

# SGS240

## SPOOL GUN SYSTEM



*A professional ready to weld spool gun system,  
Designed to fit any machine with a Euro adaptor*

### Safety

Before using make sure all operators are familiar with the welding process and have had appropriate training relating to all the risks involved.

The Health and Safety Executive publish documents regarding this such as ISBN 0 7176 0704 6

(Electrical safety in arc welding), and many others.

When welding or cutting in an environment with increased risk of electric shock extra precautions must be observed. Typical conditions with increased risk of electric shock are working in wet or damp conditions, working inside vessels, working in cramped conditions and exposed to conductive parts, etc. **DO NOT TAKE ANY RISKS** objects. This machine is designed for use indoors and must not be used in the rain or a wet environment.

### **STANDARD FEATURES ARE:**

- **Very good welding performance on aluminum and stainless and mild steel.**
- Robustly constructed gun assembly for a long life.
- BZL compatible consumables.
- Very flexible 8M coaxial cable assembly.
- Standard euro fitting on cable.
- Infinitely variable speed control on handle.
- System can be moved from machine to machine with ease.
- User friendly gun which is well balanced for minimum operator fatigue,
- No separate control box is necessary so easier to set up & move around.
- No separate power supply is needed gun runs on welding voltage only.

### **SGS240 TECHNICAL SPECIFICATIONS:**

Welding wire size,	0.8mm - 1.2mm
Spool size,	102mm x 45mm
Consumables,	SGS240 compatible (M8 tips)
Wire feed speed	3 - 18 meters per min
Welding voltage range	15-60V DC
Welding current rating (mixed gas)	240A max current @ 40%, 200A @ 60%

### **INSTALLING AND USING THIS EQUIPMENT**

The welding torch connects to the welding power source torch Euro fitting, the wire feed on the welding machine should be disabled to stop wire being pushed into the spool on gun torch. The black module (part of the torch lead) near the Euro connector has a single pole black socket fitted which needs a connection the welding earth (negative). This connection can be made using the 4mm plug or simply a wire under the screw. The wire can be attached directly to the work piece or welding clamp or directly onto the negative output socket on the power source, this can even be an unused inductance terminal etc.

A spool of wire can now be fitted to the torch; the end of the wire must be straight and must be guided through the tube and through the rollers.

The roller pressure is adjustable and set by a screw & spring, the pressure should be adjusted to just give adequate drive to the wire, do not increase pressure too much.

There is an adjustable break to stop over run of the wire spool and snags that normally follow, this break is adjusted by the screw in the center of the spool and should be set to give enough braking to stop the reel at the finish of a weld and not over run, do not set too tight.

Welding can now be carried out using the torch like a conventional MIG torch, the speed of the wire is set by the knob on the torch, welding voltage is set on the welding power source as normal.

### **FAULT FINDING**

#### **Fault pulling torch switch causes machine to energize briefly & then stop**

- 1) Check control lead is plugged into work terminal (negative) & plugged into SGS240 spool gun box.
- 2) Possible welding power source fault check it welds with a standard MIG torch.

#### **Fault pulling torch switch results in nothing happening.**

- 1) Try pressing test button on SGS240 module if that causes machine to energize hold in for 1 min, release & try pressing torch switch again.
- 2) Possible welding power source fault check it welds with a standard MIG torch.
- 3) Possible SGS240 fault contact your supplier

## Parts list

Description	part no.	SGS240
TIP ADAPTOR		SGS2412
GAS DIFFUSER		SGS2405W
CONICAL NOZZLE		SGS2416
TORCH NECK ASSY		SGS2417
COMPLETE HANDLE ASSY		SGS2401
POTENTIOMETER		SGS2402
WIRE FEED MOTOR ONLY		SGS2403
SPOOL COVER (door)		SGS2404
TORCH TRIGGER		SGS1006
LINER FOR NECK		SGS2407
ROLLER 0.8/1.0MM		SGS2408
PRESSURE ROLLER & BUSH & SCREW		SGS2409
TENSION SCREW		SGS2410
TENSION SPRING		SGS2411
WHITE INLET GUIDE		SGS2413
PRESSURE ARM ONLY (cast aluminium)		SGS2414
MOTOR GEARBOX ASSY COMPLETE		SGS2415
ELECTRONIC MODULE COMPLETE		SGS1015
BRAKE RUBBER & NUT & SHAFT (compl spool hol)		SGS2419
4M WORK LEAD C/W PLUG		SGS2418
8 M CABLE ASSY ONLY		SGS2420
KNOB ONLY FOR SPEED CONTROL		SGS2421
PCB (in control box) ONLY		SGS1020

## **MAINTENANCE**

The operator should carry out daily checks of all cables and connections etc; any faults must be reported to a competent person and the machine taken out of service until repaired.

Keep this machine a clean dry environment.

Do not attempt any electrical repairs without first isolating any incoming mains power supply.

Do not attempt any electrical repairs unless fully competent.

Do not attempt any maintenance or inspection of the feed mechanism without switching machine to off or there is a risk of bodily crush damage in the wire feed.

The welding torch & wire feed roller mechanism needs to be checked & cleaned regularly to ensure best performance; the torch neck liner will need replacing after a few rolls of wire or every few months.

The wire feed roller should need be replaced each year for optimum feeding.

Contact your supplier for assistance with any faults.

It is necessary for a comprehensive service inspection and test to be carried out at regular intervals by a competent person and documented. This should be no less than every 12 months or sooner in harsh operating conditions.

*If correctly maintained this machine should give a long trouble free life.*