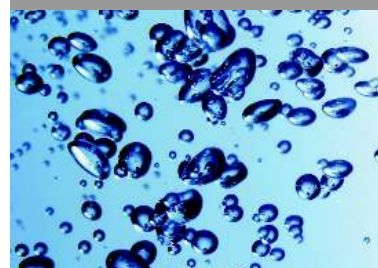


uplus

Services and Training Directory 2009





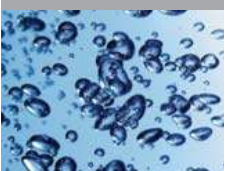
Low Pressure Bagging Off

UPLUS, the field installation team from Radius Systems, provides a flow-stopping service, utilising conventional bagging-off techniques for gas applications. This enables cut-outs for repairs and new/replacement connections to gas distribution systems to be made with a minimum of inconvenience to all parties. Bagging-off provides a viable alternative to squeeze-off techniques for gas mains up to 630mm diameter, reducing excavation size and improving the streetworks management environment.

This UPLUS service will minimise excavation footprint

Benefits of the technique:

- ▶ Reduction in excavation footprint saves 7 metres of excavation compared with the squeeze-off technique on a 500mm pipeline
- ▶ Reduced number of joints in the system
- ▶ Once connection is confirmed, UPLUS will work closely with the client to ensure connection is scheduled and completed in accordance with requirements
- ▶ All installations carried out by fully trained operatives to GN02 (minimum standard)
- ▶ State-of-the-art vans and specialist Radius Systems equipment
- ▶ All joints fully pressure-tested before connection is made
- ▶ Each connection comes complete with a full report, detailing serial numbers of pipes, fittings and valves, a digital pressure test report, plus two digital photographs with a geographical reference showing the completed connection, so the connection can easily be found at a later date if required
- ▶ Technique complies with ISO 9001
- ▶ Significant increase in operational and administrative efficiency, freeing up valuable staff and contractor time





630mm bag-off and tee insertion operation

At each end of the cut-out, a number of bagging-off saddles developed by Radius Systems are electrofused to the main. A valve is fitted to each saddle prior to the assemblies being tested and drilled. Two of the saddles at each end of the connection form the basis of the access points for the primary and secondary bags. Radius Systems can also erect and commission the bypass, cut out the main and piece through, insert tees or fit caps as necessary.

Flow-stopping range on PE mains

Mains Maximum Operating Pressure			
PE80/100 Diameter (mm)	Bag Stop (mbar)	Single Squeeze-off (mbar)	Double Squeeze-off (bar)
125	–	75	2
180	75	75	2
250	75	–	2
315	75	–	2
355	75	–	2
400	75	–	2
450	75	–	2
500	75	–	2
630	75	–	2

UPLUS
Radius Systems Ltd
 Hilcote Plant
 PO Box 1
 Blackwell
 Nr Alfreton
 Derbyshire
 DE55 5JD



t: 01773 582312
f: 01773 582489
e: sales@radius-systems.co.uk
w: www.radius-systems.co.uk



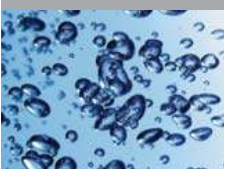
Under-Pressure PE Gas Branch Saddle Connections

UPLUS supplies the gas industry with a complete range of branch saddles to connect PE mains from 90mm up to 630mm. All have Kitemark™ certification. This wide range enables project engineers to select and fit their connection of choice.

Specialist equipment utilised for installation

Benefits of the system:

- ▶ Once job is confirmed, the customer can be confident that the connection will take place on the required date, first time every time
- ▶ All installations carried out by fully trained GN02 operatives
- ▶ State-of-the-art vans and specialist equipment used for installation
- ▶ Each connection comes complete with full report, detailing serial numbers of pipes, fittings and valves, a digital pressure test report, plus two digital photographs showing completed connection and a geographical reference point in the background, so if required the connection can easily be found at a later date
- ▶ Reduction in excavation footprint
- ▶ All joints fully pressure-tested before connection is made
- ▶ Reduced number of joints in the system
- ▶ This system complies with ISO 9001
- ▶ No disruption to customer gas supply, minimising complaints and improving the utility company profile
- ▶ Significant increase in operational efficiency, freeing up valuable staff and contractor time
- ▶ Minimal administration and management
- ▶ Reduced installation time



Under-pressure PE gas connection range

Size (mm)	Flanged	Spigot	Bar rating	Hole size (mm)
90x90	✓	✓	6	70
110x90	✓	✓	6	70
125x90	✓	✓	6	70
160x90	✓	✓	6	70
160x110	✓	✓	6	90
180x90	✓	✓	6	70
180x110	✓	✓	6	90
180x125	✓	✓	6	90
200x90	✓	✓	6	70
225x90	✓	✓	6	70
225x100	✓	X	6	90
250x90	✓	✓	7	56
250x90 (underclamp)	✓	✓	6	70
250x100	✓	X	3	90
250x150	✓	X	4	140
250x200	✓	X	3	140
280x90	✓	✓	7	56
315x90	✓	✓	7	56
315x150	✓	X	4	140
315x250	✓	X	2	197
355x90	✓	✓	7	56
355x150	✓	X	2	140
355x250	✓	X	2	197
400x90	✓	✓	7	56
400x150	✓	X	2	140
400x250	✓	X	3	197
450x90	✓	✓	7	56
450x150	✓	X	2	140
450x250	✓	X	3	197
500x90	✓	✓	7	56
500x150	✓	X	2	140
500x250	✓	X	3	197
560x90	✓	✓	7	56
630x150	✓	X	2	140

Normal service availability is 5 working days

UPLUS
Radius Systems Ltd
 Hilcote Plant
 PO Box 1
 Blackwell
 Nr Alfreton
 Derbyshire
 DE55 5JD



t: 01773 582312
f: 01773 582489
e: sales@radius-systems.co.uk
w: www.radius-systems.co.uk



Under-Pressure Gas Connections – Metallic Pipelines

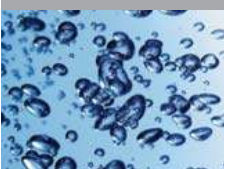
UPLUS supplies the gas industry with an extensive range of metallic under-pressure connections.

Our team of highly trained technicians have equipment to fit and drill off-takes covering 80mm to 450mm. The operation has minimal environmental impact with a reduction in excavation size compared to the alternative main cut-out option.

Increase in operational efficiency frees up valuable staff and contractor time

Benefits of the system:

- ▶ Calliper service offered to ensure correct fit to gas main, plus fitting, testing and drilling – optional emergency service/5-day standard service
- ▶ State-of-the-art vans and specialist equipment
- ▶ All installations carried out by fully trained GN02 operatives
- ▶ Once job is confirmed, the customer can be confident that the connection will take place on the required date, first time every time
- ▶ Each connection comes complete with full report, detailing serial numbers of pipes, fittings and valves, pressure test, plus two digital photographs showing completed connection and a geographical reference point in the background, so if required the connection can easily be found at a later date
- ▶ Reduction in excavation footprint
- ▶ All joints fully pressure-tested before connection is made
- ▶ Reduced number of joints in the system
- ▶ This system complies with ISO 9001
- ▶ Drill-only service also offered
- ▶ Offtakes available from 80mm to 450mm on any pipe diameter, and including cast iron, ductile iron and steel mains
- ▶ No disruption to customer gas supply, minimising complaints and improving utility company profile
- ▶ Reduced installation time





UPLUS can install under-pressure connections from 80mm to 450mm with size-for-size being the maximum off-take from any particular mains diameter.

All installations carried out using specialist vans and equipment

Under-pressure gas metallic connection range

BRANCH mm/inches	MAINS SIZE mm/inches									
	100/4	150/6	200/8	250/10	300/12	350/14	400/16	450/18	500/20	600/24
80	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
100	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
150	X	✓	✓	✓	✓	✓	✓	✓	✓	✓
200	X	✓	✓	✓	✓	✓	✓	✓	✓	✓
250	X	X	✓	✓	✓	✓	✓	✓	✓	✓
300	X	X	X	✓	✓	✓	✓	✓	✓	✓
350	X	X	X	X	✓	✓	✓	✓	✓	✓
400	X	X	X	X	X	✓	✓	✓	✓	✓
450	X	X	X	X	X	X	✓	✓	✓	✓

UPLUS
Radius Systems Ltd
 Hilcote Plant
 PO Box 1
 Blackwell
 Nr Alfreton
 Derbyshire
 DE55 5JD



t: 01773 582312
f: 01773 582489
e: sales@radius-systems.co.uk
w: www.radius-systems.co.uk



Encapsulation Saddle Permanent Repair Service



UPLUS, the field installation team from Radius Systems, provides a permanent repair service for damaged tapping tees on gas mains, operating at up to 2 bar pressure. The encapsulation solution uses Radius Systems branch saddle technology with additional safety features incorporated into the operational procedure. The safety features are primarily to create an inert atmosphere within the body of the saddle during the electrofusion process.

Trained technician preparing to fit blank plate



Benefits of the service:

- ▶ Service negates the need for a cut-out to achieve a permanent repair
- ▶ Minimal excavation
- ▶ The use of fully trained, skilled technicians, to effect permanent repair
- ▶ Minimal disruption to the general public and no interruption to supplies
- ▶ Optimum level of labour and materials required to carry out permanent repair
- ▶ Quick response time
- ▶ Minimising total costs through the use of a well-engineered solution
- ▶ All repairs carried out by GN02 fully trained operatives
- ▶ State-of-the-art vans and specialist Radius built equipment

UPLUS
Radius Systems Ltd
Hilcote Plant
PO Box 1
Blackwell
Nr Alfreton
Derbyshire
DE55 5JD



t: 01773 582312
f: 01773 582489
e: sales@radius-systems.co.uk
w: www.radius-systems.co.uk

Under-pressure PE water connection range

MAINS MAXIMUM OPERATING PRESSURE				
Size (mm)	Flange	Spigot	Bar rating	Hole size (mm)
90x90	✓	✓	12.5	70
110x90	✓	✓	12.5	70
125x90	✓	✓	12.5	70
160x90	✓	✓	12.5	70
160x110	✓	✓	12.5	90
180x90	✓	✓	12.5	70
180x110	✓	✓	12.5	90
180x125	✓	✓	12.5	90
200x90	✓	✓	12.5	70
225x90	✓	✓	12.5	70
225x100	✓	X	16	90
250x90	✓	✓	16	56
250x90 (underclamp)	✓	✓	12.5	70
250x100	✓	X	16	90
250x150	✓	X	16	140
250x200	✓	X	16	140
280x90	✓	✓	16	56
315x90	✓	✓	16	56
315x150	✓	X	16	140
315x250	✓	X	10	197
355x90	✓	✓	16	56
355x150*	✓	X	16	140
355x250	✓	X	10	197
400x90	✓	✓	16	56
400x150*	✓	X	16	140
400x250	✓	X	8	197
450x90	✓	✓	16	56
450x150*	✓	X	16	140
450x250	✓	X	8	197
500x90	✓	✓	16	56
500x150*	✓	X	16	140
500x250	✓	X	8	197
560x90	✓	✓	16	56
630x90	✓	✓	16	56
630x150*	✓	X	16	140
710x150*	✓	X	16	140

Normal availability 5-7 working days

*Please call to confirm availability

UPLUS
Radius Systems Ltd

Hilcote Plant
PO Box 1
Blackwell
Nr Alfreton
Derbyshire
DE55 5JD



t: 01773 582312
f: 01773 582489
e: sales@radius-systems.co.uk
w: www.radius-systems.co.uk



Under-Pressure Water Connections – For Metallic and Asbestos Cement Pipelines



The under-pressure metallic connection service supplied by UPLUS provides water utilities and installers with a cost-effective alternative to:

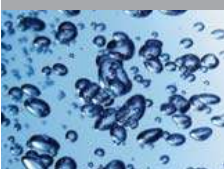
- customer notifications
- valve operations
- drain downs
- cut-outs

Drill only service available



Benefits of the system:

- ▶ All installations carried out by fully trained City & Guilds operatives
- ▶ No disruption to customer water supply, minimising complaints and improving utility company profile
- ▶ No customer notification required
- ▶ Once job is confirmed, the customer can be confident that connection will take place on the required date, first time every time
- ▶ State-of-the-art vans and specialist equipment
- ▶ This system complies with ISO 9001
- ▶ Callipering service offered to ensure correct fit to water main, plus fitting, testing and drilling
- ▶ Reduction in excavation footprint of up to 50%
- ▶ All joints fully pressure-tested before connection is made
- ▶ Reduced number of joints in the system
- ▶ 5-day standard service
- ▶ Optional emergency service
- ▶ Drill-only service also offered
- ▶ Significant increase in operational efficiency, freeing up valuable staff and contractor time
- ▶ Minimal administration and management
- ▶ Reduced installation time
- ▶ Offtakes available from 80mm to 450mm on any pipe diameter (size for size maximum offtake), materials including cast iron, ductile iron, steel and asbestos cement mains
- ▶ Each connection comes complete with full report, detailing pipes, fittings and valves pressure test report two digital photographs showing completed connection and a geographical reference point in the background, so the connection can easily be found at a later date





All installations are carried out by fully trained City and Guilds operatives

This connection service removes the inconvenience of customer supply interruptions.

Highly trained UPLUS technicians install the metallic under-pressure connections. The operation has minimal environmental impact with a reduction in excavation size compared to the mains cut-out option.

UPLUS can provide offtake sizes from 80mm to 450mm with size for size being the maximum offtake from any particular mains diameter.

Under-pressure water metallic connection range

BRANCH mm/inches	UNDER-PRESSURE WATER TEES										
	HOST MAIN SIZE (mm/inches)										
	80/3	100/4	150/6	200/8	250/10	300/12	350/14	400/16	450/18	500/20	600/24
80	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
100	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
150	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓
200	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓
250	X	X	X	X	✓	✓	✓	✓	✓	✓	✓
300	X	X	X	X	X	✓	✓	✓	✓	✓	✓
350	X	X	X	X	X	X	✓	✓	✓	✓	✓
400	X	X	X	X	X	X	X	✓	✓	✓	✓
450	X	X	X	X	X	X	X	X	✓	✓	✓

UPLUS
Radius Systems Ltd
 Hilcote Plant
 PO Box 1
 Blackwell
 Nr Alfreton
 Derbyshire
 DE55 5JD

t: 01773 582312
f: 01773 582489
e: sales@radius-systems.co.uk
w: www.radius-systems.co.uk





Specialist Connection Service for Sewers

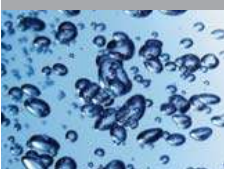
UPLUS provides an on-site installation service for specialist fittings to sewers, supplying water utilities and installers with a cost-effective alternative to existing methods.

Our junctions are the ideal solution for Section 106 surface water drain connections to existing sewer networks. They provide a safer and more economical alternative than traditional methods.

Significant increase in operational efficiency

Benefits of the system:

- ▶ Suitable for use with clay and concrete mains, the Radius junction is available in sizes 250mm to 2400mm with 150mm and 225mm inlets
- ▶ WRc approved in 2003
- ▶ All installations carried out by fully trained operatives
- ▶ Each connection comes complete with full report, plus two digital photographs showing completed connection and a geographical reference point in the background, so if required the connection can easily be found at a later date
- ▶ One-off installation or longer-term contracted partnership available
- ▶ All joints fully air tested to ensure integrity
- ▶ State-of-the-art vans and specialist equipment
- ▶ No protrusions into the bore of the main, leading to fewer blockages
- ▶ Significant increase in operational efficiency, as the operation including air testing is completed within two hours
- ▶ Minimal administration and management
- ▶ Once job is confirmed, the customer can be confident that the connection will take place on the required date, first time every time





The Radius junction is approved for use by Anglian Water, Northumbrian Water, Severn Trent Water, South West Water, Southern Water, Thames Water, United Utilities, Welsh Water and Yorkshire Water, in their respective operational areas.

Suitable for use with clay and concrete mains

Sewer fittings connection range

TRUNK MAIN SIZE (mm)	INLET PIPE SIZE (mm)	DIMENSIONS			PRODUCT CODE
		D1	L1	D2	
250	150	160	270	115	6UF25B
300	150	160	195	100	6UF30B
400	150	160	205	120	6UF40B
500-600	150	160	235	130	6UF50B
700-1200	150	200	235	190	9UF70B
200-400	225	200	350	120	9UF20B
500-600	225	200	350	140	9UF50B
700-1000	225	200	450	220	9UF70B
1200-2400	225	200	440	250	9UF120B

UPLUS
Radius Systems Ltd
 Hilcote Plant
 PO Box 1
 Blackwell
 Nr Alfreton
 Derbyshire
 DE55 5JD

t: 01773 582312
f: 01773 582489
e: sales@radius-systems.co.uk
w: www.radius-systems.co.uk





Under-Pressure PE Water Branch Saddle Connections

The electrofusion branch saddle connection service supplied by UPLUS provides water utilities and installers with a cost-effective alternative to cut-outs. The process removes the need for customer supply interruptions incurred with standard site installations and can be used in retrospective supply and fittings of hydrants and air valves.

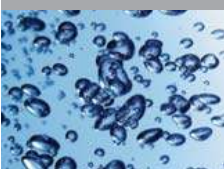
Branch saddles are installed with minimal environmental impact, as they reduce the overall size of the excavation.

Retrospective fit of air valves saves time and cost



Benefits of the system:

- ▶ No disruption to customer water supply, minimising complaints and improving the utility company profile
- ▶ No customer notification required
- ▶ Reduced number of joints in the system
- ▶ All joints fully pressure-tested before connection is made
- ▶ Once connection is confirmed, the customer can be confident that it will take place on the required date, first time every time
- ▶ All installations carried out by fully trained operatives who have City & Guilds under-pressure drilling and electrofusion welding as a minimum standard
- ▶ State-of-the-art vans and specialist equipment
- ▶ Each connection comes complete with full report, detailing serial numbers of pipes, fittings and valves, a pressure test report, plus two digital photographs showing completed connection and a geographical reference point in the background, so if required the connection can easily be found at a later date
- ▶ This system complies with ISO 9001
- ▶ Reduction in excavation footprint of up to 50%
- ▶ Significant increase in operational efficiency, freeing up valuable staff and contractor time
- ▶ Minimal administration and management
- ▶ Reduced installation time – no overruns or night-time shut-offs
- ▶ The branch saddle is also a cost-effective way of retrospectively fitting hydrants/air valves, saving time and cost





Accredited training courses from the experts

To help you get the most from your own people, and to encourage and build upon best practice, UPLUS offers training delivered by people with real experience in installing pipelines.

Via our City & Guilds and EUS accredited competency based training programmes, the UPLUS team are on hand to deliver courses that include the welding of plastic pipes, safe handling and various installation practices. With a purpose built classroom, high bay workshop and outside trench facilities, trainees can put theory into practice in a safe environment.



Training Course Programmes: Water

City & Guilds Butt Fusion Course

- ▶ Location: Hilcote
- ▶ Duration: 1 day
- ▶ Number of delegates: maximum 8 per course
- ▶ Includes City & Guilds registration and certification

City & Guilds Electrofusion Course

- ▶ Location: Hilcote
- ▶ Duration: 1 day
- ▶ Number of delegates: maximum 8 per course
- ▶ Includes City & Guilds registration and certification



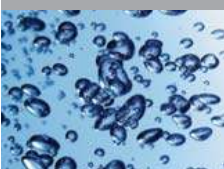
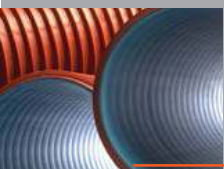
Safety Training Course Programmes

Coil Handling & Dispensing Course

- ▶ Location: Hilcote or off-site
- ▶ Duration: 1 day
- ▶ Number of delegates: maximum 6 per course

Pipe Bursting Course

- ▶ Location: Hilcote
- ▶ Duration: 2 days
- ▶ Number of delegates: maximum 6 per course





Accredited training courses from the experts

Training Course Programmes: Gas

Management & Supervisory Training Course (Engineering Update)

- ▶ Location: Hilcote or off-site
- ▶ Duration: 1 day
- ▶ Number of delegates: maximum 12 per course

Introduction to ProFuse Systems

- ▶ Location: Hilcote or off-site
- ▶ Duration: 1 day
- ▶ Number of delegates: maximum 6 per course



EUS Registered Suite of Mainlaying Skills Courses:

Medium Diameter Mainlayers (includes ProFuse) 200mm-355mm Course

- ▶ Location: Hilcote
- ▶ Duration: 1 day
- ▶ Number of delegates: maximum 6 per course

Large Diameter Mainlayers (includes ProFuse) 400mm – 630mm Course

- ▶ Location: Hilcote
- ▶ Duration: 2 days
- ▶ Number of delegates: maximum 6 per course

Repair Location & Maintenance Course

- ▶ Location: Hilcote
- ▶ Duration: 1 day
- ▶ Number of delegates: maximum 12 per course

Train the Trainer Peelable Pipe 250mm – 355mm Course

- ▶ Location: Hilcote
- ▶ Duration: 1 day
- ▶ Number of delegates: maximum 6 per course



UPLUS
Radius Systems Ltd

Hilcote Plant
PO Box 1
Blackwell
Nr Alfreton
Derbyshire
DE55 5JD



t: 01773 582312
f: 01773 582489
e: sales@radius-systems.co.uk
w: www.radius-systems.co.uk

