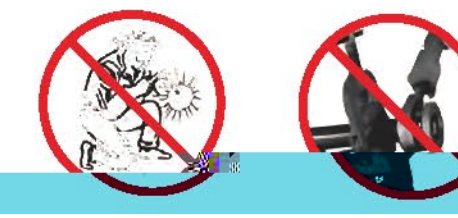
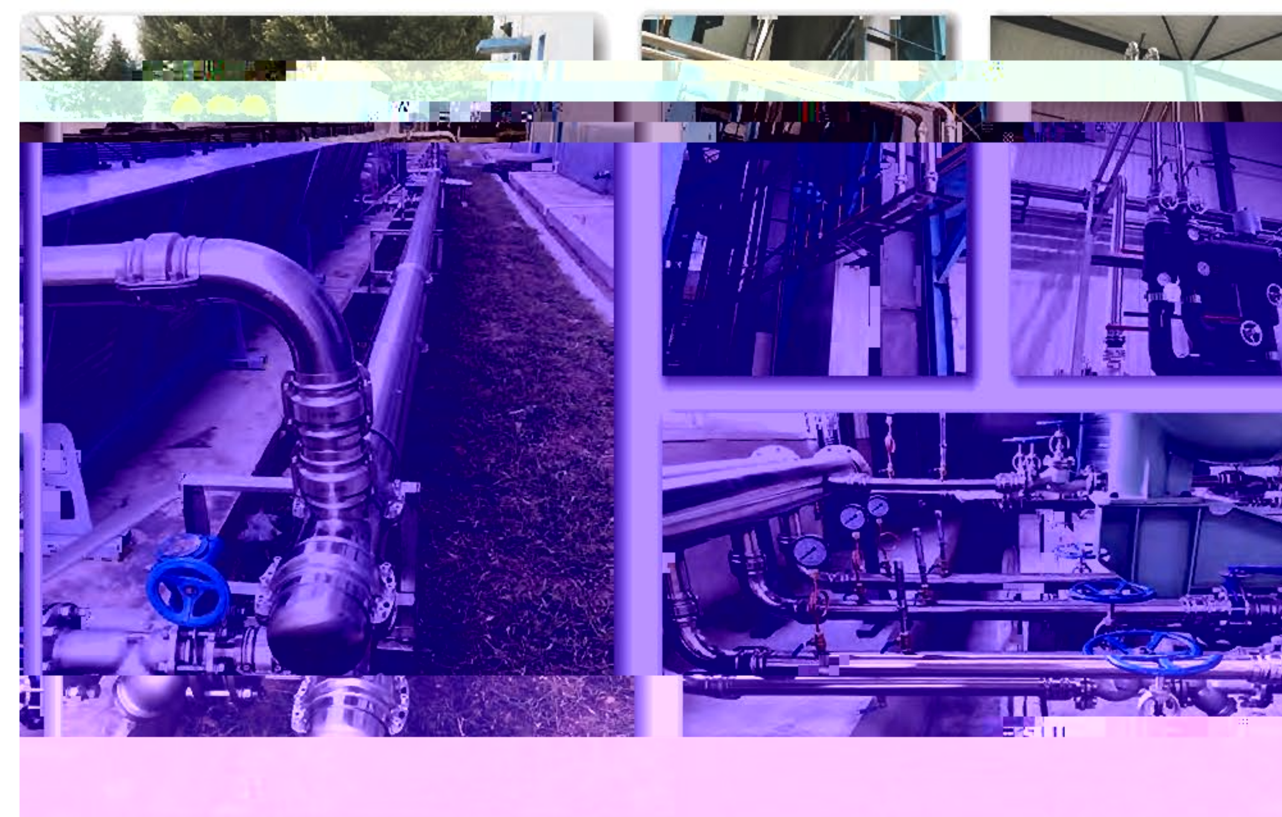
is a product brand of AllPipe Group.

Engineered for Superior Performance

ENGINEERED FOR SUPERIOR PERFORMANCE

GOODBYE...

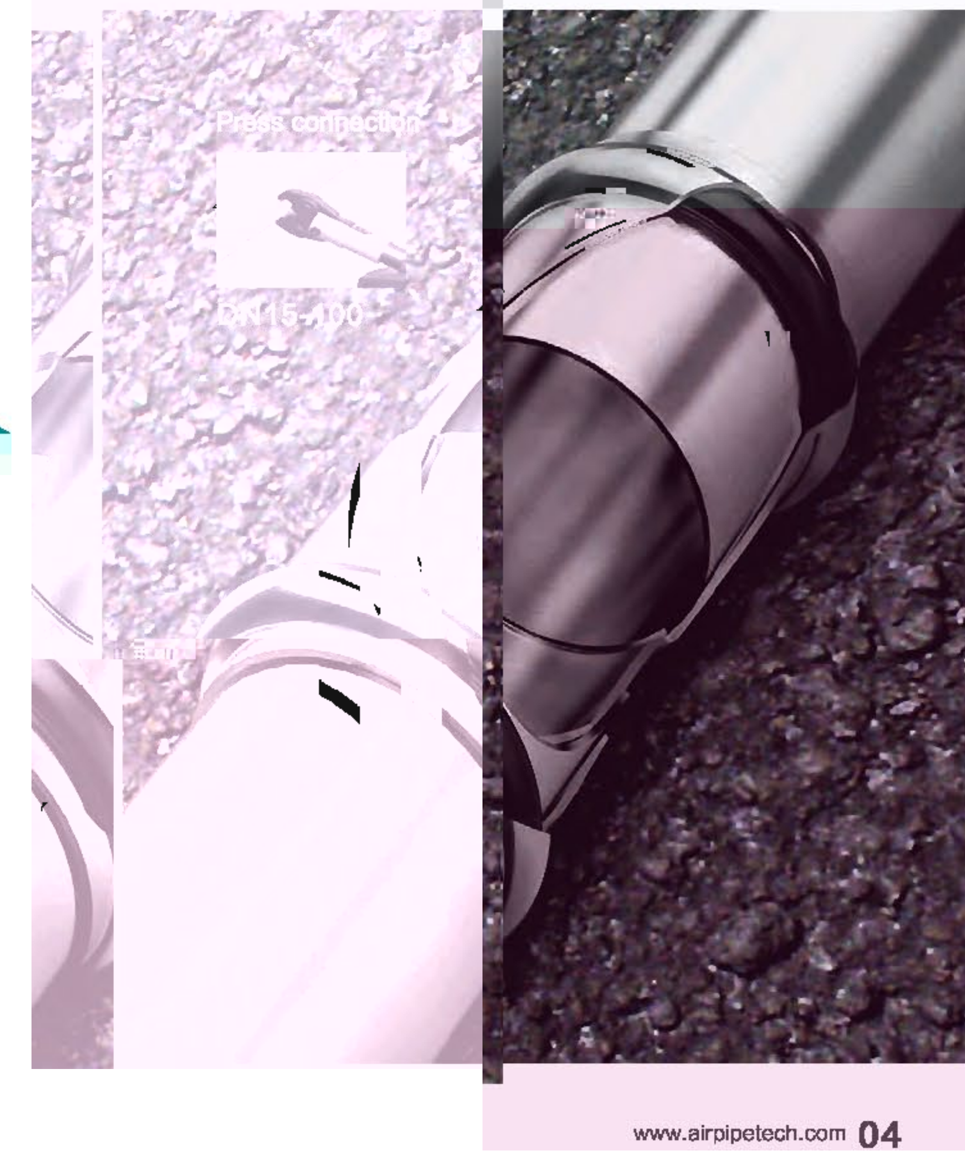




OUR TECHNOLOGY

DN125-25

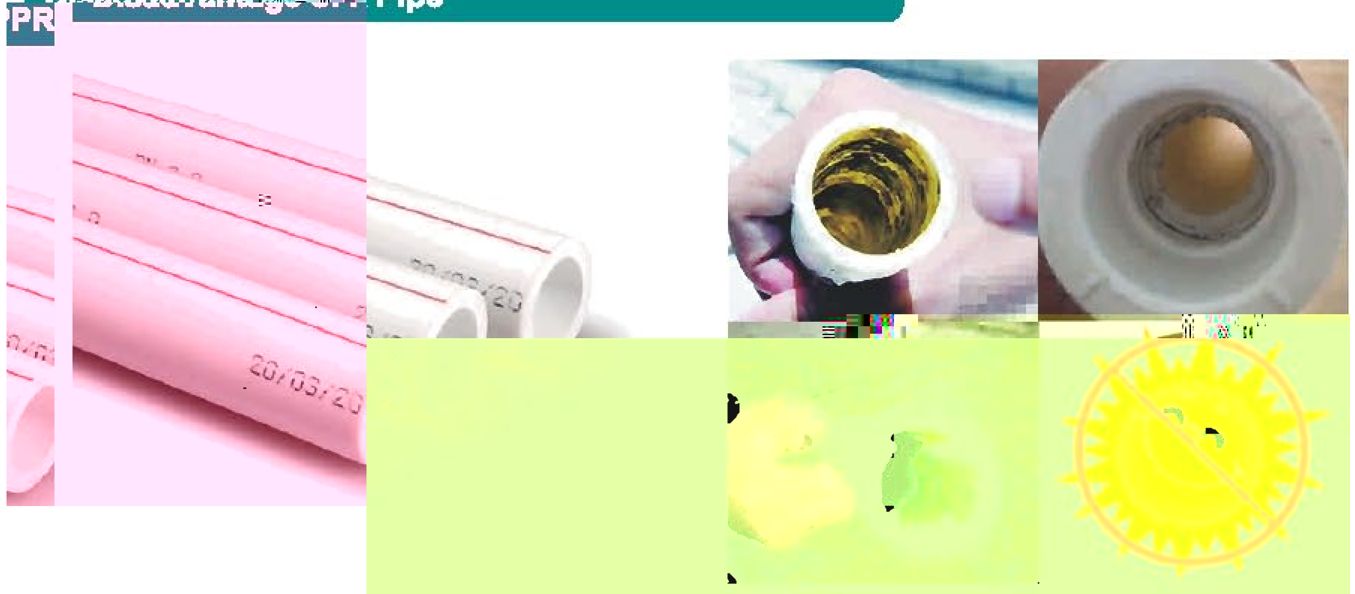
- Clampshell union connector, quick install & re-assembly.
- Convex ring, no shrinking on inner diameter.
- Surface contact, active concentric sealing, leak free.
- Surperior reliability & longevity.



DN15-100

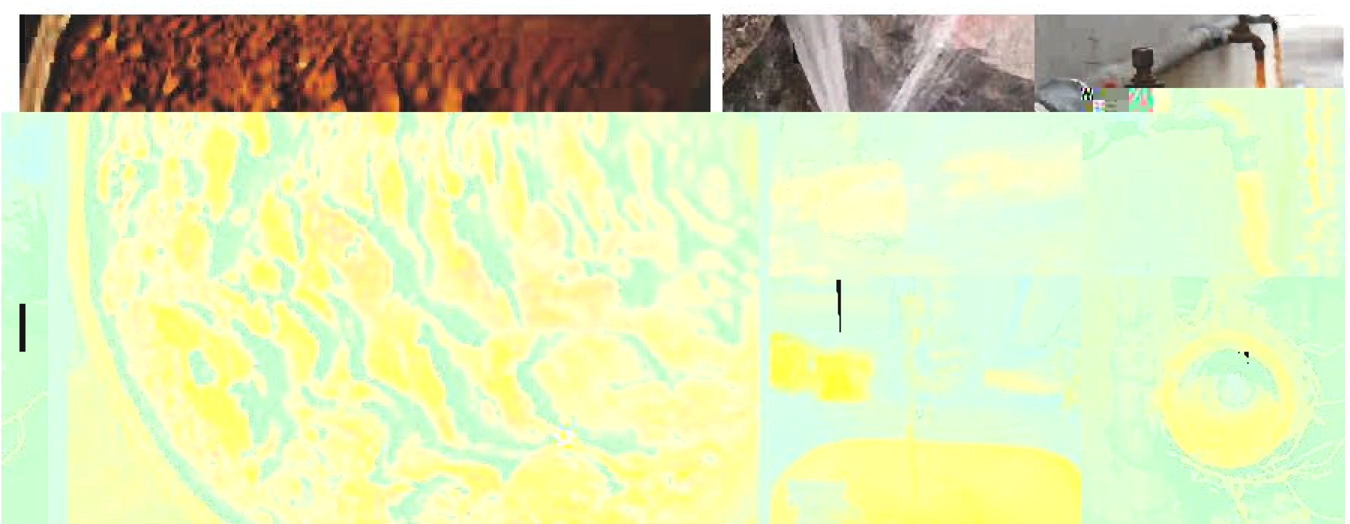
- Built-in sealing, options for gas and liquid.
- Extension fitting sleeve grabbing on pipe.
- Quick & modular installation, reduce labor cost.
- Surperior reliability & longevity.

Disadvantage of PPR Pipe



- Aging on UV, not suitable for outdoor installation.
- Bacteria/moss grow on light, pollution into fluids.
- Heat expansion 8 times of SS, strength 1/8 of SS, risk of broken in low temperature.
- Leakage/loosening due to plastic hot melting connection, short lifetime.
- Inner size reduction due to hot melting, flow restriction.

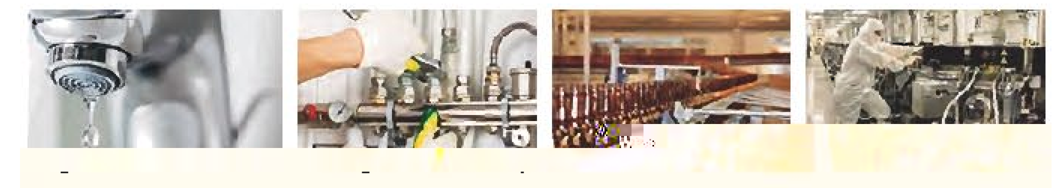
Disadvantage of Carbon Steel Pipe



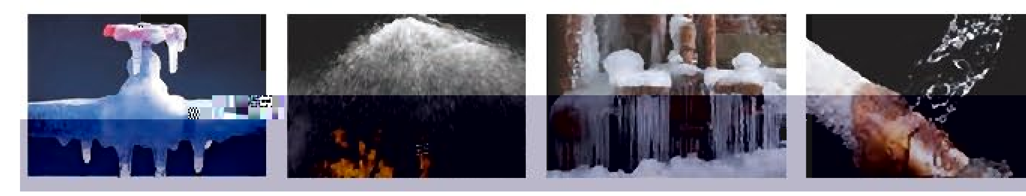
- Oxidization, rusting will be accelerated after 4-5 years, both inner and outside.
- High flow friction inner surface and pollution into fluids.
- High Leakage & broken risk especially for outdoor and underground installation.
- Thick & heavy pipe, high labor cost due to welding/ threading/ flanging.

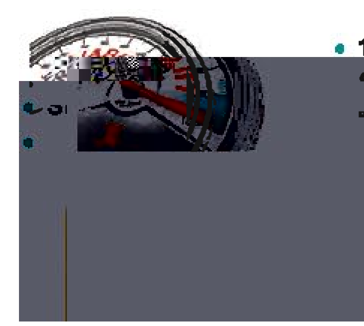
AQUApipe Features & Benefits

- International standards 304/316 stainless steel.
- Premium quality for water, air/ gas and other compatible fluids.
- Widely used in industries like food & beverage, medical & chemical productions, pharmacy etc.



- Wide temperature range by working with proper sealing.
- Moderate expansion characteristics & high tensile strength.
- No risk of breaking due to water freezing.





- 10 years warranty for all AQUApipe & fittings.
- Stability for all weather conditions.
- "Soft" connection can absorb 2-3mm expansion/ contraction.

- Corrosion resistance due to chromium dioxide layer.
- Smooth inner surface ensure best flow characteristics.
- No risk on pollution into fluids.

AQUApipe vs PPR Pipe

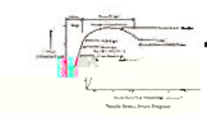

VS


	Items	AQUApipe (304)	PPR pipe	Remark
Corrosion Resistance	Tensile strength(N/mm²)	≥520	≥49	PPR's strength only 9.2% of AQUApipe
	Wear resistance	High	Low	PPR much lower resistance to flow impact
	UV impact	No impact	Aging	Plastic will be aging quickly due to constant UV light
	Expansion factor(10^{-6}m/°C) (0-100°C)	16	70	Expansion is 8 times of AQUApipe, risk of leaking/ breaking due to temperature change
	Lowest temperature	-40°C, sealing -270°C	-5℃	PPR will be crispy below zero
	Highest temperature	120°C, sealing 400°C	90℃	Risk of toxic materials being separated out when PPR above 90°C
	Environmental endocrine	No	Possible	Disturb endocrine system
Environmental Protection	Contamination precipitation	Very less	Easy to happen	Easy to be polluted due to sunshine and contamination
	Risk of toxic water	No	Possible	If plastic material doesn't comply relevant standard
	Toxic materials	No	Possible	Possible into fluids
	Odours	No	Possible	Possible into fluids
	Recycle	Recycle	Non-degradation	Can not be 100% recycled
	Lifetime	≥100 years	5-20 years	Only ¼ lifetime of AQUApipe

Physical performance of different pipes

Pipe materials		Density (kg/m³)	Expansion factor (10^{-6}m/°C)	Thermal conductivity (W/m/°C)	Specific heat conductivity (J/KG/°C)	Resistivity (Ωmm²/m)	Young's modulus (KN/mm²)	Magnetism
AQUApipe		7930	16	15	500	0.72	200	No
Carbon steel pipe		7850	11.6	60	60	0.14	210	Yes
Plastic pipe	UPVC	1350	70	0.05	1470	C.10-18	/	No
	PE、PEX、PB	950	140					
	PP-R	900	110					

Tensile strength of metal pipes



Pipe type	Material	Tensile strength (MPa)	Elongation (%)
AQUApipe	304	520~750	＞35
	304L	480~670	
	316	520~680	
	316L	480~620	
Carbon steel	Carbon steel	230~290	＞30
Copper	Copper	210~380	/

Flow rate comparison

Pipe materials (L/min)	Nominal Diameter					
	15mm	20mm	25mm	32mm	50mm	65mm
	½	¾	1	1¼	2	2½
AQUApipe	7	16	34	53	174	297
Copper pipe	6	15	30	51	160	265
Galvanized pipe	6	13	25	49	138	265
Aluminum plastic pipe	5	11	24	50	153	/