# WA Technology

### What is a *SilverShield GSS™?*

SilverShield GSS

Our FB3 and FB4 model GSS's (Patented Gas Saver System)

fit smaller shops and home welders. *Cuts* gas waste while improving the gas *Shield*. They assist as skills develop to produce quality, good looking welds or perhaps to become a master welder!

Smaller size welders typically use lower volume gas cylinders. They are often used to make shorter welds and tack welds. The *"gas blast"* at every weld start not only wastes gas it leads to excess spatter, poor weld shape, and possibly internal porosity. The starting gas flow surge pulls air into the shielding gas stream. The turbulent flow created lasts for a short time even after flow rate reduces until the desired laminar flow is attained. This inferior gas shield exists for much of a short weld! Peak flow rates can exceed 150 CFH.

By saving wasted shielding gas at the weld start, higher gas flows can be used while welding in drafts or outdoors. This provides better weld quality while still using less total gas!



Larger shops have gas cylinders delivered; small shops and home users have to spend money for fuel and waste time to have them refilled. With a *GSS* a gas cylinder can last over twice as long when making mostly short welds. There is also less risk of running out of gas when working on a weekend!

#### Testimonial



Al Hackethal sent this email after purchasing a 3 foot, FB3 *GSS* for his small MIG welder. "Well, I can't believe it. I never thought a hose could make that much of a difference. The weld quality (with the *GSS*), and even penetration is considerable better. Almost no spatter! The weld seemed to be hotter and I turned my MIG down a notch.

Initially thought that my imagination had kicked in, but then realized that the gas I'm buying is actually working the way it's supposed to. Glad I found your website. This is one of the few things that really works better than any info could suggest. I understood the theory, though

in practice I understood it much better after the first couple of welds. Now I have better looking welds and almost no spatter, which means less grinding and finish work! In addition, the tip was cleaner after the job I just did.

### **Patented GSS**

The patented *GSS* reduces shielding gas waste by utilizing a smaller diameter gas delivery hose that reduces the gas stored at each weld stop by over 80%. This reduces the starting gas surge. It also incorporates a peak flow restriction orifice in the welder end of the hose. This helps reduce gas waste and improves weld start quality by limiting peak flow rate turbulence.



## **Production Results**

Our website; <u>www.NetWelding.com</u> has much more *GSS* information including examples of customer gas savings. They typically report 40 to 50% savings and when making many short welds, over 60%. One user reported welding 632 parts with one gas cylinder that would have previously required 2.7 gas cylinders to complete!

#### **BOTTOM LINE**

- The *GSS* cuts gas waste using a small ID, heavy wall thickness hose incorporating a peak flow rate limiting restrictor. This cuts starting gas surge by over 80%.
- The *GSS* provides better quality weld starts by reducing shielding gas turbulence. For short welds, excess turbulence can last for much of the weld.
- It pays for itself in one gas cylinder refill. Over 10,000 are in use.
- Instructions supplied with *SilverShield GSS* products include shielding tips for smaller welders. This includes why you should *NEVER* use a self-shielded flux cored wire in combination with a gas shield!

US Patent # 6,610,957; Canadian Patent #, 2,455,644

"Cut" Gas Waste - Improve Gas "Shield"

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