The cost of items purchased from a welding distributorship represents less than 10% of the cost of the finished weld. That sounds unbelievably low, but we can prove it. The other 90% is labor, power, and capital costs. The question is, how can you manage those costs if you don’t measure them? How do you know if you are getting better if you don’t benchmark them?

Several years ago Airgas created an Advanced Fabrication Technology group with the mission of finding ways to help manufacturing firms become more profitable – not through lower acquisition costs, but through greater welding efficiency. Because of our geographical scope, and organizational depth, we were able to collect massive amounts of production and consumption data from around the country, and across many market segments. That has afforded us the opportunity to create a profile of what is “great,” what is “good,” and what doesn’t measure up. That template, when held up against any individual account’s purchasing data, provides guidance relative to where improvements can be made. Those improvements are more than just theoretical suggestions. These improvements can be implemented, and we can help accomplish that. Our team carries AWS certifications, and we are very comfortable on the shop floor.

Some statistics to consider:

- The average manufacturing facility in the United States purchases three times more shielding gas than needed. Why would they do that?
- A typical welder pulls his trigger less than 15% of his work day, or less than nine minutes out of every hour. The very best operate at a 30% level. Where are you?
- The average welding operation uses one grinding wheel for every 65 lbs. of welding wire purchased. The best operations use one wheel for every 248 lbs. of wire used Why the difference?

Our group recently:

- Improved travel speed on a continuous tube mill by 50%, enabling the customer to take on work that had previously been unprofitable.
- Increased welding speed by 52% at a truck body manufacturer with seven locations on the east coast.
- Decreased gas consumption at a firm from 7,000,000 cubic feet per year, to 1,400,000 cubic feet per year, while helping them to increase throughput. That’s an 80% reduction in purchased gas!

We are helping our customers improve quality, compete more effectively, and increase their competitive edge. We might be able to help you, too.

Let’s get together to discuss that.

Contact your local account manager today!
Weld Efficiency Analysis Benefit Description

The Airgas Weld Efficiency Analysis deals with understanding the relationship between weld process efficiency and consumable usage. This initial process takes very little time and includes gathering information on key purchased consumables used in the welding process. The purchasing data is used to develop specific ratios to help uncover hard cost savings that can be gained quickly.

The following key ratios will be worked on developing:

- Gas to Wire
- Wire to GMAW Gun Consumables
- Wire to Labor Hours
- Flux to Wire
- Wire to Grinding Discs
- Wire to Anti-Spatter

The analysis of these ratios, and the comparison to over 700 reports compiled from across the U.S., often points to areas for improvement that usually would have never been identified.

We have discovered that the average metal manufacturing company purchases twice as many welding consumables than necessary due to inefficiencies in their welding system. We have also discovered that the average manufacturer purchases three times more shielding gas than necessary for their application. This overuse also points to the root causes for rework.

The analysis of purchasing history is a method to identify areas that lead the way for manufactures to improve their ability to compete in the business in which they are engaged.
What are blood tests? Why do we have them performed?

Blood tests help doctors check for certain diseases and conditions. They also help check the function of your organs and show how well treatments are working.

Specifically, blood tests can help doctors:

- Evaluate how well organs — such as the kidneys, liver, thyroid, and heart — are working.
- Diagnose diseases and conditions such as cancer, HIV/AIDS, diabetes, anemia (uh-NEE-me-eh) and coronary heart disease.
- Find out whether you have risk factors for heart disease.
- Determine whether medicines you're taking are working.
- Access how well your blood is clotting.

Blood Work Overview

Blood tests are very common. When you have routine checkups, your doctor may recommend a blood test to see how your body is working.

Many blood tests don't require any special preparations. For some, you may need to fast for 8 to 12 hours before the test. Your doctor will let you know how to prepare for blood tests.

During a blood test, a small sample of blood is taken from your body. It's usually drawn from a vein in your arm using a needle. A finger prick also might be used. The procedure usually is quick and easy, although it may cause some short-term discomfort. Most people don't have serious reactions to having blood drawn.

What is a Weld Efficiency Analysis? Why would you have one performed?

An Airgas Weld Efficiency Analysis helps business owners and management personnel check certain aspects of their welding and cutting operations to make sure it is as efficient as possible. This in turn will make them more competitive and profitable.

- Evaluate your welding or cutting process to see if it is costing you more than it should.
- Diagnose common areas where improvement can be achieved, reduce weld volume, reduce gas volume, improve productivity, improve quality and improve operator efficiency.
- Find out how your business performs on a national average.
- Check whether processes are performing to your expectations.
- Assess how well your processes are contributing to your company's overall health.

Weld Efficiency Analysis Overview

The Process Survey starts out with a welding/cutting process evaluation. This consists of a walkthrough of your plant, and a simple form to be filled out.

The Efficiency Analysis form doesn’t ask for pricing. Only current purchasing data is needed to get a snapshot of the health of your organization.

The procedure is quick and easy, although it may cause some short-term discomfort. Most companies don't have a serious reaction to having the analysis performed.
**Blood Work Analysis**

Laboratory (lab) workers draw blood and analyze it. They use either whole blood to count blood cells or they separate the blood cells from the fluid that contains them. This fluid is called plasma or serum.

The fluid is used to measure different substances in the blood. The results can help detect health problems in early stages, when treatments or lifestyle changes may work best.

Doctors can’t diagnose many diseases and medical problems with blood tests alone. Your doctor may consider other factors to confirm a diagnosis. These factors can include your signs and symptoms, medical history, vital signs (blood pressure, breathing, pulse and temperature), and results from other tests and procedures.

**Weld Efficiency Analysis**

Airgas Weld Process Specialists take your purchasing data that you have provided and prepare a quantitative and qualitative review of your operation. The process includes a detailed analysis, reporting and recommendations based on our database of 700 companies to benchmark your welding system’s health.

The report quantifies and lists areas for possible process improvement.

The review is shared with management so objectives and goals can be established.

Action plan projects are planned and prioritized, changes are made based on achieving the desired results, and training for those results is implemented.

Ongoing Analysis and Training is tracked and compared to the desired results, changes are made to achieve results, and “Train-the-Trainer” education for continual process improvements is developed.

**Outlook**

Blood tests have few risks, but the information they provide can help you lead a happy and healthy life. An Airgas Weld Efficiency Analysis doesn’t have any risks, but like the blood test, it can lead to a more profitable and competitive business in today’s market. Whether you have a manual or automated process, assuring that every facet of your welding or cutting operation is as efficient as possible will make you more competitive and profitable.

The Airgas Advanced Fabrication Team can show you how.

Contact an Airgas representative TODAY if you are interested in having a Weld Efficiency Analysis performed and benchmark your operation against the best!