediately before and after a branch .
- To compensate linear expansion force of pipes must use sufficient and stable clamps and mounting .
- Sliding clamps have to allow axial movements of the pipe without damaging the pipe clamp it has to be ensured that movements of the pipelines are not hindered by fittings or armatures installed next to the clamp .



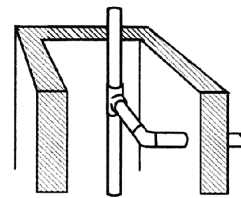
- When installing Sanitary and apartment's pipes system from the main pipe , you can apply these techniques to compensate the pipe's thermal expansion .



You can make pipe connection at some distance away from the wall .



connecting pipe can be passed through a hole much larger than the pipe diameter.



You can make apartment connection through a branch Pipe to provide flexibility.

Types Of Installation

- Distribution Network for domestic water and heating in residential buildings.
- In front of the wall installation .
- Distribution network heating technique .
- Concealed installation.
- Surface installation.

Type Of Installation	Installation Thickness
Pipes located in an accessible unheated place	4 mm
Pipes located in an accessible heated place	9 mm
Pipes located in a ventilation system , far from hot water pipes	4 mm
Pipes located in a ventilation system , near a hot water pipes	13 mm
Pipes located in a ventilation system close to water pipes	4 mm
Pipes located in a riser pipe set close to water pipes	13 mm
Pipes located on a concrete slab	4 mm

Distances between the supporting points

The type and number of the pipe fixings , depend on the type of structure and the longitudinal expansion . The fixed points divide pipe into sections , The different pipe sections are maintained by sliding hinges , The distances between those fixes supporting points depend on the working conditions and the weight of the pipes including that of the fluid which is conveyed.

Φ mm	Distance between the supporting Points in cm. at different temperatures						
	20 ° C	30 ° C	40 ° C	50 ° C	60 ° C	80 ° C	100 ° C
16	75	70	70	65	65	55	40
20	80	75	70	70	65	65	45
25	85	85	85	80	75	70	50
32	100	95	95	90	85	75	55
40	110	110	105	100	95	85	60
50	125	120	115	110	105	90	70
63	140	135	130	125	120	105	80
75	155	150	145	135	130	115	85
90	165	165	155	150	145	125	95
110	185	180	175	165	160	140	105



The pipe Bracket spacing given in the table may be increased by 30 % in the case of vertical pipe runs .

Linear Expansion

The Linear Expansion of PP-R pipes depends on the difference of operation temperature to installation temperature $\Delta T = T_{\text{operating}} - T_{\text{installation}}$

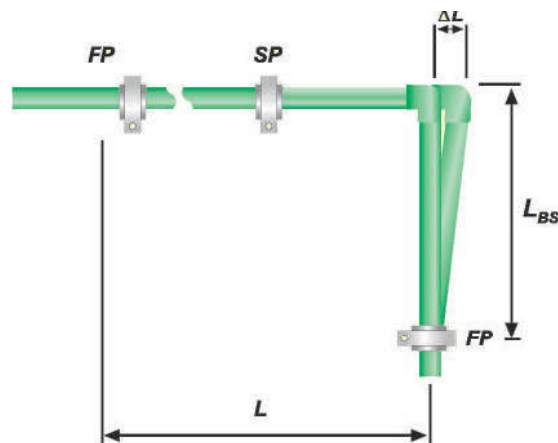
Calculation of the Linear Expansion ΔL Formula is : $\Delta L = \alpha \times L \times \Delta T$

Where ΔL : Linear Expansion , L : pipe Length , ΔT : Temperature difference

α : coefficient of linear expansion = 0.15 mm / mk

Bending Side Length

$$L_{BS} = K \times \sqrt{d \times \Delta L}$$



Expansion loop

L_{BS} = The Bending Side Length

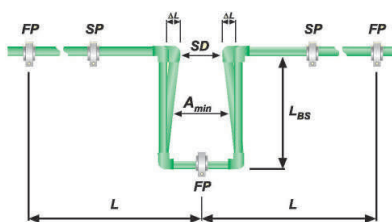
A_{min} = Width of the expansion loop (mm)

SD = safety distance 150 mm

The pipe bend A_{min} is calculated to the following formula :

$A_{min} = 2 \times \Delta L + SD$

The width of expansion loop A_{min} should be at least 210 mm .



Pre-stress

When space is limited , it is possible to shorten the total width A_{min} as well as the bending side length L_{BS} by its pre stressing

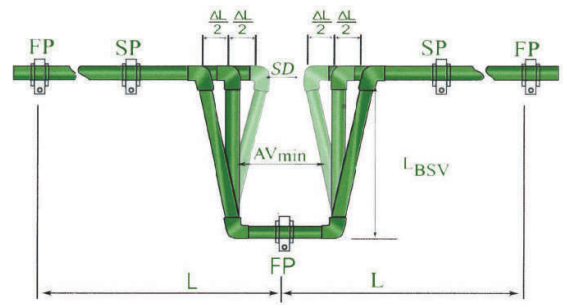
$$L_{BSY} = K \times \sqrt{d \times \Delta L / 2}$$

Where

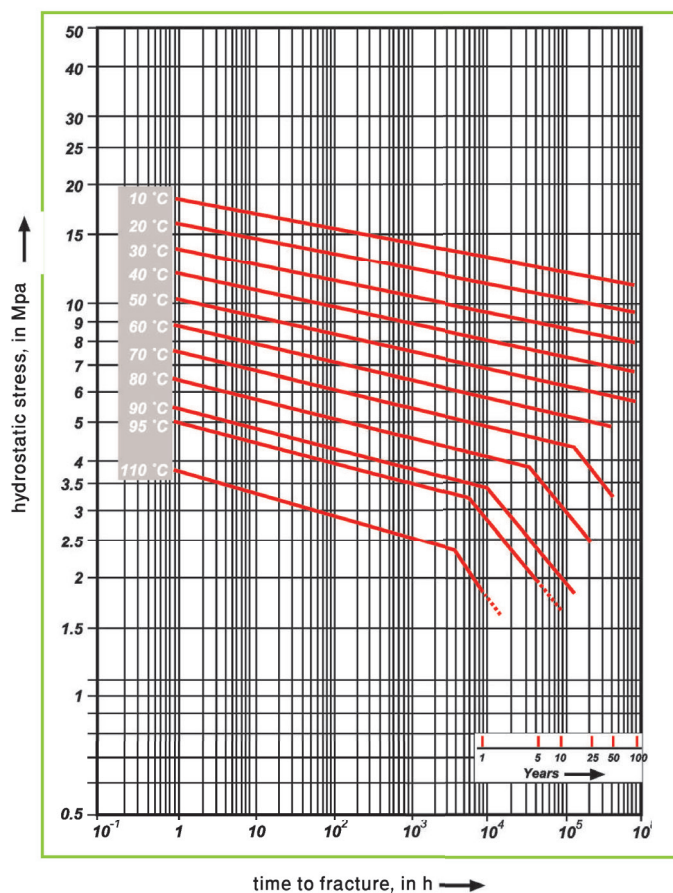
L_{BSV} : length of the bending side

K : Material specification constant = 15.5

D : outside diameter (mm)



Long Term Behavior of PPR Pipes



According to DIN 8078

Cold Water Supply

Permanent operating temperature up to 20 ° C

Permanent operating pressure up to 20 bar

Hot Water Supply

Permanent operating temperature up to 70 ° C

permanent operating pressure up to 10 bar

Heating Supply

Permanent operating temperature up to 70 ° C

permanent operating pressure up to 3 bar

Utilisation of at least 50 years

Allowable working Pressure

The below table is about the permanent temperature from 70 ° C to 95 ° C and its affect on the service life .

Temperature ° C	Years of service	Pipe series							
		20	16	12.5	8.3	5	3.2	2.5	2
		Standard Dimention Ratio							
		41	33	26	17.6	11	7.4	6	5
Allowable working pressure(Bar) for pipes transporting ppr 80 with SF = 1.5									
10	1	4.4	5.6	7.0	10.6	17.6	27.8	35.0	44.2
	5	4.2	5.3	6.6	10.0	16.6	26.4	33.2	41.8
	10	4.0	5.1	6.4	9.7	16.1	25.5	32.1	40.4
	25	3.9	4.9	6.2	9.4	15.6	24.7	31.1	39.1
	50	3.8	4.8	6.0	9.1	15.2	24.0	30.3	38.1
	100	3.7	4.7	5.9	8.9	14.8	23.4	29.5	37.1
20	1	3.8	4.8	6.0	9.0	15	23.8	30.0	37.8
	5	3.5	4.5	5.6	8.5	14.1	22.3	28.1	35.4
	10	3.4	4.3	5.5	8.2	13.7	21.7	27.3	34.4
	25	3.3	4.2	5.3	8.0	13.3	21.1	26.5	33.4
	50	3.2	4.1	5.1	7.8	12.9	20.4	25.7	32.4
	100	3.1	4.0	5.0	7.5	12.5	19.8	24.9	31.4
30	1	3.2	4.0	5.1	7.7	12.8	20.2	25.5	32.1
	5	3.0	3.8	4.8	7.2	12.0	19.0	23.9	30.1
	10	2.9	3.7	4.6	7.0	11.6	18.3	23.1	29.1
	25	2.8	3.5	4.4	6.7	11.2	17.7	22.3	28.1
	50	2.7	3.4	4.3	6.6	10.9	17.3	21.8	27.4
	100	2.7	3.4	4.2	6.4	10.6	16.9	21.2	26.4
40	1	2.7	3.4	4.3	6.5	10.8	17.1	21.5	27.1
	5	2.5	3.2	4.0	6.1	10.1	16.0	20.2	25.4
	10	2.5	3.1	3.9	5.9	9.8	15.6	19.6	24.7
	25	2.4	3.0	3.8	5.7	9.4	15.0	18.8	23.7
	50	2.3	2.9	3.7	5.5	9.2	14.5	18.3	23.1
	100	2.2	2.8	3.5	5.4	8.9	14.1	17.8	22.4
50	1	2.3	2.9	3.7	5.5	9.2	14.5	18.8	23.1
	5	2.1	2.7	3.4	5.1	8.5	13.5	17.0	21.4
	10	2.1	2.6	3.3	5.0	8.2	13.1	16.5	20.7
	25	2.0	2.5	3.2	4.8	8.0	12.6	15.9	20.0
	50	1.9	2.4	3.1	4.6	7.7	12.2	15.4	19.4
	100	1.9	2.4	3.0	4.5	7.2	11.8	14.9	18.7
60	1	1.9	2.4	3.1	4.6	7.7	12.2	15.4	19.4
	5	1.8	2.3	2.9	4.3	7.2	11.4	14.3	18.0
	10	1.7	2.2	2.8	4.2	6.9	11.0	13.8	17.4
	25	1.7	2.1	2.6	4.0	6.7	10.5	13.3	16.7
	50	1.6	2.0	2.5	3.8	6.4	10.1	12.7	16.0
70	1	1.6	2.1	2.6	3.9	6.5	10.3	13.0	16.4
	5	1.5	1.9	2.4	3.6	6.0	9.5	11.9	15.0
	10	1.5	1.9	2.3	3.5	5.9	9.3	11.7	14.7
	25	1.3	1.6	2.0	3.0	5.1	8.0	10.1	12.7
	50	1.1	1.3	1.7	2.6	4.3	6.7	8.5	10.7
80	1	1.4	1.7	2.2	3.3	5.5	8.6	10.9	13.7
	5	1.2	1.5	1.9	2.9	4.8	7.6	9.6	12.0
	10	1.0	1.3	1.6	2.4	4.0	6.3	8.0	10.0
	25	--	1.0	1.3	1.9	3.2	5.1	6.4	8.0
95	1	1.0	1.2	1.5	2.3	3.6	6.1	7.7	9.7
	5	--	--	1.0	1.5	2.5	4.0	5.0	6.3
	(1 (10)	--	--	--	(1.3)1	(1(2.0)	(3.4)1	(4.2)1	(5.3)1

1) The bracketed values apply where testing can be shown to have been carried Out for longer than one year at 110 ° C .

Pressure Test

Technical rules for potable water installation DIN 1988, All pipes have to be hydraulically pressure tested, The Test pressure has to be 1.5 times of the operating pressure.

For The preliminary test a test pressure of 1.5 times of the highest possible operating pressure has to be produced. this test has to be reestablished twice within 30 minutes with in an interval of 10 minutes.

After a test time of further 30 minutes, the test pressure must not drop more than .6 bar and no leakage should have appeared.

After pipe work is filled with water and completely vented to release air locks in the system testing can begin :

1. Test pressure = (permissible working pressure + 5 bar) shall be produced 2 times within 30 minutes at 10 minutes intervals.
Restore by hand pump to required test pressure after the 10 minutes interval if the pressure drops.
2. If no leakage is detected for the next 30 minutes, check if the pressure has dropped by more than 0.6 bar within this period, leakage must have occurred, detect and rectify.
3. If pressure drop is within 0.6 bar and no leakage detected, continue the test without restoring the required pressure for the next 120 minutes.
4. During this time it should be checked if the pressure drop is more than 0.2 bar within this period, leakage must have occurred, Detect, rectify and repeat procedure.
5. Pressure test is successful when the entire above are met and the readings should be recorded.

Flow Rate :

The basis of determining the maximum flow rate should be calculated on the desired flow rate of each water point, The simultaneous use respectively.

Section of the installation	Max. calculate flow rate at run	
	15 min. m/s	>15 min. m/s
Connecting pipes	2	2
Service pipes parts with poor drag reducing passage armature (2.5<)*	5	2
Parts with passage armatures with a higher correction vale loss **	2.5	2

* piston valve acc. To DIN 3502

** Screw down stop globe valve acc. To DIN 3512

Certificates




INTACT

Certificate Of Registration

This is to certify that

TALENT

**Industrial Units (12&24)-Model B S&M Industries Complex
Port Said – Egypt**

has been audited at the above address for the scope as under and found to be in accordance with the requirements of Management System.

Quality Management System

ISO 9001:2015

the certificate is valid for the following scope of Operations

Manufacturing of Plastic Pipes, Tubes And Fittings

Certificate No.: +20 2020177

Date of Initial Registration: 13 06 2020

Date of this Certificate: 13 06 2020

Certificate Expiry: 12 06 2021*

Re Certification Due Date: 12 06 2023

*This Certificate is valid for total 03 years from the date of Issue, subject to successful completion of annual surveillance audits at 12 months frequency. After successful completion of Surveillance Audit new Certificate will be issued.




Director

INTACT SYSTEMCERT PRIVATE LIMITED

Accredited by Joint accreditation System of Australia and New Zealand (Accreditation No. M252710161N)

FECCA House, 4 Phipps Close, Deakin, ACT 2600, Australia

This certificate is valid only if it is available on Intact Website at <http://www.intactsystemcert.com/clients.php>
The certificate Registration remains the property of Intact Systemcert Pvt. Ltd. shall be returned upon request.
In case Surveillance Audit is not allowed to be conducted on or before the certificate shall be suspended/Withdrawn.

Office : BMS Business Center, 2, Gujrat Vihar, Vikas Marg, Delhi - 110096, India
Ph: +91 11 30010180 URL : www.intactsystemcert.com E-mail : info@intactsystemcert.com



مركز تكنولوجيا البلاستيك

وزارة التجارة والصناعة
مجلس الصناعة للتكنولوجيا والابتكار

تقرير الاختبار
رقم : ٤٨٩

اسم العميل : تالنت تيرم (Talent Therm) - التاج / مصنع تالنت .
تاريخ الاصدار : ٢٠٢٠ / ٨ / ١٤ .
العلامة : ماسورة بولي برويلين (PPR) قطر ٢٥ مم X قطر ١٢ مم سمك .
لون العينة : الأخضر .
المواصفات : ١ - الامانة ٨٠٧٨٨٠٧٧ .
٢ - الايزو ١١٣٤٨ - ٣ .
* العينة وبياناتها وردت إلى المركز لمعرفة التحليل
* في حالة وجود أي شكوى رجاء الاتصال على رقم تليفون ٠٣/٥٠١٤١٩١ .

مدير إدارة المعامل
(كيميائية / وقاء على مرسى)

وزارة التجارة والصناعة
مركز تكنولوجيا البلاستيك
مجلس الصناعة للتكنولوجيا والابتكار

عبد

F/LAB-05-09/01
1 of 2

العنوان : أمام ٢٥ شركى عملا الله - ميدان الساعة - فيكتوريا - الإسكندرية - ت - ف / ٣٥٠١٤١٩١ - ٣٥٠٢٥١١٦
ص ب : ١١ الإسكان الصناعي - السوف
صفحة الفيسبوك : www.facebook.com/ptc.gov

مركز تكنولوجيا البلاستيك

وزارة التجارة والصناعة
مجلس الصناعة للتكنولوجيا والابتكار

شهادة تحليل
رقم التقرير : ٤٨٩

اسم العميل : تالنت تيرم (Talent Therm) - التاج / مصنع تالنت .
تاريخ الاصدار : ٢٠٢٠ / ٨ / ١٤ .
العلامة : ماسورة بولي برويلين (PPR) قطر ٢٥ مم X قطر ١٢ مم سمك .
لون العينة : الأخضر .
* العينة وبياناتها وردت إلى المركز لمعرفة التحليل

البيانات المرجعية	النتائج	الاختبار
١ - مقاومة الضغط الهيدروليكي	اجتازت	١ - مقاومة الضغط الهيدروليكي (١٠ ساعة ، ٢٠ م)
٢ - السمعية (- ١٥ م)	اجتازت	٢ - السمعية (- ١٥ م)

الخلاصة

١ - اجتازت العينة ماسورة بولي برويلين PPR (٢٥ مم) - اختبار الضغط الهيدروليكي النتيجة في حدود المسموح به طبقا للمواصفة الدولية ٨٠٧٨٨٠٧٧ .
٢ - من نتيجة اختبار الماء المستخلص بعد وضع عينة من ماسورة بولي برويلين (PPR) قطر ٢٥ مم وجد ان الماء ليس به سمية (Non-Toxic) .
العينة (ماسورة بولي برويلين) (PPR) قطر ٢٥ مم) لم يمت بها تأثير سمي على مياه الشرب .

مدير المعمل التحليلي
(كيميائية / مروة احمد قطب)

مدير المعمل الميكانيكي
(مهندس / السيد محمد)

وزارة التجارة والصناعة
مركز تكنولوجيا البلاستيك
مجلس الصناعة للتكنولوجيا والابتكار

عبد

F/LAB-05-09/01
2 of 2

العنوان : أمام ٢٥ شركى عملا الله - ميدان الساعة - فيكتوريا - الإسكندرية - ت - ف / ٣٥٠١٤١٩١ - ٣٥٠٢٥١١٦
ص ب : ١١ الإسكان الصناعي - السوف
صفحة الفيسبوك : www.facebook.com/ptc.gov

“TALENT” Industrial



Call us now

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Support email

sales@talentindustrial.com

Our address

Unit 118 , 24 & 12 factories

AlraswaSouth-portSaid-Egypt

