

# FIREFLY

GMAW/FCAW/GTAW orbital weld system



[www.ipwl.co.uk](http://www.ipwl.co.uk)

firefly – an IPWL product



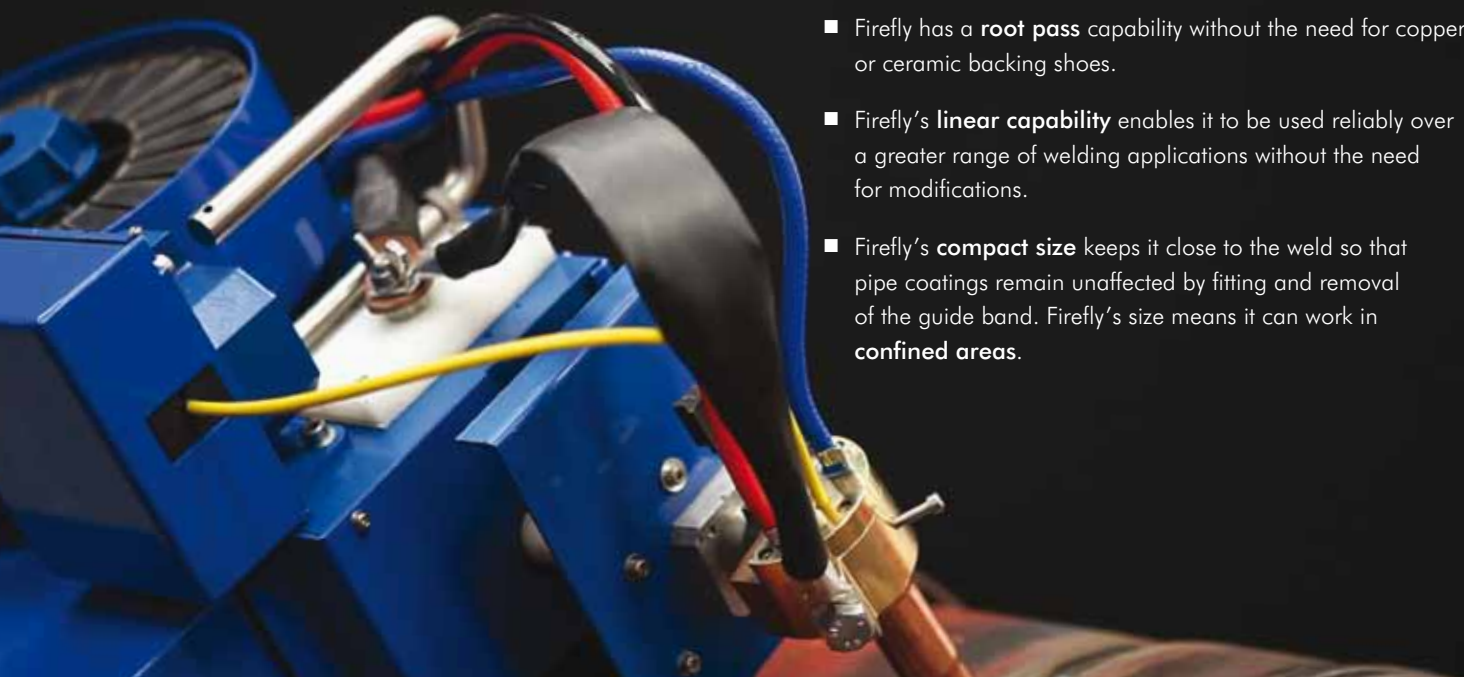
The Firefly welding bug is IPWL's brand new semi-automatic external pipeline welding machine designed and manufactured in the UK by IPWL. The Firefly's unique features combine to give you a smarter welding machine that works with you in the most demanding situations.

The Firefly is designed to meet the most rigorous standards and is particularly suited to applications requiring a high level of weld repeatability.

The Firefly welding bug is full of innovative features to make your life easier:

- Firefly's **self adjusting legs** keep adjustment between pipe sizes to a minimum and allow a greater range of pipe sizes to be welded on one set of legs.
- Firefly uses an **industry standard IPC** controller to enable customisation of software.

- Firefly's state of the art operator's control is ergonomically designed for **intuitive operation**. Constructed from high impact composites and with military grade switches, Firefly's 'workbox' offers a long life and reliability. A hi-visibility display allows ease of parameter identification and operator tolerance.
- Firefly uses a password protected, simple to use **touchscreen HMI**. Visual programming simplifies the parameter setup – 50 parameter memories come as standard.
- Firefly's **lightweight design** allows for ease of handling. Health and safety lifting related issues are reduced
- Firefly's **simple band clamping** system allows fast and effective clamping and removal of the machine to the weld band. A **quick release** system on the weld band means fast set up times are possible.
- Firefly can be used on a magnetic or vacuum mounted **flat track**.
- Firefly's **bi-directional** capability eliminates the need for separate left and right hand bugs.
- Firefly has a **root pass** capability without the need for copper or ceramic backing shoes.
- Firefly's **linear capability** enables it to be used reliably over a greater range of welding applications without the need for modifications.
- Firefly's **compact size** keeps it close to the weld so that pipe coatings remain unaffected by fitting and removal of the guide band. Firefly's size means it can work in **confined areas**.



- Firefly has both hardwire and flux core welding **capability** due to the high torque motor installed, effective feed of both types of weld wire is possible. Firefly also has **TIG** capability.
- Firefly's **on board monitoring** of service schedules enables accurate servicing.
- Firefly's **military specification** connectors give rugged electrical and data connections prolonging the life of umbilical and remote connections
- Firefly **offers choice** – a range of water cooled MIG or TIG torches; wire on board or wire off board models are also available.
- Firefly is compatible with suitable inverters from **all manufacturers**.

### What's included?

- The firefly
- The operator remote control
- Starter kit – spares kit and operator tool kit
- High impact carry case
- Gas Box
- Service manual including recommended spares list
- Operator Manual
- Free access to our helpline for one month after delivery
- Free product familiarisation (two days) for up to one technician and one weld supervisor to take place at IPWL or on-site (subject to travel costs).



## INDUSTRY APPLICATIONS

- ✓ Oil, gas and water pipelines
- ✓ Wind and wave farm construction
- ✓ Large diameter vessel fabrication
- ✓ Chemical and petrochemical facility construction
- ✓ Steam pipes
- ✓ Tubular structures
- ✓ Pressure vessel construction
- ✓ Internal welds
- ✓ Shipyard construction work
- ✓ Power plant construction, nuclear and conventional
- ✓ General fabrication

### Firefly's versatility

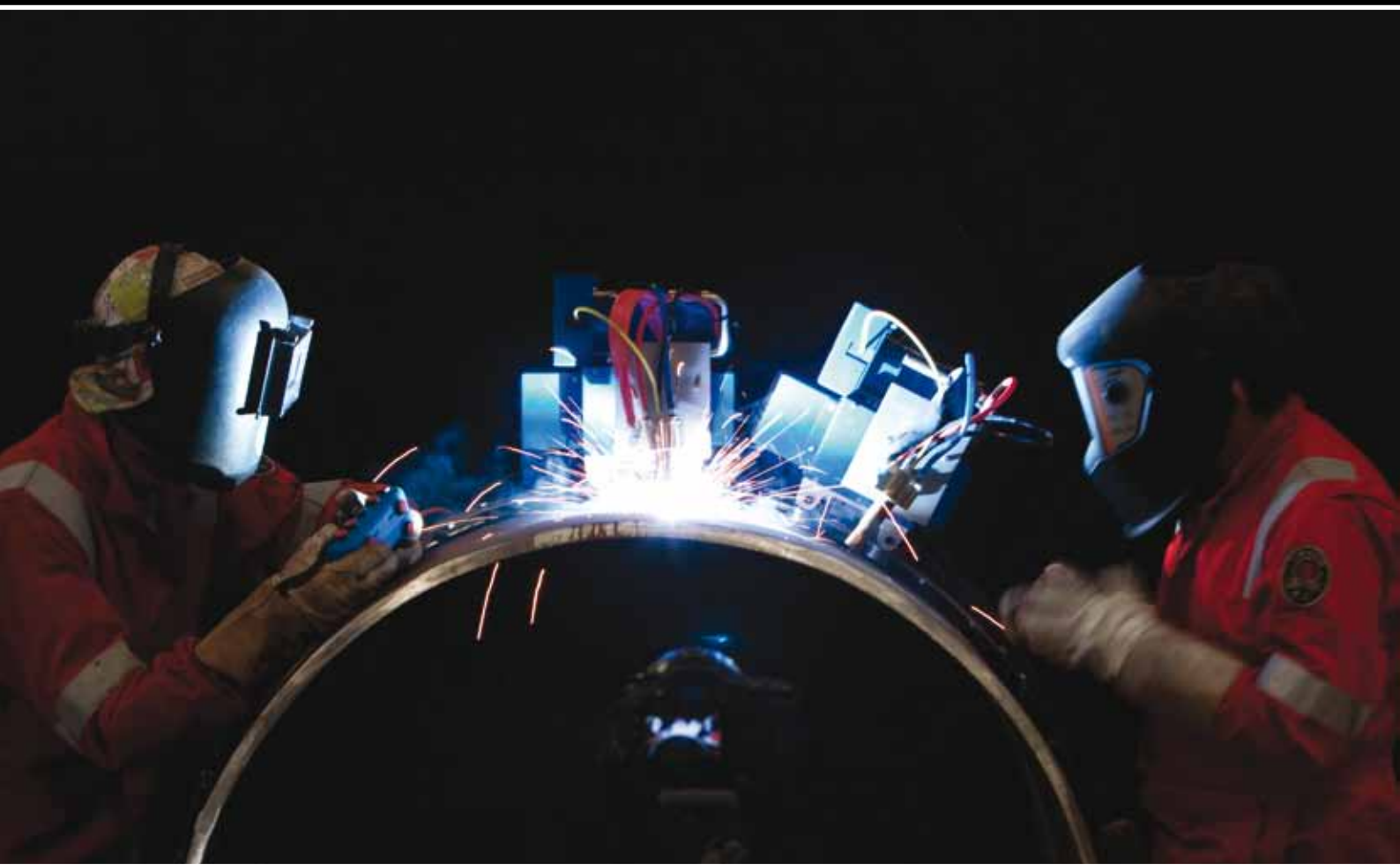
Firefly offers choice in the degree of automation, from a semi-automatic machine to a fully automated system. Firefly is modular and scalable – a range of software and hardware options means Firefly can adapt to suit your changing requirements.

- The addition of a seam laser will enable automatic weld seam tracking, automatic torch height adjustment and the ability to profile scan the weld
- A spot laser will give a simple but accurate automatic torch height adjustment
- Varying degrees of control of inverter communications – from simple arc switching to full analogue or digital options
- Communication protocols can include RS232, RS485, DeviceNET, MODbus, PROFibus, CANbus, ethernet or other fieldbus formats
- Sector control and job programming; customisable sectors to give the maximum flexibility and repeatability to parameters
- Data logging for enhanced traceability, analytical purposes, documentation or ISO compliance
- Enhanced security features
- Connectivity to allow downloadable software updates and remote assistance
- Vertical oscillation capability for fillet weld applications
- Blade style control system to facilitate fitting of enhancements

# SPECIFICATIONS

Min Weld Diameter*	8 Inches (250mm)
Max Weld Diameter	Flat ( $\infty$ )
Max Wall Thickness*	3 Inches (75mm)
Max oscillation width	2 inches (51mm) (Independently adjustable in 0.001 inch (0.01mm) increments)
Dwell Time	0- $\infty$ (independently adjustable in 0.01s increments)
Travel speed*	0-270 Inches (0-6858 mm) per Minute
Wire Capacity*	0.8-1.0-1.2 mm Flux core or Hard Wire with 5 KG Spool
Machine Weight	16kg Gross, 11kg Net

\* Denotes standard features. These can be changed subject to requirement.



For further information on the Firefly, please contact us:

**Phil Wainwright**

**Tel: 44 (0) 1535 633 828**

**info@ipwl.co.uk**

**www.ipwl.co.uk**

IPWL Ltd | Unit 5 Enterprise Centre | Skipton Road | Cross Hills | Keighley BD20 7BX | United Kingdom

The Firefly welding system is designed and manufactured in the UK by IPWL Limited | 