**Why are Argweld® Inflatable Purge Dams the Clear Choice for Pipe Purging?**

When welding stainless steel, chrome or other types of pipe that require an oxygen-free weld, there are several types of Purge Dams available to accomplish the goal. Of course when comparing these various weld-purging options the question is: which type of purge dam or system is the most effective and the most cost-effective? In other words, which type of purge dam is the best tool for the job? The following comparison points clearly demonstrate why Argweld® Inflatable Purge Dams are the best choice:

1. Argweld® Inflatable Purge Dams are the most effective and reliable.

- They provide a **100% airtight seal** on the pipe ID on either side of the weld route…every time. Once the dams are pulled into position and the gas is turned on they inflate firmly against the pipe ID providing a perfect seal. It is almost impossible to compromise the seal or lose a purge as the dams will not become dislodged once inflated. *Other methods including paper, cardboard, pre-formed paper dams etc. have numerous possible leak paths that can allow the purge to be compromised due to tape coming loose, holes in paper dams, dams becoming dislodged, gaps where the hose is inserted etc.*
- The Argweld® Purge Dams allow the welder to pump as much or as little gas (usually Argon) into the weld-purge area eliminating the fears of over-pressurizing the weld or losing a purge due to too much or too little gas.

2. Argweld® Purge systems are the most cost-effective method of pipe purging. **They are much faster and use much less gas than conventional purge dams.**

Argweld® inflatable purge dams are the fastest pipe purging method by far.

- There is virtually **no time wasted building or setting up purge dams, and no time wasted purging long sections of pipe**. The inflatable purge dams are designed to be easily pulled through extensive lengths of pipe and around elbows into position right where the purge is needed, and from one weld to the next. *Other types of dams not only waste time building / taping them in place, they often can not be placed right where they are needed and result in having to purge large sections of pipe.*
- Once the weld is completed and the purge system is deflated, it can easily be pulled through the piping (including elbows / 90's etc.) to the next weld location. *Other purge system designs such as discs can and have become jammed or stuck in the pipe with no way to remove them other than cutting the pipe.*
- Due to their superior design, the actual purge times with Argweld® systems are extremely fast. For example, an **8" pipe can be purged to less than 1% O2 in less than one minute and a 12" pipe in about 90 seconds.** In a comparison study based on side-by-side tests using Argweld® Quick-Purge systems vs. conventional foam dams on 16" and 20" pipe the Argweld® systems were up to 8 times faster…the results speak for themselves.

Argweld® purge systems also offer huge savings from reduced gas consumption. They typically use **less than 1/3 the amount of gas** that is used with other types of purge dams.

Comparison of Purge Times and Gas Consumption Based on Side-By-Side Testing with Argweld® Quick-Purge Systems and Conventional Foam Dams

**Comparison of Time to Purge:**

**Actual Purging Time (does not include time required to build dams)**

| | Quick-Purge | Foam Dam |
|---|---|---|
| • 16" Pipe | 3 minutes | 10 minutes |
| | (333.3% longer for conventional foam dams) | |
| • 20" Pipe | 4 minutes | 12 minutes |
| | (300.0% longer for conventional foam dams) | |

**Total Purging Time (including 15 minutes for building / set-up of conventional dams)**

| | Quick-Purge | Foam Dam |
|---|---|---|
| • 16" Pipe | 3 minutes | 25 minutes |
| | (833.3% longer for conventional foam dams) | |
| • 20" Pipe | 4 minutes | 27 minutes |
| | (675.0% longer for conventional foam dams) | |

**Comparison of Total Gas Consumption (Liters of Argon) for welding 16" and 20" SS Pipe:**

| | Quick-Purge | Foam Dam |
|---|---|---|
| • 16" Pipe | 861 Liters | 3120 Liters |
| | (362.7% more Argon used with conventional foam dams) | |
| • 20" Pipe | 1078 Liters | 3888 Liters |
| | (360.6% more Argon used with conventional foam dams) | |