



# ARCOS Industries LLC

## Niche player aims for global market

After a period of economic anxiety, Arcos Industries LLC – former Arcos Alloys Corporation – is making a comeback. Since its very earliest days it has been filling a market niche as a manufacturer of welding filler metals, aiming for US markets that the bigger players have left untouched. Now, with renewed confidence, Arcos is preparing to set sail for other markets and expand its business, a change of tack symbolised by its new name. Stainless Steel World went to Mount Carmel, Pennsylvania, to speak with President Rick Laubach and Vice President David Kessler to learn more about their plans for the future.

Before talking about the issue of market expansion, Mr. Kessler first explains the background of their company. “Ever since 1919, when Arcos was founded, we have been manufacturing quality welding filler materials for the industry’s most demanding requirements. We have always been involved in these high-quality niche markets as we found that we were able to service them much better than the mass volume players. Our company is big enough to meet any requirements a customer may have, and small enough to be able to respond to customers’ changing needs.” One such customer, celebrating its 20th Anniversary this year is Sterling Boiler & Mechanical Inc. of Evansville, IN. Sterling is a world-wide construction fabricator of, but not limited to, lining, duct work, pre-fab panels and tubing for the power generation industry. Rodney Ahrens, weld supervisor, comments: “One of the more difficult nickel alloys to weld

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is the ERNiCrCoMo-1 (Arcos 617). Their sales and technical support team worked closely with us in our particular application until we gained the confidence that their products proved to have a consistent quality spool after spool, and I’ve tested a lot of other wire. They stock and release the products as I request which makes scheduling my shop orders easier and helps keep inventory costs down.” Obviously, offering a wide variety of high-quality products is one of the first conditions for survival in niche markets. To achieve this, Arcos has set up a quality system that is second to none. Behind every product now in Arcos’ portfolio lies an enormous amount of research and development. The company has its own weld and chemistry labs, and has recently expanded its research capabilities with a high-tech

metallurgical microscope, digital camera and scanning software, which is able to analyse material behaviour. Weld deposit chemical analyses are performed on an optical emissions spectrometer. It should therefore not come as a surprise that Arcos' ongoing drive to manufacture the best products available has meant that it has achieved vital industry certification approvals. Mr. Laubach: "Our specialisation and certifications really set us apart from others. For example, Arcos was the first welding manufacturer in the world to receive the ASME certificate for nuclear approval in 1971, and have maintained it ever since. Furthermore, our military qualifications show our abilities to manufacture a quality product. In addition to stainless and nickel alloy filler metals we supply consumable weld inserts for the Navy's nuclear submarines to the highest standards possible. You can imagine the importance of a high-quality weld in submarines and what can go wrong if there is a failure." Consumable weld inserts are placed between two pipes and consumed into the weld, Mr. Laubach explained, leaving an extremely smooth weld surface as opposed to when a backing ring is used. They are in especially high demand in the ship building industry. Vigorous R & D also goes into the coating formulation of Arcos' coated electrodes, Mr. Laubach said. "We specialise and customise formulas to meet chemistry requirements for specialised customer applications. We can, in fact, build a product to his demands by working together with him in the development stage."

Besides product development and testing, Arcos' quality system is also integrated into the actual production line. Traceability is an essential element in the system. Every step of every order is monitored. Even when hundreds of orders are going through production at the same time, each and every one of them can be administratively tracked down in order to establish its status. In this way, Arcos is able to adapt production schedules to changing demand and accommodate, for instance, rush orders as well as inform their customers on order progress. Mr. Kessler: "We think that the least surprises you can give a customer, the better it

is. It is part of our policy of building up long-term customer relationships and has proven its value in the long run. To give you an idea, some of our customer relations go back 30 plus years!"

Another first in the welding industry, introduced by Arcos is the Flag Tagging method of identification for bare TIG wire. Every finished piece of wire is tagged for identification and, today, by double tagging, inkjet printing, color coding or lot marking customer's wire, Arcos ensures from beginning to end that the product is exactly what the customer is expecting. After tagging, low alloy wires are put in

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heavy-duty bags, which are purged with argon gas to eliminate any possibility of contamination. The bags are then vacuum-sealed and packed in corrugated boxes, ready for shipment. In order to attain stringent Navy standards, covered electrodes are packaged in hermetically sealed cans to meet waterproof requirements. During a tour of the final packaging and inspection facilities, it became very clear that these final steps in the total quality that Arcos maintains, is as vital as the manufacturing process itself.

**REVOLUTION**

Arcos has reached a position in which it is ready to expand its market position in the USA and Europe. The first step is to increase its production capacity to support higher demand. New equipment has been acquired to achieve that goal. In addition, it will allow Arcos to produce new products that, according to Mr. Laubach, will revolutionise the industry and become an important pillar of Arcos' business. "Early this year we started Arcos Thermal Systems, our thermal spray division. We think that there is an enormous potential for it to grow, as the applications for thermal spray are virtually endless. Of course, the concept of thermal spray is not new but we have taken it, turned it around, and improved it to a high-quality product, ready to find its way to any kind of industry." But first, Mr. Laubach said, Arcos has to convince the industry that thermal spray is no longer the problem child it used to be. To illustrate the reliability of Arcos' thermal spray, the company has already built up a library of R & D data as well as test data. According to Mr. Laubach, thermal spray can extensively increase the lifetime of vessels, tanks, pipes etc. and even function as a replacement for hard chrome materials. It will therefore easily find its way into the pulp digester and boiler industry, for instance, or any other highly abrasive, corrosive environment. Mr. Laubach: "Our Arcos No.2 is a thermal spray wire product that is ready to hit the market. We're focusing on the utility industry first but expect to be able to reach other markets as well in the future." The Arcos Thermal

**FACTS & FIGURES**

<b>Name:</b>	Arcos Industries, LLC
<b>Place:</b>	Mount Carmel, PA, USA
<b>Employees:</b>	70
<b>Product turnover:</b>	3 – 4 million pounds per year
<b>Sales agents:</b>	New locations in the UK and other parts of Europe as well as over 100 in the USA and Canada.
<b>Certifications:</b>	A.S.M.E., AWS, AMS, NUPIC, CWB, ABS, Military. Automotive grade approval for GM, Ford, Chrysler
<b>Products:</b>	Arcos supplies in all materials: coated electrodes, consumable weld inserts, tig wires, mig wires, subarc wires, flux-core wires, metal cored wires.



*Behind every product in Arcos' portfolio lies an enormous amount of research and development.*

Spray Systems approach is to apply thermal spray wires with ATS Preferred Arc System. This portable dual wire feed machine provides the flexibility to take it into any application.

**EXPANSION**

That brings us to the core of Arcos' future: other markets. Work on expanding Arcos' sales network has already begun with the recent appointment of a new sales agent in the Gulf Coast Region and UK. We will continue to expand our sales network throughout the USA and Europe. Mr. Kessler: "That doesn't mean we are going to storm the market and aim for a quick profit. That's not the way we do business. As I said before, some of our customer relations go back decades, which illustrates the way we deal with our customers and build up long-term relationships. We have done this in the past and will continue to do so in the future. I think one of the strengths of our company is that customers get to know us on a personal basis. Rick Laubach and I have been working for Arcos for 21 years. Our Marketing Director Beth Haupt has been with us for 18 years, so through our careers and travels, we

have got to know our customers and their expectations very well. It also applies to a large part of our other employees: turnover is very low and the majority have been with us for many years."

Obviously, Arcos' sales are predominantly channelled straight to the customer from its head office in Mount Carmel. All sales inquiries are handled by its customer service department in Mount Carmel and sales distributors throughout the world, generating direct contact with the customer and consequently direct market feedback. To facilitate direct sales, Arcos maintains a wide variety of products in stock, which will be

increased in accordance with its forecast higher sales. But there's another development that pushes Arcos to maintaining stock on-site, says Mr. Laubach: "Today, everyone wants to have their products delivered just-in-time.

Twenty years ago, stocking distributors were commonplace but that has all changed; companies do not want to tie up money in inventory. If you want to stay in the race, you have to build up your own stock." However, not all sales are handled straight through Arcos. Mr. Kessler explained that there are areas of the country where customers prefer doing business through distributors, in which case Arcos naturally adapts and sells its products through a third party. Therefore, the company is looking for opportunities to expand its distribution network globally.

By the end of the interview, it is clear that Arcos is serious about new markets and becoming a highly recognised global niche player. R & D facilities are being expanded, new machines are being put in place and its sales force is getting stronger. With new products and through strategic alliances with companies such as co-owner Select-Arc, Inc. of Fort Loramie, Ohio (a tubular wire manufacturer of metal cored and flux cored low alloy; mild steel and hard facing products), Arcos is able to supply the full range of welding wires in any kind of low- and high-alloy materials for virtually any type of welding application.