CMP doubles down on non-toxic anodes

IN A BID TO DOMINATE THE GLOBAL ANODE MARKET, CANADA METAL (PACIFIC) IS INVESTING HEAVILY IN ITS NON-TOXIC PRODUCT LINE, POSITIONING ITSELF TO COMPETE SIMULTANEOUSLY ON QUALITY AND PRICE

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They may not be the most glamorous components to be found in a marine equipment store, but sacrificial anodes nonetheless perform one of the most important jobs on the water, by protecting expensive metal components from corrosion. To that end, there isn't a parts counter anywhere that doesn't sell them.

Traditionally, sacrificial anodes have been made from zinc – to the point where they have become universally known as "zincs" rather than by their proper name. In the face of growing environmental sensitivity among consumers worldwide, Delta, British Columbia-based anode manufacturer Canada Metal (Pacific), or CMP, has elected to focus its Martyr anode business on non-toxic alternatives to zinc – alternatives that not only exceed the original material's performance while alleviating ecological concerns, but have come to cost less than the original product, providing greater margins for distributors and dealers alike.

THE PROBLEM WITH ZINC

Zinc anodes have been used for decades as the primary means of protecting metal components like drive shafts and lower units from galvanic corrosion in both freshwater and saltwater environments. "In a nutshell, anodes protect the metal surfaces they are attached to by being constructed from materials with a more active electro-chemical voltage range," explains Michael Szwez, director of marketing/general counsel at Canada Metal (Pacific). "They shift the focus of electro-chemical reactions which result in corrosion onto themselves, and away from the structures that they protect. It's a simple approach that works equally well on small boats, large yachts, commercial ships and

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CANADA METAL AT-A-GLANCE

Location: Delta, Canada; Woodbridge, Canada; Ningbo, China; Virginia, USA; Casella, Italy
Early 1900s: Foundry operations established by Camnico and NL Industries to serve plumbing and forestry industries
1987: Acquired from Camnico, expanded focus on marine
1991: Acquisition of 50% of Pacific Die Casting
1993: Full acquisition of Pacific Die Casting; incorporated as Canada Metal (Pacific) Ltd
1999: Acquisition of Octopus autopilots
2004: Establishment of foundry operations in Ningbo, China
2010: Launch of Titan Marine division
2011: Acquisition of Seaguard Italanodi S.r.l.; acquisition of Rocna and Vulcan anchor lines
2014: Establishment of CMP Global Limited
2015: Buys controlling interest in Dock Edge Plus

shoreline installations like docks and lock gates."

While zinc is an effective anode material, and small amounts of zinc are essential for human health, in higher concentrations the element has been found to be highly toxic to plants, invertebrates and fish. Worst still, zinc anodes typically include some amount of cadmium, which has been associated with serious illnesses including kidney disease, atherosclerosis, hypertension and cardiovascular diseases. Further, there is growing concern that exposure to cadmium may be linked to immune system deficiencies, with recent studies revealing a significant correlation between cadmium exposure and the occurrence of disease in human populations.

> ***"Zinc costs have basically doubled. Beyond that it's a heavy material, so warehousing is a pain and shipping costs are enormous"***

Such findings have inevitably raised concerns about the continued use of zinc anodes in marine environments. In the United States, bans on the use of zinc anodes have been proposed in California and Maryland after studies identified high levels of the element in local environments located near large marinas.

The third strike against traditional zinc anodes is financial. The cost of zinc has increased substantially in recent years, rising from a level of approximately US$0.70 per pound in December 2015 to approximately US$1.44 per pound today. "Zinc costs have basically doubled," says Szwez. "Beyond that it's a heavy material, so warehousing is a pain and the shipping costs are enormous. You could probably justify the expense if it was a premium product, but it isn't. There are much better alternatives available."

ZINC ALTERNATIVES

The anode category is an important segment for Canada Metal, representing approximately 50% of the company's overall business. With ISO 9001:2008-certified anode manufacturing facilities in British Columbia, Canada; Virginia, USA; Casella, Italy; and Ningbo, China, Canada Metal claims to be the only manufacturer that produces products for all three anode markets (fresh water, brackish water and salt water). While zinc anodes – sold under the Martyr 'Traditional' branding – still represent somewhere around 60% of the company's overall anode business, CMP has begun to focus much more heavily on its Martyr 'Premium' aluminium product line.

Aluminium anodes are said to provide numerous advantages over zinc, starting with simply being far more effective. In use, they last up to 50% longer than zinc anodes of comparable size. Aluminium is also much lighter in weight than zinc, and completely non-toxic. Aluminium's superiority to zinc as an anode material is overwhelming enough that it has completely displaced zinc as the choice of engine manufacturers worldwide. "All of our OEM customers put aluminium on their product," says Szwez.

MICHAEL SZWEZ MARKETING DIRECTOR
CANADA METAL (PACIFIC)

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"Mercury, BRP, Honda, Suzuki, Yamaha, Volvo Penta – all of them. It's by far the most effective anode material there is."

Ironically, the greater life span of aluminium anodes has led to sales resistance. "Aluminium doesn't erode anywhere near as fast as zinc does, so customers look at the anode and think it isn't working!" notes Szwez. "If anything, we haven't done a good job of communicating the fact that aluminium anodes simply last longer. So part of our new focus will be on doing a better job of communicating the benefits of using the premium product."

The company also needs to do a better job of teaching customers that not all aluminium anodes are the same, says CMP president John Mitchell. Aluminium is a highly recyclable material, and its re-use is openly encouraged by government and military clients such as the US Navy, one of the world's largest anode buyers. "The US military specifications encourage the use of recycled aluminium, but there is a huge difference between recycled material and scrap," says Mitchell. "It's one thing to repurpose high-grade alloy from sources like high voltage wires, and quite another to melt down low-grade scrap. It sounds unbelievable, but there are suppliers out there who buy old, used-up anodes from shipyards, melt them down, then sell them right back to the same shipyards they sourced them from. No one is any the wiser until the next haul-out, and that's when the finger-pointing starts. That's why we adhere to a strict ISO 9001 Quality Management System, and our alloys are chemically tested constantly so they're guaranteed to meet the latest US military specifications. Otherwise, without some sort of third-party quality certification, how do you know what you're getting?"

CMP applies the same quality focus to its magnesium anodes, which represent the top-of-the-line for boats used in freshwater environments. Magnesium offers an extremely active electro-chemical voltage range, giving it a substantial protection edge that surpasses that of zinc and even aluminium. "Nothing beats magnesium," notes Szwez. "We sell it as a premium product, but only for freshwater applications. We don't recommend magnesium in saltwater environments because it's too effective, to the point it corrodes and disappears in such a short time it could leave the hull completely unprotected. In saltwater it dissolves like an antacid tablet. But in freshwater, it's far and away the best you can get."

DOUBLING DOWN

Although the benefits of premium anodes over traditional zincs may be clear to OEM customers, Szwez notes that Canada Metal's top priority is to proactively educate aftermarket distributors and end-users alike on the advantages of using non-toxic anodes. The company was an early adopter of aluminium as an alternative to traditional zinc anodes, but it has never aggressively promoted its non-toxic line. "We had our Martyr zinc anodes, then came the Martyr 2 aluminium product," says Szwez. "But the name Martyr 2 doesn't mean anything to a consumer. Customers walk into a store and they ask for new zincs, and that's exactly what they get. We need to do a better job of letting people know that premium non-toxic anodes exist and that they represent greater value by doing a better job for the same price. And that's what we've begun to do. We're introducing all-new branding and packaging for our anode lines, and better identifying the premium products so consumers can understand the differentiation at a glance. We've also produced new planograms and sales aids to help both dealers and end-users better understand why and when they need to replace them."

While CMP's new anode strategy rolled out worldwide this winter, the company will initially place a focus on Europe, which it sees as a traditional anode market split among small manufactures that have neither the technical capability nor the production capacity to compete with non-toxic alternatives of their own. "Europe currently represents one of the greatest opportunities for CMP to grow its global market share," says John Mitchell, who moved to Italy in September 2014 in order to personally spearhead sales efforts on the continent. "I am confident that our significant investment to replace the traditional zinc with our premium aluminium product will realise not only a monetary reward, but a significant ecological one. It's the right thing to do, and not just from a business perspective. Boaters have a strong interest in protecting clean water and marine ecosystems – our job is to simply show them how they can do that by switching to more effective products." IBI