

Responsive

AquaFast

Couplings & Flange Adaptors
For Polyethylene & PVC Connections

NEW
Enhanced
Design

EASIER FITTING ON
OVAL OR COILED PIPES

NOW AVAILABLE
IN 280MM DIAMETER



PIONEERS IN PIPE SOLUTIONS

CRANE

BUILDING SERVICES & UTILITIES



Designed & Engineered to Simplify Polyethylene & PVC Pipe Connections

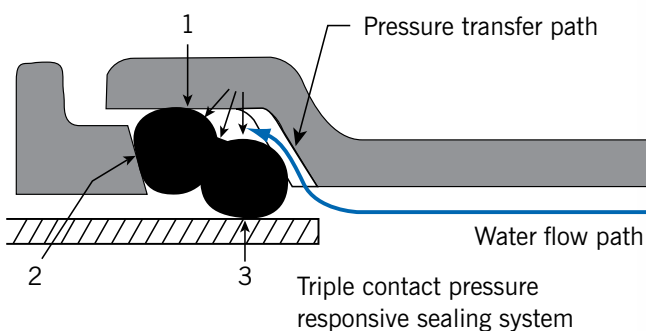
Effortless Installation

AquaFast's unique pressure sealing system offers a simple and reliable solution for connecting Polyethylene & PVC pipe. With a visual indicator confirming correct fitment and no special skills or tools required, installing AquaFast is effortless and quicker than other systems. In addition, an enhanced gripping mechanism ensures fittings slide easily into position during installation and provide full end load restraint in service negating the need for thrust blocks to prevent pipe pull out.



On-the-spot Repairs

From start to finish, AquaFast offers benefits to the installer. Supplied fully assembled and with an improved design that delays gripper engagement, AquaFast slides effortlessly over coiled and oval pipe making it easy for installers to correctly position the product in narrow trench conditions. Needing no specialist equipment, simply a "rag and a spanner", AquaFast can be installed in all-weather conditions and this, coupled with a design that does not need a support liner, means the product is ideal for on-the-spot connections in both new lay and repair / maintenance work.



Simple Jointing

Using only a standard spanner to tighten fewer bolts (only two per fitting up to 125mm) until the visual indicator confirms correct fitment AquaFast provides operatives with simple means of joining PE pipes. The metal-to-metal positive stop indicating mobilisation of the gripper and gasket sealing mechanisms removes the need for a torque wrench and prevents over tightening of the bolts while ensuring optimum assembly to every time.

Transitional Connections

AquaFast couplings & flange adaptors are available from 63mm to 315mm OD. Designed to work on both Polyethylene pipe in both PE80 and PE100 material SDR 11, 17/17.6 without a support liner, they can also be used to connect metric PVC pipe, so AquaFast is ideal for PE/PVC transitional connections.

AquaFast Coupling



AquaFast Flange Adaptor

Pipe Materials



AquaFast Couplings & Flange Adaptors

Product Design Benefits

Simple to Install

- Captive, non-rotating bolts across whole range requiring a single spanner to install.
- Increased bore dimensions and inclusion of resistors to prevent early engagement of gripper ensures AquaFast slides easily over pipe.



Positive Stop

- Correct installation confirmed through visual indication with metal to metal contact between three components (end ring, intermediate ring and sleeve / flange adaptor body).



Flexible Flange Drilling

- As standard the flange adaptors are multi drilled to accommodate BS EN 1092-1 PN10 & 16.

Efficient Gasket Sealing Technology

- Double 'O' ring gasket provides localised high pressure contact points generating efficient seal on pipe surface.
- EPDM (water quality approved) gaskets.

Corrosion Protection

- Metal components are coated with Rilsan Nylon 11, which is WRAS approved for use with potable water, and offers long term corrosion protection impact abrasion resistance
- The nuts & bolts are Sheraplex coated to WIS 4-52-03, which does not gall when re-used and provides long term corrosion protection.

Unique Progressive Sealing and Gripping Mechanism

- Patented gasket and gripper design delivers low pressure / load to outside of pipe at initial bolt up eliminating the need for support liner.
- Water transfer path uses internal pressure to increase gasket compression at contact points.
- As system pressure increases the initial gripper engagement with the pipe is enhanced through progressive gripping.

Customer Benefits

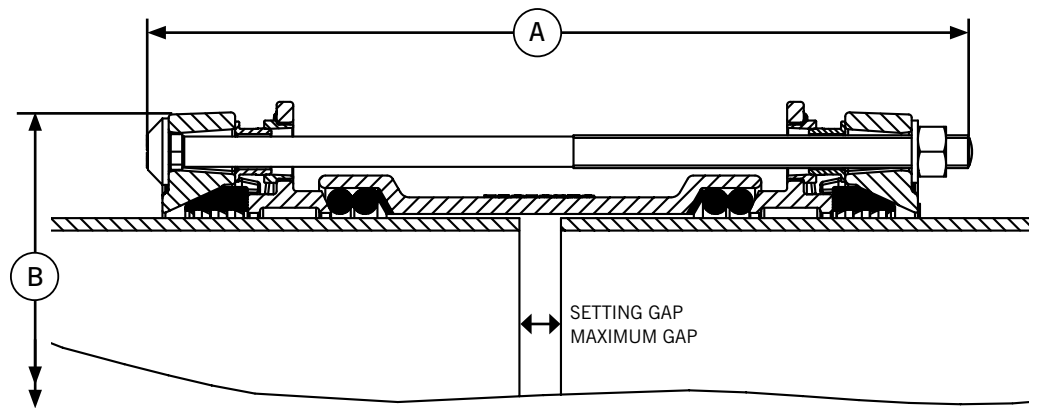
- Ideal for pumped sewage line as no support liner is required meaning a clear unrestricted bore. Additionally, Rilsan abrasion resistance coating accommodates any solids any solids in sewage.
- 50 years design life expectancy is assured through "Accelerated Aging Testing" that simulates lifecycle of the product and Rilsan Nylon coating to metal works for corrosion protections as well as Sheraplex coated bolts to WIS 4-52-03
- Rough on site handling accommodated by Rilsan coating.
- Simple onsite installation as the product comes pre-assembled hence easily slides over the round pipe. The resistor ensures gripper remains fully contained in housing until bolt up is complete.
- Reduced number of bolts ensures the product can be always orientated to facilitate easy access for bolt up.
- Minimal damage to pipe as progressive gripping system only penetrates sufficiently to mobilise and load forces from internal pressure and other loads in PE Pipe.
- All water contact materials approved for use with potable water (WRAS)
- Fully restrained fitting, designed to meet the performance requirements of WIS4-24-01 Type 2 and ISO14236.2



Flange Adaptor

AquaFast Couplings

Specifications



Coupling

Pipe OD	Bolt Size No.-Dia x Length	Dimensions (mm)		Setting Gap (mm)	Max Gap (mm)	Weight (kg)
		A max	B dia			
63	2-M12 x 250	257	144	20	30	4.2
75	2-M12 x 250	257	156	20	30	4.7
90	2-M12 x 250	257	171	20	30	5.3
110	2-M12 x 250	257	192	20	30	6.4
125	2-M12 x 250	257	207	20	30	7.1
140	4-M12 x 250	257	221	20	30	8.4
160	4-M12 x 250	257	241	20	30	9.2
180	4-M12 x 375	382	272	30	50	18.0
200	4-M12 x 375	382	292	30	50	20.4
225	4-M16 x 385	395	328	30	50	24.8
250	6-M16 x 385	395	352	30	50	31.5
280	6-M16 x 385	395	382	30	50	33.6
315	6-M16 x 385	395	417	30	50	38.7

Materials & Relevant Standards

Centre Sleeve, End Ring and Flange Adaptor Body

Ductile iron to BS EN 1563 Symbol EN-GJS-450-10

Gripper Ring

Ductile iron to BS EN 1563 Symbol EN-GJS-450-10

Intermediate Ring

Ductile iron to BS EN 1563 Symbol EN-GJS-450-10

Bolts

BS EN ISO 898-1 Property class 8.8

Stainless Steel option - BS EN ISO3506-1 Grade A2

Property Class 70 (Stainless steel available as special order)

Nuts

Steel to BS EN20898-2 Property Class 8

Stainless Steel option - BS EN ISO3506-2 Grade A4

Property Class 80 (Stainless steel available as special order)

Washers

BS 1449:Part 2 Grade 304S15

Gasket (EPDM)

BS EN 681-1 Type WA/BS 6920 hardness to 70 IRHD

Resisters

Free cutting Mild Steel (Grade Y15) Zn3 Zinc coated

Coatings

Centre sleeve, end ring, flange adaptor body and intermediate ring:

Rilsan Nylon 11

Gripper: Cathaporetic coating

Bolts, nuts: Sheraplex to WIS 4-52-03

Pressure Rating

Working 16 bar

Test 24 bar

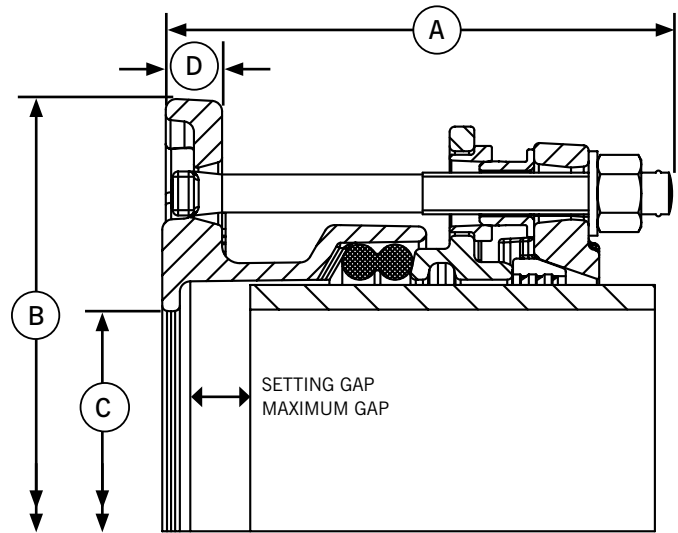
Approvals

WRAS

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AquaFast Flange Adaptors

Specifications



Flange Adaptor

Pipe OD	Flange Drillings	Tee Bolt Size No.-Dia x Length	Dimensions (mm)		Bore C (mm)	Flange Thickness D (mm)	Setting Gap (mm)	Max Gap (mm)	Weight (kg)
			A max	B dia					
63	50/65 PN10,16	2-M12 x 135	144	185	50	17	20	25	4.4
75	65/80 PN10,16	2-M12 x 135	144	200	65	17	20	25	4.8
75	60 PN10,16	2-M12 x 135	144	200	65	17	20	25	4.9
90	65/80 PN10,16	2-M12 x 135	144	200	80	17	20	25	5.0
110	100 PN10,16	2-M12 x 135	144	229	100	17	20	25	6.1
125	100/125 PN10,16	2-M12 x 135	144	250	100	17	20	25	7.2
140	125 PN10,16	4-M12 x 135	144	250	125	17	20	25	7.4
160	150 PN10,16	4-M12 x 135	144	285	150	17	20	25	8.5
180	150 PN10,16	4-M12 x 190	199	285	150	17	25	35	12.4
200	200 PN10,16	4-M12 x 190	200	343	190	18	25	35	15.4
225	200 PN10,16	4-M16 x 195	205	343	190	18	25	35	16.9
250	250 PN10,16	6-M16 x 195	207	406	240	20	25	35	22.5
280	250 PN10,16	6-M16 x 195	207	406	270	20	25	35	22.1
315	300 PN10,16	6-M16 x 195	208	483	300	21.5	25	35	28.2

All flange drilled to BS EN 1092-1 (formerly BS 4504) /BS EN ISO 7005 PN10 and PN16

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Centre Sleeve, End Ring and Flange Adaptor Body

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Gripper Ring

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Bolts

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Stainless Steel option - BS EN ISO3506-1 Grade A2

Property Class 70 (Stainless steel available as special order)

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Gripper: Cataphoretic coating

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Pressure Rating

Working 16 bar

Test 24 bar

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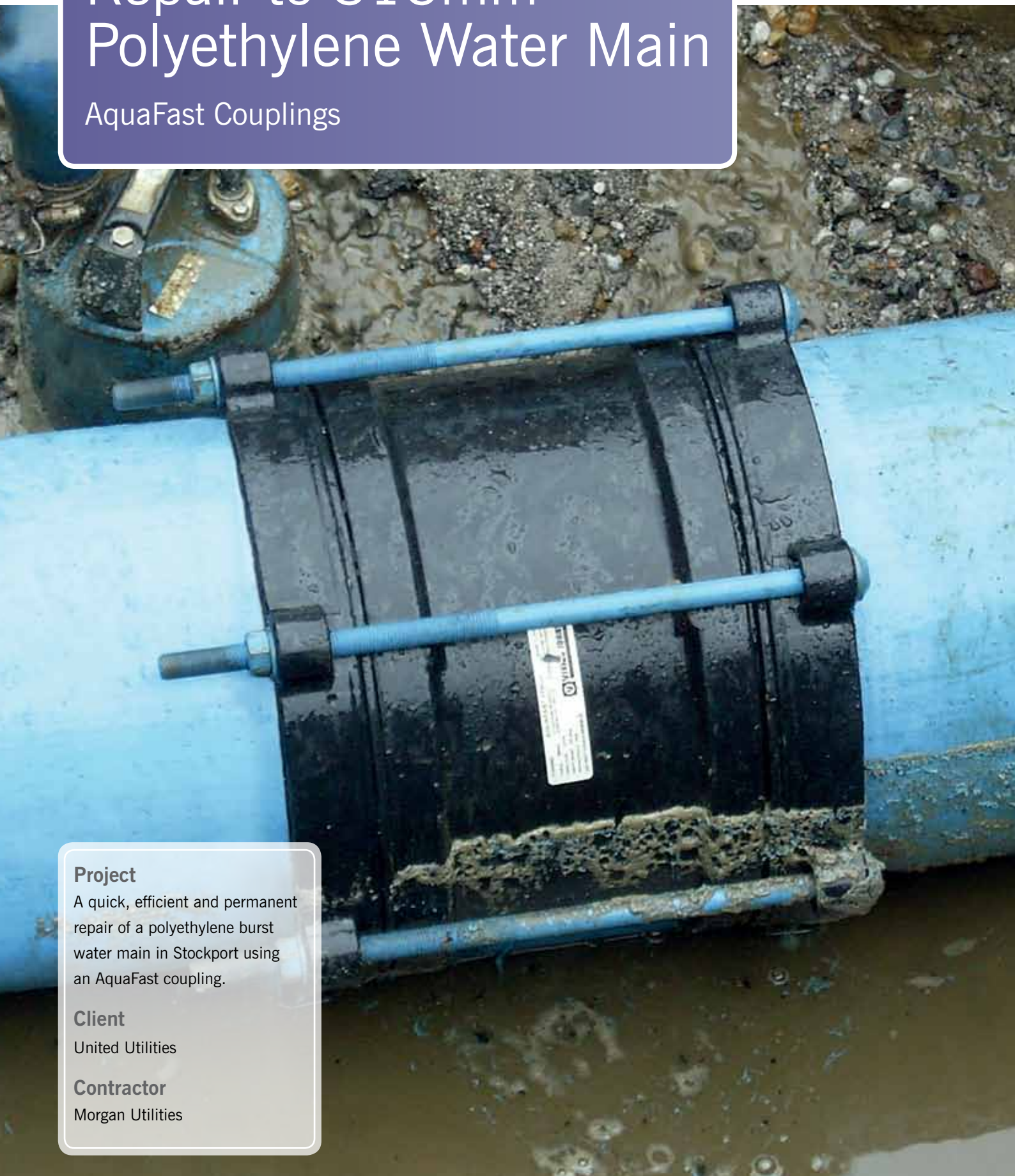
WRAS

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United Kingdom - Stockport

Repair to 315mm Polyethylene Water Main

AquaFast Couplings



Project

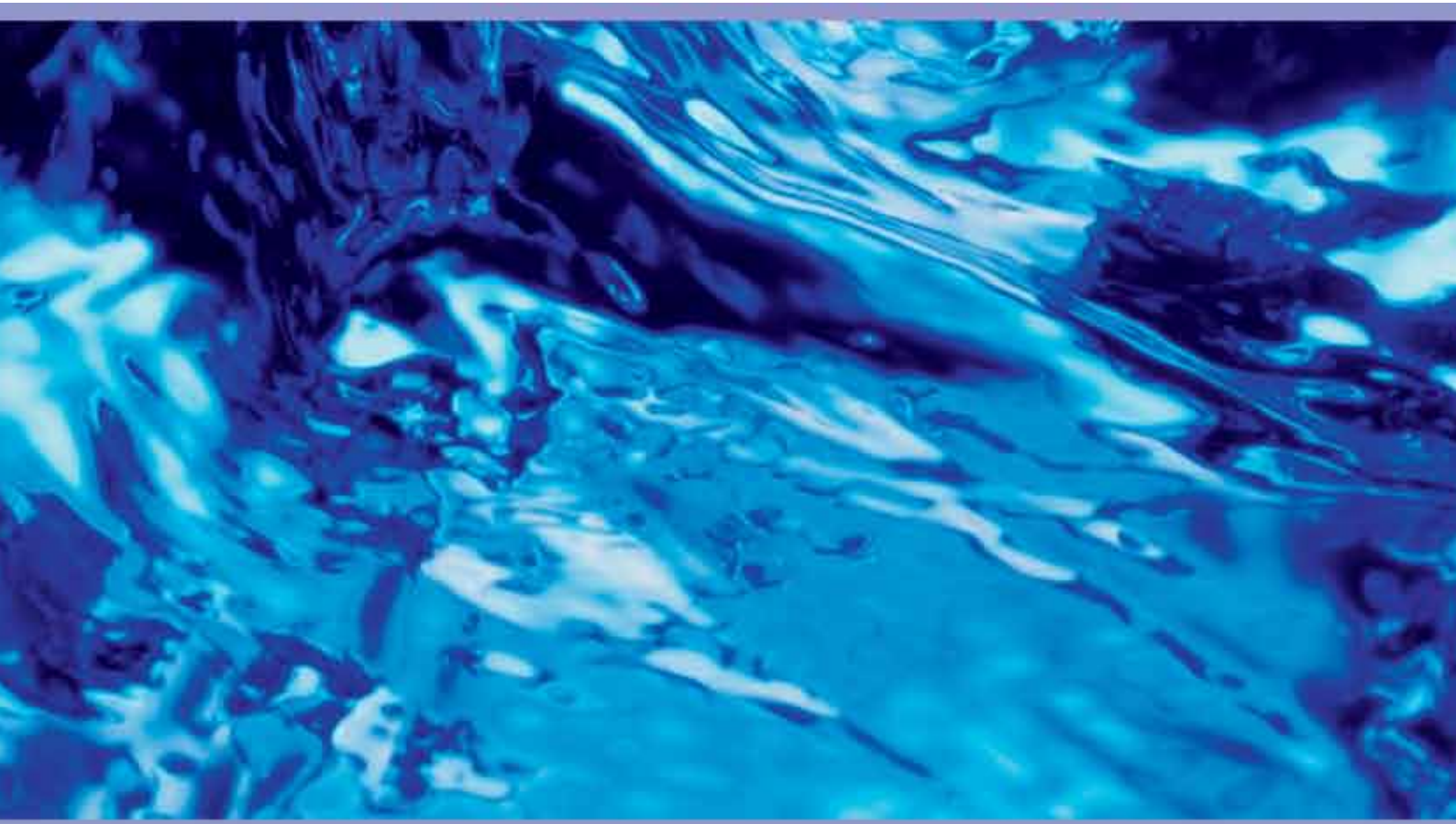
A quick, efficient and permanent repair of a polyethylene burst water main in Stockport using an AquaFast coupling.

Client

United Utilities

Contractor

Morgan Utilities



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ISO 14001 • EMS 51874



ISO 9001 • FM 00311



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- Designed and manufactured under quality management systems in accordance with BS EN ISO 9001.
- Environmental Management System accredited to ISO 14001.
- For full terms and conditions, please visit our website.

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