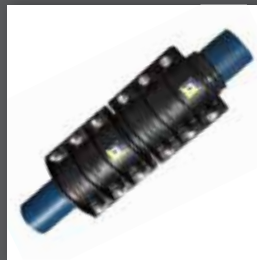




Repair & Maintenance Technical Brochure

‘Always On’



***Continually Introducing Innovation
into Water Industry – Since 2004***



www.r2mltd.co.uk

Repair with No Disruption

Stay 'Always On' with R2M

- Page 4-7 Wide Range Repair & Encapsulation Collars – cQuicks
- Page 8-9 Wide Range Repair & Encapsulation Collars – Duofits
- Page 10-11 Connector Clamps
- Page 12-13 EZ Valve...Live Valve Insertion

Fast Repair Products

Speeding Up the Operation

- Page 14-15 Molecor Class 500 Pipe
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- Page 18-19 Nova Siria Wide Tolerance Technology

Smart Technology

Operate Valves Smarter with 3S Technology

- Page 20-21 3S Portable Smart Valve Actuator

R2M Technical/Training & Emergency Services

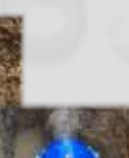
- Page 22 Technical Back Up
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Why ALWAYS ON?

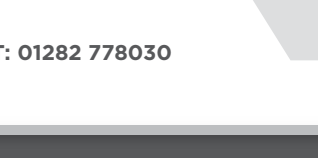
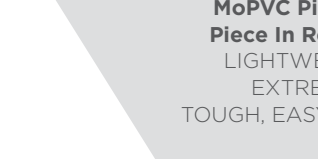
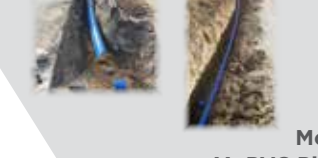
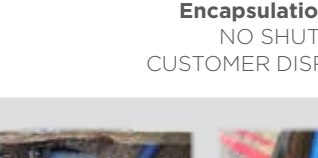
No disruption, no customer complaints,
minimising minutes lost, keeping the customer happy



**AVT EZ Valve
Live Valve Insertion**
NO SHUT OFF OF
CUSTOMER DISRUPTION



**cQuick
3" - 8" Live
Encapsulation Collars**
NO SHUT OFF
OR CUSTOMER
DISRUPTION



**Duofit
10" - 60" Live
Encapsulation Collars**
NO SHUT OFF OR
CUSTOMER DISRUPTION



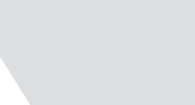
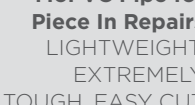
*Products and
Materials for Leakage
Management*



**3S Antriebe - Valve
Exercisers and
Wireless Remotely
Operated Actuators**
Exercise crucial or
sticking valves in
a controlled and
safe way,
wirelessly
actuate
valves



**Smartjoint and Multigrip
Universal End Restraint Fittings**
FOR PIECE IN REPAIRS ON
ALMOST ALL PIPE MATERIALS



**Molecor
MoPVC Pipe for
Piece In Repairs**
LIGHTWEIGHT,
EXTREMELY
TOUGH, EASY CUT

Unit 6, Metcalf Drive, Altham Industrial Estate, Accrington BB5 5TU T: 01282 778030

Encapsulate 'ALWAYS ON...'

Easy fit wide tolerance encapsulation collars.
Fast, allows for unevenness, ovality and measuring errors

cQuick Encapsulation Collar
uti 80 - 200mm 11mm tolerance



cQuick² Encapsulation Collar
uti 80 - 300mm 16mm to 18mm tolerance



Duofit Encapsulation Collar
uti 125 - 3000mm 25mm to 300mm tolerance



No disruption, no customer complaints, minimising minutes lost



Before



During



Encapsulated!



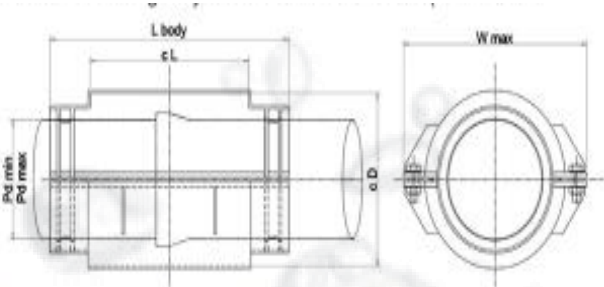


cQuick Encapsulation Collar Specification

R2M’s range of cQuick encapsulation collars offer a quick, light and viable solution to making a permanent repair of leaking AC collars, CI socket spigots and any other leaks which fall within the OD tolerance (i.e. EFL couplers, etc.). All installations can be made under live conditions without the need to shut off the water, re-pressurise, chlorinate, sample, etc. and with no disruption to customers’ supplies.

The cQuick² has a larger tolerance so will also capture DI pipe as well as having a larger encapsulation collar which can cover leaking flanges of compression couplers.

All are 16 bar rated and can be installed using a 24mm socket and torque wrench.



DN	Range (Pd Min / Pd Max)	Encapsulation Cavity Inside Diameter	Encapsulation Cavity Inside Length (cL)	DAL (L)	Weight
3" / 80mm	93-102mm	180mm	300mm	430mm	23kg
4" / 100mm	120-129mm	210mm	300mm	430mm	29kg
5" / 125mm (cQuick ²)	138-152mm	275mm	318mm	433mm	33kg
5" + 125mm (cQuick ²)	145-158mm	275mm	318mm	433mm	33kg
6" / 150mm	175-183mm	257mm	300mm	430mm	33kg
6" / 150mm (cQuick ²)	166-183mm	318mm	318mm	433mm	39kg
8" / 200mm	229-239mm	330mm	300mm	430mm	41kg

cQuick
9 - 10mm tolerance
encapsulation collar.
16 bar rated with cavity
large enough for collars
and socket spigot bells.

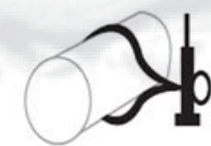


cQuick²
13mm/17mm tolerance
encapsulation collar.
16 bar rated with
cavity large enough for
collar, socket spigot
bells and flanges.



New cQuick² sizes coming soon, 3" up to 12"

cQuick Instructions



Measure the actual diameter of the pipe. Check that the diameter lies within the range.

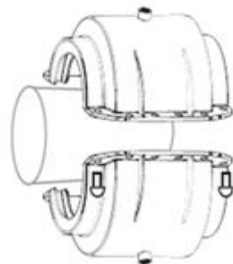


Clean the working area of the pipe, remove any loose scale, grind out deep scratches. Spray with chlorus.



Fit rubber gaskets onto the pipe.

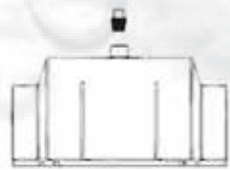
Ensure that both gaskets have the opening at the top or bottom of the pipe.



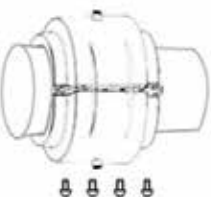
Fit the bottom half of the fitting ensuring that the rubber gaskets are fully inside the seating.

The 4 long bolts are provided to assist in the initial installation of the top half.

Installation Instructions and Assembling Steps

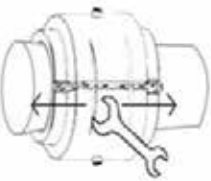


Push the top half of the fitting down until it fits and check that the rubber gaskets are inside their seatings.



Remove vent plug. In cases where the leak is severe a 1/2" ferrule may be used to vent the pressure whilst installing the clamp.

Torque the middle bolts first and then gradually move outwards. Tighten both sides simultaneously.



Tighten to torque stated on the fitting.

Plug refit or turn off the ferrule to complete the installation.



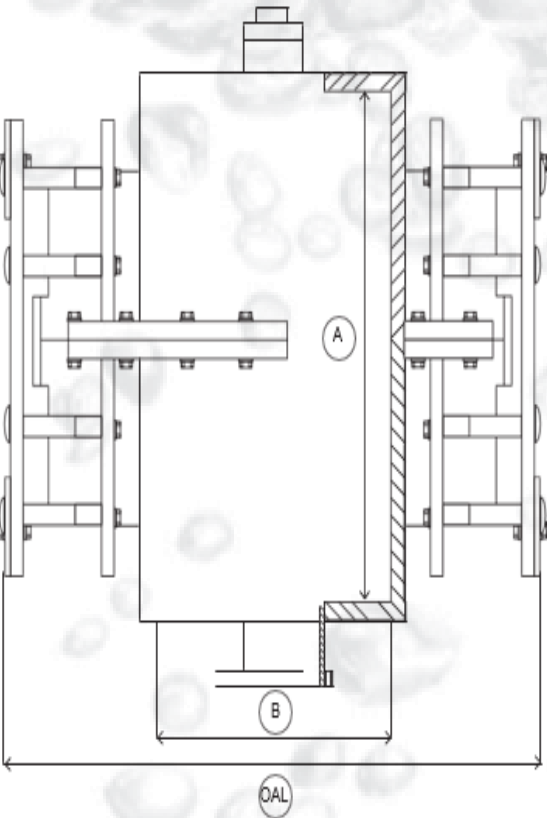
The application of a thin continuous coating of petroleum paste over the whole area to be protected as a primer. Where bolt heads, nuts, flanges and other projections arise, a profiling mastic shall be used to give a smooth external profile. The joint or fitting shall be wrapped with a protective tape. The minimal application shall be a spiral wrap using 55% overlap. The tape shall extend along 150mm of the barrel of the pipe on each side of the joint or fitting.

16 bar rated live encapsulation collars for AC & DC.



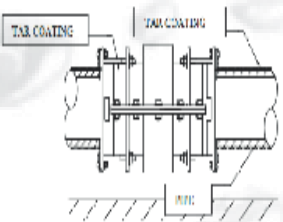
Duofit Instructions

Duofit Cavity Dimensions

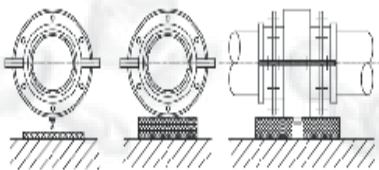


DN	Range	A	B	OAL
	Min - Max			
5"	135-159mm	310mm	400mm	870mm
8"	220-244mm	450mm	400mm	870mm
9"	247-271mm	421mm	400mm	890mm
10"	264-288mm	450mm	400mm	870mm
12"	318-348mm	498mm	400mm	1022mm
12" +	345-375mm	548mm	400mm	1022mm
14"	368-398mm	548mm	400mm	1022mm
16"	401-431mm	581mm	400mm	1022mm
16" +	435-465mm	650mm	400mm	1022mm
18"	472-502mm	652mm	400mm	1022mm
18" +	490-520mm	670mm	400mm	1022mm
20"	530-560mm	710mm	400mm	1022mm
24"	610-640mm	790mm	400mm	1022mm
24" +	645-675mm	950mm	500mm	1122mm
28"	730-760mm	910mm	500mm	1122mm
30"	800-835mm	980mm	500mm	1122mm
30" +	805-835mm	1280mm	500mm	1122mm
32"	835-865mm	1015mm	500mm	1122mm
36"	940-970mm	1120mm	500mm	1122mm
40"	1045-1075mm	1225mm	500mm	1122mm
42"	1120-1150mm	1300mm	500mm	1122mm
48"	1250-1280mm	1430mm	500mm	1122mm
48" +	1273-1305mm	1550mm	500mm	1122mm

Duofit Instructions



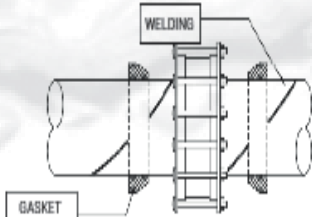
Thoroughly clean the pipe surface removing all dents, projections and weld beads. If the pipe is a steel one, the welding has to be smoothed by maintaining the pipe's profile.



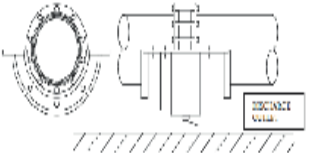
Support the lower coupling's shell in order to centre as much as possible of its two halves with respect to the pipe section.

Installation Instructions and Assembling Steps

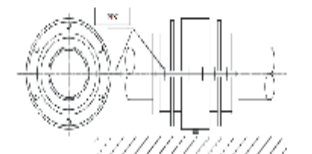
Duofit Instructions



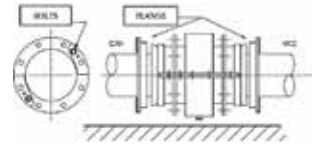
If the pipeline is a heliocoidally welded steel one, the welding has to be smoothed out along the area where the "Duofit" coupling gaskets will be placed to avoid interference with its seating.



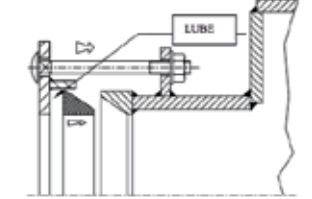
Place the lower shell of the coupling below the damaged object section and remove the lower discharge plug.



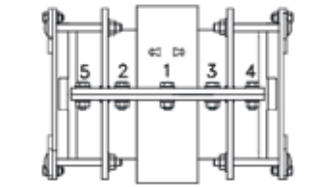
Place the upper shell of the coupling on the lower shell on positioning it on the appropriate reference studs.



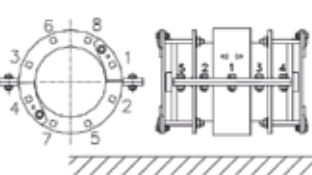
Place the compression followers on both sides of the coupling after the locking the appropriate short bolts.



Carry out the assembly of flange bolts, lubricate the gasket seatings and bring near the conical sealing rings previously positioned inside the main fitting body and screw the nuts by hand without tightening them yet.

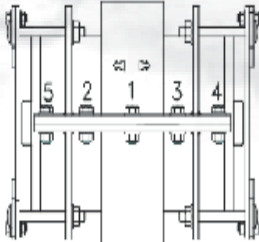


Lock the side bolts (please refer to the point 6) until the two sides are touching. The bolts tightening must be performed starting from the centre as indicated in the drawing.

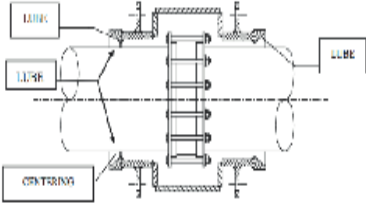


Tighten the compression follower bolts starting with the two closest ones to the coupling between the two shells following the criss-cross sequence as shown in the picture. Repeat this step until reaching a firm lock.

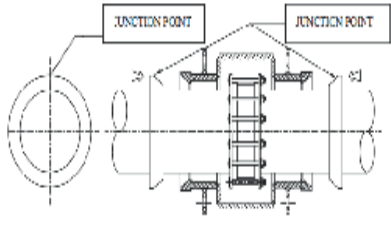
Installation Instructions and Assembling Steps



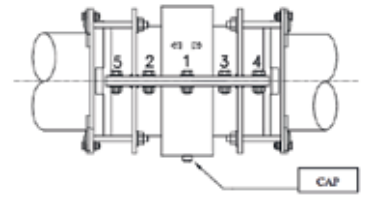
Insert the bolts on both sides of the coupling and lock them in such way as to let the gasket stick out approximately 1mm on the conical heads. The torque process must be performed from the centre of the coupling towards its ends following the numerical order as shown. Check that the gasket does not stick out too much (no more than 2mm) by adjusting the bolts No.4 and No.5.



Clean accurately all conical surfaces and lubricate both conical surfaces and the pipe with vaseline oil. During this step the centering of the coupling on the pipe must be checked and adjusted. This allows an easy insertion of the gaskets in their seatings.



Clean accurately the conical gaskets and place them around the pipe. The two ends should meet about the pipe section. The gasket ends should be glued using "Loctite 495". The junction point of the gasket can be placed on the upper or lower side of the pipe.



Screw the discharge plug back to the place. If the leak is severe, a commission valve may need to be installed (provided within the Duofit). Once installed, turn into the 'Closed' position. The installation is now complete.

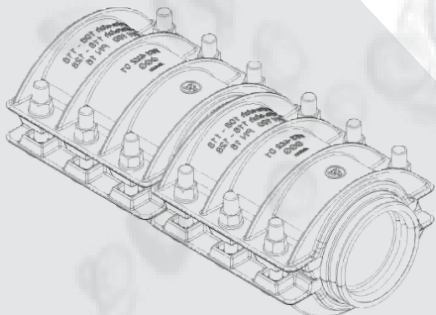
The application of a thin continuous coating of petroleum paste over the whole area to be protected as a primer. Where bolt heads, nuts, flanges and other projections arise, a profiling mastic shall be used to give a smooth external profile. The joint or fitting shall be wrapped with a protective tape. The minimal application shall be a spiral wrap using 55% overlap. The tape shall extend along 150mm of the barrel of the pipe on each side of the joint or fitting.



Connector Clamp

Manufactured in Germany, the revolutionary two piece repair clamp links together, enabling leaks to be repaired, even when the affected area is no longer than a single clamp.

Full 16 bar rated, using high quality galvanised fixings and ductile iron body. With its moulded and bonded in seal system, it can be used for full circumferential gaps of up to 2cm.



Size	Range	Length of Each Single Clamp	Weight
40mm	44-52mm	200mm	4.3
40mm	54-61mm	200mm	4.3
50mm	60-68mm	200mm	4.7
65mm	76-87mm	200mm	5.5
80mm	89-98mm	205mm	9.8
80mm	95-108mm	205mm	9.8
100mm	108-118mm	240mm	12.2
100mm	116-128mm	240mm	12.2
125mm	133-144mm	245mm	17.6
125mm	142-153mm	245mm	17.6
150mm	159-172mm	300mm	25.6
150mm	168-184mm	300mm	25.6
200mm	214-225mm	405mm	39
250mm	267-274mm	406mm	56
300mm	315-326mm	500mm	83.6

No disruption, no customer complaints, minimising minutes lost, keeping the consumer “Always On”

Seal any longitudinal splits simply by joining more Connector clamps



EZ Valve

Fit valves live and take full control with NO disruption



EZ Technology

The latest advancement in valve insertion or line stopping

1 machine, 2 functions!

“Take it or leave it - the valve bonnet, that is!”



The EZ Process

The EZ system was developed to provide important performance and installation benefits to professionals working under difficult conditions and with critical needs.

Advanced Valve Technologies Delivers

- High quality components meeting industry standards (AWWA material spec C-509-09/C-515 and UL Drinking Water System Component ANSI/NSF 61. Also certified to NSF /ANSI 372 MH49142)
- Rapid installation procedures (reduced field work hours)
- Single excavation performance
- Standardised operation (normal turns to actuate valve)
- Pipeline integrity maintenance (no sectional or circumferential pipe intrusion, only a miller slot with no coupon drop)
- Lightweight and compact installation equipment
- No service interruption (process is completed under pressure)
- Sizes available for 4" - 12" (100mm - 300mm), 18" (400mm), 20" (500mm) and 24" (600mm) systems - 18" (450mm) coming soon

Plus

- Integral isolation valve and
- “Take it or Leave it” valve bonnet design lets you choose to retain the insertion valve operation or temporarily create a line stop: the bonnet may be used for multiple projects



6" EZ Valve Live Install - 1 hour and 20 minutes



EZ System



End Mill Machine

Temporarily mounts in place of valve bonnet and features field-replaceable cutting blades available in pneumatic, hydraulic or electric drives

Removable Valve Bonnet

Resilient wedge gate and actuation mechanism are contained for fast and easy installation or removal

Double Seal Gaskets

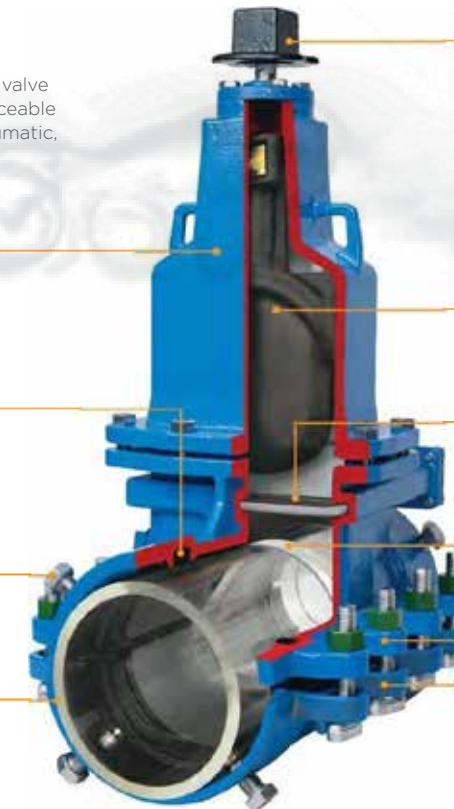
Maintain system pressure while allowing rotation of casting assembly during slot-milling

Fasteners

Stainless steel components secure casting assembly and provide final positioning on pipe

Pipeline Comparability

The EZ™ design works with all common and many uncommon pipe materials (consult AVT for details)



Actuator

Standard number of turns to open and close valve

Resilient Wedge

A wedge gate valve over a ductile iron component that effectively seals even tuberculated host pipe

Integral Isolation Valve

Provides “under pressure” installation or removal of valve bonnets or blind flanges

Insertion Slot

One narrow slot over a 120° path maintains pipe integrity and creates wedge valve access

Castings

Ductile irons casting are precision machined to fit project specifications and pipe material

12" AVT EZ Valve - Live Valve Installation

On Saturday 2nd June, R2M Site Services Engineers installed a 12" AVT EZ Valve onto a live 12" cast iron pipe.

Due to growth in the local area and other strategic reasons, a valve in this position was required to safeguard the network and for ongoing usability, the valve would be needed. A line stop was not the most suitable option. In this case, the EZ Valve, with its full functionality as a valve, small excavation and full live installation, without any shut off, made this the best option.

The installation of the EZ Valve began at 12.30am and was fully complete, with the valve functioning, at 2.30pm. The valve is now a permanent fixture in the network.

As with many of R2M's products, the EZ Valve is installed under live conditions which means there are no disruptions to customers' supplies and risks offlines and compensation, lost minutes, etc. A live installation of this type also alleviates the need for sampling, chlorination and flushing.

The installation was deemed a complete success.



Molecor Class 500 Pipe

The easiest and fastest pressure pipe to lay



- **Molecor is thin walled yet five times stronger than PE.** This has resulted in water companies using smaller pipes yet with greater hydraulic capacity which equals lighter and more cost-effective
- **On average it is 75% lighter than D. Iron and 50% lighter than PE** which means there is less requirement for heavy lifting equipment and less back injuries
- **Documented reports show lay rates of 20-25 pipes per day even at 400mm diameter**
- **Easy, simple push fit assembly** means huge advantage in terms of installment in metres per hour which is ideal for piecing I, no EF or butt fusion joint and equipment
- **Unbeatable impact resistance** which means there is no need to recoat on site as with Ductile when it is damaged
- **Pipes are available at 90-800mm in bar ratings 12.5, 16, 20 and 25** which are the best choices in high pressure situations
- **Increased hydraulic capacity** with between 15-40% more hydraulic capacity than other pipe materials with same external dimensions
- **Approved under regulation 31 of the Water Supply (Water Quality) Regulations 2000**



www.r2mltd.co.uk

Hawle System 2000 Join PE & MoPVC with ease



Why use many fittings when you can just use one?

Hundreds of thousands of mechanical pipeline joints are made every year using Ductile Fittings, Adaptors, Bolt Sets and lots of operational time when joining PE & MoPVC... This really is working in the dark ages when technology like System 2000 is available. Some water companies are already engaging with this system.



South West Water choose Hawle System 2000 for joining PE & MoPVC



Over the past few months, South West Water have taken a huge step to minimise future leakage issues and reduce operation costs by evaluating the **Hawle System 2000 range of fittings**. The system allows mechanical connections to PE and PVC with no specialist training allowing joints to be made faster and with fewer fittings this reducing the number of joints and potential for future leaks.

The System 2000 is designed for PE and PVC pipes with metric sizes CD which grips and seals with full end restraint, up to 16 bar. No liner is required further simplifying operations when using SDR11 or SDR17 PE. Another key way that the System 2000 provides significant savings is the combination of fittings, bends, tees, flange adaptors and couplers available.



Example of how the System 2000
simplifies mechanical jointing of PE and PVC



Chris Dorain, Procurement Manager at South West Water commented, "As a company, we are challenging all aspects of what we do and asking, 'is there a better way?' The Hawle System 2000 range offers a full suite of fittings and valves allowing us to simplify jointing PE and metric PVC without the need for multiple products. Furthermore, we are saving on liners, another product we don't need to stock. This allows us to tick a number of boxes in reducing operational time on site, stock costs and space, weight in vans, reducing orders raised and due to the simplicity of the products minimal training is required. This is a real Totex solution."



Nova Siria Wide Tolerance & Restrained Fittings

Install fittings in a fraction of the time by using wide tolerance fittings. With or without end restraint, operation costs will be lower.

Benefits of wide tolerance fittings vs dedicated fittings

- 30mm tolerance (300mm+ sizes) - Sizes from 300mm up to 2500mm
- Minimum 50% stock reduction, reduced logistics costs
- Take just one fitting to the site instead of 2 or 3
- Multi-material transitional fitting that can join PE, Ductile, Steel, Cast Iron and PVC, all in one fitting
- Easy to fit even on old uneven pipes vastly reducing the operational time (80% of the cost of any pipeline installation)

Wide Tolerance Restrained Fittings

Same as above, plus...

- 16 bar rated across the range
- Type 1 rated fittings for PE pipe applications
- Fast and simple on site installation, derisks operatives and reduces trench time - a 630mm multigrip can be fitted in 25% of the time it take to fit a VJ aquagrip



Strategic Wide Tolerance Check List

TOLERANCE RANGE	PIPES COVERED
350 (340-370mm)	345 Cast / 355mm Steel & PVC / 355mmPE / 345 & 356mm AC
350 (365-395mm)	386mm Cast / 378mm DI / 376mm GRP / 392mm AC
400 (390-420mm)	399 & 413mm Cast / 405mm Steel & PVC / 392, 405 & 419mm AC
400 (410-440mm)	413 & 426 & 439mm Cast / 429mm DI / 427mm GRP / 419mm AC
450 (438-468mm)	439 & 453mm Cast / 457mm Steel & PVC / 448 & 463mm AC
450 (465-495mm)	492mm Cast / 480mm DI / 478mm GRP / 478mm AC
500 (490-520mm)	492 & 506mm Cast / 508mm Steel & PVC / 498 & 515mm AC
500 (518-548mm)	545mm Cast / 532mm DI / 530mm GRP / 532mm AC
600 (590-620mm)	597 & 613mm Cast / 610mm Steel & PVC / 605mm AC
600 (620-650mm)	630mm PE / 635mm DI / 633mm GRP
600 (652-676mm)	667mm Cast / 660 Steel & PVC / 654 & 672mm AC
700 (700-724mm)	702 & 720mm Cast / 711mm Steel & PVC / 718mm GRP
700 (726-750mm)	728 & 746mm Cast / 738mm DI
800 (806-830mm)	807 & 826mm Cast / 813mm Steel & PVC / 820mm GRP / 808mm AC
800 (824-848mm)	826mm Cast / 842mm Cast / 830mm AC
800 (856-880mm)	859 & 879mm Cast / 830mm AC
800 (882-906mm)	886 & 905mm Cast / 882-904mm AC
900 (934-958mm)	945mm DI / 952mm AC
900 (960-984mm)	964mm Cast / 970 & 977mm AC
1000 (1045-1075mm) LS	1068mm Cast / 1048mm DI / 1067mm Steel



Multisize Couplings & FAs



Multigrip (16 bar restraint)



Repair Collar

Encapsulation Collar

Procedure
Check OD of pipe and confirm with pipe OD tape
Find 30mm tolerance fitting size above that covers OD required
Choose fitting required from pictures and descriptions above
Phone Emergency Contact at Strategic Stores

3S Portable Smart Valve Actuator

- Portable battery operated actuator for use on cap top and handwheel operated valves up to 900Nm torque (1800Nm with torque booster kit).
- Lightweight one man operation unit which will drastically speed up the valve operation process and improved health and safety for technicians.
- Calm Network button - Extra slow opening and closing functionality to eliminate turbidity in the network.
- Proven to operate stiff and heavy turning valves effortlessly.
- Automated valve exercising programme to prolong the working life of valves in the network.
- Additional functionality means the 3S unit can be programmed to map the torque required to operate valves and perform an automated valve maintenance programme which ensures valves are seating correctly and will reduce the torque required to open the valve, resulting in a reduction in valve replacement.
- Counts number of turns in 0.1 turn increments.
- Information can be transferred to GIS systems to record valve condition in network.
- Adjustable torque in 10nm increments.
- Pre-loadable with valve data from GIS system via Bluetooth or USB.

www.r2mltd.co.uk

3S Portable Smart Valve Actuator



R2M Technical Back Up

If you have a problem on site, one of our Technical Team can help.



R2M Technical Support Vehicle

On site technical support and training on the trickiest installations in the most difficult conditions.
A large array of spares and tooling/equipment is also carried.



R2M Roadshows, Training & Best Practice Events



R2M Roadshows

We come to your premises and show off the latest in pipeline innovation.

R2M Training & Best Practice

At R2M, we don't believe in simply just selling you a fitting. Best practice means you carry out the operation safely and efficiently.



24/7 Emergency Service

R2M offer a true emergency call out service 24/7, 365 days a year.
If it's in stock, we will get it for you, no matter what the time of day or night.



R2M Site Services Ltd

Full range of ability to repair, measure, fit line stops and encapsulation collars including the EZ Valve (live valve insertion).





Handwritten notes on page 26:

1. The first part of the notes discusses the importance of maintaining accurate records of all transactions, including sales, purchases, and expenses. It emphasizes the need for regular reconciliation and the use of appropriate accounting software to ensure data integrity and accuracy.

2. The second part of the notes focuses on the importance of maintaining accurate records of all transactions, including sales, purchases, and expenses. It emphasizes the need for regular reconciliation and the use of appropriate accounting software to ensure data integrity and accuracy.

3. The third part of the notes discusses the importance of maintaining accurate records of all transactions, including sales, purchases, and expenses. It emphasizes the need for regular reconciliation and the use of appropriate accounting software to ensure data integrity and accuracy.

Handwritten notes on page 27:

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OUTSIDE DIAMETER CONVERSION CHART

Nominal Bore		inch	0.5	0.75	1	1.25	1.5	2	2.5	3	3.5	4	5	6	7	8	9	10	11	12	14	15	16	18	20	21	22	24	26	27	28	30	32	33	34	36	40	42	44	48	
		mm	15	20	25	32	40	50	65	80	90	100	125	150	175	200	225	250	275	300	350	375	400	450	500	525	550	600	650	700	750	800	825	850	900	1000	1050	1100	1200		
Cast Iron & Steel	BS1776:1997 + A1:2013	Class ABCD																																							
	BS EN 1211:2005	Class AB only																																							
	BS EN 488:2003	Class CD only																																							
	BS EN 10225:2004	Class Standard																																							
	BS EN 10224:2002	Class Standard																																							
PVC	BS EN 10220:2002	Class Standard																																							
	API 5L & BS1600:1991 (OT 36" NB)	Class Standard																																							
	BSA 3505:1985	Class Standard																																							
	BS EN 3506:2009	Class Standard																																							
	BS EN 10220:2002	Class Standard																																							
Ductile Iron	BS EN 10220:2002	Class Standard																																							
	BS EN 10220:2002	Class Standard																																							
	BS EN 10220:2002	Class Standard																																							
	BS EN 10220:2002	Class Standard																																							
	BS EN 10220:2002	Class Standard																																							
GRP	BS EN 1512:1995	Class 15																																							
	BS EN 1512:1995	Class 20																																							
	BS EN 1512:1995	Class 25																																							
	BS EN 1512:1995	Class 30																																							
	BS EN 1512:1995	Class 35																																							
Metric uPVC & PE	BS EN 10220:2002	Class Standard																																							
	BS EN 10220:2002	Class Standard																																							
	BS EN 10220:2002	Class Standard																																							
	BS EN 10220:2002	Class Standard																																							
	BS EN 10220:2002	Class Standard																																							



Ductile Iron

- Ductile iron pipes
- Fabricated pipes
- Flanged fittings
- Tyton fittings
- Pipe pulling tools
- Standard gaskets
- Anchor gaskets



Repair Clamps & Bossed Clamps

- Universal fittings
- Stainless steel and mild steel clamps
- Bossed clamps with male and female bsp outlets



Couplings & Adaptors

- Universal couplings
- Universal adaptors
- Stepped couplings
- Dedicated specialists
- Emergency fabrication



Valves

- Gate valves
- Non-return valves
- Air valves
- Fire hydrants
- Penstocks
- Extension spindles and keys



Molecor

- Class 500
- Fast pushfit installation
- 12, 16, 20 & 25 bar
- 75% lighter than ductile
- 50% lighter than PE
- Incredibly tough, flexible and durable



Repair & Encapsulation

- Wide 30mm tolerance
- Easy, fast fit
- Anti-leak clamps
- Encapsulation collars



End Restraint Fittings

- 30mm tolerance
- 16 bar restraint uti
- 1000mm
- Universal fit
- Just a torque wrench to fit
- Up to 2500mm



Demonstration Van

- Line demos
- Training
- Best practice
- Innovation



Tech Support Vehicle

- On Site advice
- Problem-solving
- Best practice