

### ProFuse Pipe Exposure Tool (PET)

**Single size tool**  
For all sizes of ProFuse pipe

**Direction marking**  
For clear and simple operations

**Plastic body**  
Lightweight and good site durability

**Sculpted runners**  
Protecting the retractable blade for precise one handed control

**Self-retracting blade**  
Giving greater control and safety



Recommended for the quick, simple and safe removal of ProFuse skin

Designed for the safe removal of the ProFuse skin. The hardened steel blade parts the skin and lifts its edge to allow it to be readily peeled.



### QuickTee Tapping Tee



The must-have innovative product for all your service connections.

The new QuickTee from Radius Systems is a technologically advanced electrofusion fitting developed to give substantial time and cost savings in gas service connection operations.

The QuickTee's unique feature is that the base of the fitting is welded at the same time as the service outlet in one single fusion operation, compared to the current standard 2-weld connection carried out onsite. It also has its own built-in pipe clamping mechanism to secure the service pipe in place during the fusion cycle, removing the need for additional expensive tooling.

Quick and easy to install, QuickTee is simple to use and requires no additional training.



### Installation and Training

To help with the correct installation of Radius and other products, RadiusPlus, the services division of Radius Systems, offers a range of 'Train the Trainer', City & Guilds and other training courses.

Please contact us on +44 (0) 1773 582312 for more information or visit [www.radius-systems.com/training](http://www.radius-systems.com/training)



## Radius Systems - Pioneers in PE Pipe Technology

Radius Systems is a leading force in the design and development of plastic pipes for the utilities and construction industries. We take care of the entire pipe lifecycle - from design and manufacture through to installation and repair, our products are used in more than 100 countries around the world.

- **Manufacturing facilities**  
With our own production sites, we have complete control over quality and speed, and the ability to meet the expectations of our clients
- **Innovative approach**  
We are leaders in our field with a history of research and new product development. Practicality, durability and adaptability are all high on our agenda and that of our clients
- **Flexible product and service provision**  
Our comprehensive range of services is designed to fit the variable demands of our client's developments including pipes, fittings, equipment sale or hire, training and support services
- **Reliability and safety**  
With over 40 years of design and manufacture, our clients know that they can count on us to meet not just their product and service needs, but also their delivery and safety requirements

### Have you seen...



## ProFuse Peelable Gas Pipe System

The solution for protection and non-scrape joining



For more information please visit our website: [www.radius-systems.com](http://www.radius-systems.com) or contact us:

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Stockist Stamp

The ProFuse gas pipe system is a major advance in pipeline technology which reduces lifetime system costs by improving installation quality and system reliability.

At the heart of the ProFuse system is a high performance PE100 polyethylene pipe which has a unique peelable skin. This skin protects the pipe from the moment it is manufactured to beyond the point of installation and reinstatement.

During manufacture, the protective skin is added to the pipe through melt on melt technology. Applying the protective skin before the core pipe emerges from the die head, prevents pipe surface contamination, either through oxidation or from physical contamination with dirt.

The skin is easily scored using the ProFuse pipe exposure tool (PET) without damaging the core pipe. Once scored, the peelable skin is removed by hand revealing a pristine pipe surface which is ready to be jointed without further preparation using electrofusion or butt fusion jointing techniques.

ProFuse is ideally suited for more aggressive NO-DIG installation methods. The tough protective skin on the pipe has been designed to absorb the damage that such challenging methods could produce in other types of pipe, making ProFuse the superior product in pipeline technology.

ProFuse peelable pipe is suitable for a range of gas applications including LPG, biogas and natural gas.

## Features and Benefits of using ProFuse

- UV protection**  
Peelable skin provides full UV protection increasing the longevity and stability of the pipe and enabling you to store the pipe for longer
- Damage protection**  
In trenchless technologies such as Pipe Bursting, Directional Drilling, Molding and Dead or Live Insertions, the tough ProFuse skin offers excellent abrasion resistance as it absorbs potential damage which can occur when using these techniques
- Reduced installation time**  
The unique peelable skin is easily removed and reduces the time required to prepare large diameter pipes for electrofusion socket fittings and saddles
- Optimum joint integrity**  
Peelable skin technology reveals a pipe surface suited to making welded joints with no further preparation providing better joint quality and integrity to your asset
- Full pressure rating**  
For pressure ratings see table

## Specifications and Approvals

- ProFuse pipe**  
Can be manufactured to GIS/PL2-2:2008 (BSI Kitemark), ISO4437-2:2007 (National Standards Authority of Ireland Certification) and DVGW GW 335A2 (DVGW CERT GmbH)
- ProFuse fabricated fittings**  
GIS/PL2-6:2009, approvals via BSI Kitemark
- Electrofusion fittings**  
Can be manufactured to GIS/PL2-4:2008 (typically yellow) (BSI Kitemark), EN1555 (Italian Institute of Plastics Certification) or DVGW GW 335B2 (DVGW CERT GmbH)

The main body of the QuickTee fitting can be manufactured to the electrofusion approvals listed in this brochure while it's unique socket is pending approval

Further details are available on request



## Product Information

Our standard approved range of ProFuse peelable gas pipe includes:

	White Core / Yellow Skin			Black Core / Yellow Skin	
	SDR 17 / 4 bar ISO 4437-2	SDR 21 / 2 bar GIS/PL2 Part 2	SDR 26 / 2 bar GIS/PL2 Part 2	SDR 11 / 10 bar DVGW GW 335A2	SDR 17 / 4 bar DVGW GW 335A2
90	✓	✓	New Eco Range coming in 2011 in 200 to 630mm	✓	✓
110	✓	✓		✓	✓
125	✓	✓		✓	✓
140	✓	✓		✓	✓
160	✓	✓	See next page for details	✓	✓
180	✓	✓		✓	✓
200	✓	✓	✓		
225	✓	✓			
250	✓	✓	✓		
280	✓	✓	✓		
315	✓	✓	✓		
355	✓	✓	✓		
400	✓	✓	✓		
440	✓	✓	✓		
450	✓	✓	✓		
500	✓	✓	✓		
560	✓	✓	✓		
630	✓	✓	✓		

Standard pipe lengths are 6 and 12m, standard coils are 50, 100 and 150m.

Coils available up to 180mm. 11.5m lengths are available for export



## Product Customisation:

No two projects are ever the same so to meet our customer's unique requirements we can customise our ProFuse peelable gas pipe in a number of ways:

**Variety of skin colours**  
Orange or black skin with a variety of coloured stripes is available in accordance with country-specific requirements or to identify different applications such as LPG, biogas or natural gas

**Special pipe sizes**  
Special sizes of pipe and fittings can be developed for specific projects to offer the least cost installation. For example, we have already developed special sizes including 296 and 440mm for close fit slip lining insertion

**Extra wall thickness / same pressure rating**  
For special installation methods such as horizontal drilling, we can increase the pipe wall thickness to resist installation forces while keeping the pressure rating of the pipe unchanged

**Range extensions**  
Distributors and asset owners wishing to adopt the ProFuse technology should get in touch with us to discuss how we could potentially extend the ProFuse gas range to meet your requirements

ProFuse peelable pipe is also available for water applications. Please see the ProFuse Peelable Water Pipe System brochure or contact your sales representative for more information.

## Related Products

### Electrofusion Fittings



Available in a variety of sizes, voltages, pins and in black or yellow

### Fabricated Spigot End Fittings



These fittings are butt fused in the workshop ready to be joined by butt or electrofusion onsite

Radius offers a range of electrofusion and fabricated fittings that are compatible with ProFuse pipe.

Visit : [www.radius-systems.com](http://www.radius-systems.com) for details

## New Eco Range in 2011

As part of our ongoing commitment to help our customers reduce their carbon footprint at the same time as cuttings costs, we have developed a new range of SDR 26 pipe which can be used instead of the thicker SDR 21 yet keep the same 2 bar pressure rating. Please contact your sales representative for more information.

- Benefits:**  
By reducing the wall thickness, we:
- use less material and so reduce the cost and the carbon footprint across the whole supply chain. Approximately 0.015 tonnes of carbon dioxide is saved for every 1kg reduction of PE100 pipe\*
  - create a larger internal bore hole which can be used for either extra capacity or to increase the terminal pressure and use smaller downpipes for further environmental and cost savings
  - reduce pipe production costs and pass these cost savings on to our customers

- Case Study:**  
In the UK, a major utility company that will use SDR 26 instead of SDR 21 pipe will benefit from:
- using over 500,000kg less of PE100 every year
  - saving nearly 8,000 tonnes of carbon dioxide per year\*
  - a 6% increase in network capacity or a 9% reduction in head loss in each 1km
  - decreased procurement costs of more than 10% or more than 15% over the pipe that it replaces

\*0.0353 barrels of oil are used across the supply chain (extraction, refinement, processing, production and transportation) for each 1kg of PE100 pipe (source: PP XIII technical paper by Osry & Tjabring). One barrel of oil has 0.43 tonnes of embodied carbon dioxide (source: US Environmental Protection Agency www.epa.com).

## ProFuse Bead Gauge Kit

**ProFuse Bead Gauge Kit**  
All you need to comply with the gas industry best practice

This essential kit comes in a handy plastic pocket with waterproof contents making it ideal for on-site use. Each kit contains:

- 6-18mm Bead Gauge
- 19-28mm Bead Gauge
- Recommended Bead Widths Reference Card
- Butt Fusion and Electrofusion Jointing Instruction Booklet

Now available to buy online at: [www.radius-systems.com/shop](http://www.radius-systems.com/shop)

