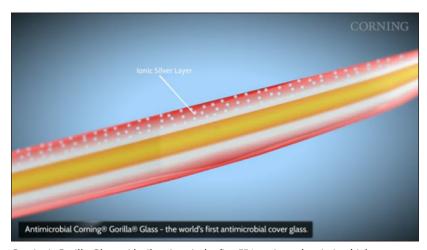
Silver News

Corning Adds Silver to Gorilla Glass First EPA-Registered Antimicrobial Cover Glass



Corning's Gorilla Glass with silver ions is the first EPA-registered antimicrobial cover glass. (Click image to see animation)

"Corning's Antimicrobial Gorilla Glass inhibits the growth of algae, mold, mildew, fungi, and bacteria because of its built-in antimicrobial property, which is intrinsic to the glass and effective for the lifetime of a device." —

James R. Steiner of Corning Specialty Metals

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Corning Inc. has added silver ions to its line of durable Gorilla Glass for use in smartphone and tablet touchscreens. The company announced the <u>first U.S.</u>

<u>Environmental Protection Agency-registered antimicrobial glass cover</u> at the Consumer Electronics Show 2014 (CES 2014) in January.

"Corning's Antimicrobial Gorilla Glass inhibits the growth of algae, mold, mildew, fungi, and bacteria because of its built-in antimicrobial property, which is intrinsic to the glass and effective for the lifetime of a device," said James R. Steiner, Senior Vice President and General Manager of Corning Specialty Materials, in a prepared statement for CES 2014. He added: "This innovation combines best-in-class antimicrobial function without compromising Gorilla Glass properties. Our specialty glass provides an excellent substrate for engineering antimicrobial and other functional attributes to help expand the capabilities of our Corning Gorilla Glass and address the needs of new markets."

Gorilla Glass is used because of its high-scratch resistance and hardness, which allows thin glass without fragility. More than 2 billion devices from 33 major brands use Gorilla Glass, according to Corning, and the glass can also be recycled.

Corning's marketing claims for the silver ion glass -- which are listed in the EPA-product registration and can appear on product labels -- include: "The world's first antimicrobial cover glass;" "Tough enough to stop the growth of odor and stain-causing microorganisms on touch surfaces" and "Glass contains an antimicrobial agent to protect the surface," among others.

Company officials noted that the first showcase device for the technology is not a smartphone but a room-scheduling system displayed on a large touchscreen that would be used by multiple people. They also said the antimicrobial glass could find a market in hospitals as well as transportation and hospitality industries.

An Interview with David Madge of A-Mark Precious Metals

David Madge has been president of A-Mark Precious Metals, Inc., since 2011. Previously, he held several positions with the Royal Canadian Mint including Sales Manager, Director of Bullion & Refinery Services and, in 2003, when the Mint restructured into four business lines, he was promoted to Executive Director where he assumed P&L responsibility for the Bullion & Refinery Business line, including the refinery plant operations. A-Mark, established in 1965, is a full-service precious metals trading company with customers on six continents. Madge's priority is business development, and in 2012 he launched Transcontinental Depository Services, LLC, which offers global storage solutions for precious metals. He has also negotiated exclusive distribution agreements for new gold and silver bullion products that have proved popular with investors

Following is an edited interview with Madge.

Silver News: What has been the effect of the recent American Eagle silver coin shortages on your business?

Mr. Madge: Allocations limit what you can sell, but it also opens the door for many new products from smaller mints or fabricators to get into the market. If customers want Silver Eagles, for example, but they're not readily available, they will turn to alternative products which means some of the other mints or fabricators that aren't quite as popular have an opportunity.

SN: Can you give some examples?

DM: Obviously, the two big mints are the Royal Canadian Mint and the U.S. Mint, particularly in North America. When you move beyond them we have the British Royal Mint and the Austrian Mint. Those are the other big ones.

SN: What about bars?

DM: The same scenario holds. If coins are in shorter supply, people move to alternative products, which is good for small bar businesses as well.

SN: How have new bullion security features (see <u>April, 2013</u> *Silver News*) affected your business?

DM: Companies around the world will continue to add security features to protect consumers and make it harder to counterfeit their products. I think that's a growing trend. Producers are going to introduce more and more security features as we move forward. However, people want the security features and they like the security features, but they're not necessarily willing to pay a price for the security features. It's like .999 silver versus .9999 silver. Everybody says four nine silver is better than three nine silver but at the end of the day, are they willing to pay a premium for it? The answer is no.

SN: In 2009 you opened up a facility in Vienna, Austria to handle some European trading. Why did you do that and how is it going?

DM: We're one of the few global trading companies. There are lots of regional or niche players but not too many that play in the international or the global market. We opened up the Vienna office in an effort to service our customers in Europe, and it's been going very well. It also extends our trading desk hours. Our trading desk is open 18 hours a day. We could go to 22 hours if we wanted, but we find with the two desks, we're able to service Europe, North America and cover Asia as well.

SN: What can customers expect in terms of new products?

DM: Since joining A-Mark a little over two years ago one of my focuses has been developing new products for consumers and bridging the gap between the mints and the dealers or the consumers. I understand the mint side and the customer side. We're seeing increased demand for all products, but silver in particular is expanding and growing. Consumers want to own silver. They like the value proposition of silver and they also like the variety of coins. They just don't buy one coin. They buy multiple coins and they like the collecting side of it as well as the bullion investment side of the business. They want variety and novelty.

For example, we worked with the British Royal Mint to launch a Chinese Lunar Coin Program where they took a silver Britannia and put a series of little snakes around the rim of the coin. We've just launched a similar product with little horses going around the rim. The silver coins were so well received that we've done a gold version. With the Royal Canadian Mint we've introduced a series of coins over the last two years that included the one-and-a-half ounce Polar Bear coin. It did phenomenally well both in Europe and in North America. Based on that success, we've just launched the Arctic Fox. It is being produced and sold now, the second in that series. We've done three-quarter ounce coins for the War of 1812, commemorating the 200th anniversary. We've just launched a Special Forces coin in half-ounce silver in North America. These have all been incredibly successful and it has expanded the market as a whole as opposed to just cannibalizing other sales. The goal here is to grow the overall market.

We worked with Sunshine Mint (a member of the Silver Institute) to produce products from silver salvaged from the *SS Gairsoppa*, a ship in the second World War that was in a convoy going to Great Britain. It was sunk and became one of the largest recoveries in recent years of shipwrecked silver. We also worked with the British Royal Mint to produce Silver Britannia coins also from the *Gairsoppa* silver. We also produced ten-ounce bars from the salvaged silver as well, and sold the original 1000-ounce bars that were salvaged.

SN: Has the recent retreat in price affected your business?

DM: Even though there has been a pullback in the price of silver there hasn't been a wholesale redemption of product. This means that there isn't a lot of product coming back into the secondary market. Consumers of these products tend to be long-term investors. They're not saying, 'Oh, it's gone down. I'm going to sell it.' Silver tends to stay in the hands of investors. They have a long time horizon, and that's a pretty good story for silver.

LaCie Produces Silver-Plated Hard Drive Sphere

For the computer user with style and a bit of cash, French manufacturer of fine silverware and home accessories Christofle has handcrafted LaCie's Sphère, a silver-plated storage ball that holds a terabyte of data.

At US\$499 each, LaCie promises that the beautifully ensconced hard drive "never fails to turn heads and spark conversation." It was introduced at the recent Consumer Electronics Show. Esthetics aside, the Sphère features high-speed USB 3.0, which makes file transfers and backups nearly three times faster than with USB 2.0. The Sphère gets power through the USB cable, so no power cord is needed.

Christofle was founded in 1830, and produces silver pieces in its Haute Orfevrerie workshop in Normandy, France. The company has been commissioned to do work for heads of state including Napoleon III and King Louis-Philippe, and Christofle pieces appear in museum collections throughout the world. It was the first company in France to use electrolysis to silver plate metal. French company LaCie specializes in external hard drives including those for mobile use. U.S. storage company Seagate Technology is expected this year to close on a deal to acquire LaCie.



This handcrafted silver-plated sphere by LaCie contains a 1-terabyte hard drive.

Silver Spark Plugs Enhance Performance

What's the difference between spark plugs in your car and those used in race cars?

Silver.

The electrical spark created by spark plugs can be tough on the center electrode. Because of this, most spark plugs use iridium, a super dense material that is resistant to heat, corrosion and wear. However, iridium doesn't deliver the best performance. Silver does, according to officials of Nology, Bosch, Brisk Racing and Accel, which offer silver spark plugs.

Officials note that because silver is the best electrical and thermal conductor of any metal, it produces a cleaner and more powerful spark. Unlike iridium, though, silver spark plugs don't last as long and therefore are mainly suited for race cars or for use by drivers who don't mind changing their spark plugs more often in exchange for greater performance, better gas mileage and easier starting, albeit at a higher price.

According to an Accel spokesman: "Silver is the best electrical conductor which allows for a wider heat range and is extremely resistant to fouling. The silver center electrode has low ignition voltage requirements and allows easier starting."



Silver spark plugs offer high performance for professional racers and enthusiasts.

Royal Canadian Mint 1,000-Ounce Silver Bar Added to COMEX Good Delivery List

New Anti-Counterfeiting Features for \$5 Silver Maple Leaf

The Chicago-based CME Group added the Royal Canadian Mint's 1,000-ounce 99.9% silver bar product to the COMEX exchange's Silver Good Delivery List on December 5, 2013.

"As one of the world's top producers of silver bullion, the Royal Canadian Mint prides itself on the industry-leading quality and reliability of its silver refining and assaying capabilities," said Ian E. Bennett, President and CEO of the RC Mint. "The addition of the Mint's 1,000-ounce pure silver bars to the COMEX Silver Good Delivery List is a coveted seal of approval which reinforces the world-class status of our silver refinery, our assay operations and our silver bullion products."

The COMEX Silver Good Delivery List officially names the only Exchange-approved brands of silver bullion bars which can be delivered against COMEX metal future contracts. The Mint is already on the COMEX Gold Good Delivery List.

The RC Mint also has announced that the 2014 Maple Leaf 1-ounce .9999 fine silver \$5 bullion coins will include a new 'radial line finish' and a micro-engraved laser mark which will be permanent features to the silver bullion coin.

The particular width and pitch of the lines radiating from the coin's central design motifs create a light-diffracting pattern that is unique to the next generation of Silver Maple Leaf coins, and will serve as an anti-counterfeiting measure, according to Mint officials. Another security feature is the addition of a micro-engraving produced by laser of a textured maple leaf incorporating the numeral '14' to denote the coin's year of issue -- a technology also found on the Mint's Gold Maple Leaf bullion coin and its 2012 \$1 and \$2 circulation coins. "After 25 years of producing the world's purest and one of its most popular silver bullion coins, the Mint is pleased to offer investors even more value by incorporating technology which also makes our Silver Maple Leaf bullion coin a world leader in security," said Bennett.



The 2014 Maple Leaf 1-ounce .9999 fine silver \$5 bullion coins include a new 'radial line finish' and a microengraved laser mark as anti-counterfeiting measures.

Antimicrobial Coatings Market Expected to Grow

The market size for antimicrobial coatings was about \$1.5 billion in 2012 by value and is estimated to grow with a compound annual growth rate of about 11.8% from 2013 to 2018, according to a report from RnR Market Research. The major additives considered in this report are silver, copper, zinc oxide, zirconium, titanium dioxide, and zinc omadine.

The report, titled <u>Antimicrobial Coatings</u>, divides the market on the basis of major applications such as Indoor air/HVAC, medical, mold remediation, building & construction, food & beverages, textiles and others in which the indoor air/HVAC coatings dominate over all other coatings. The report also covers major geographies such as North America, Europe, Asia-Pacific, and the rest of the world, spotlighting the countries that are driving the antimicrobial coatings market.

"In order to tap the growing market and to gain a competitive advantage in the antimicrobial coatings market, huge investments are made by the major companies such as AkzoNobel, BASF, PPG, Sherwin-Williams and others in developing countries of Asia-Pacific and Latin America. The new R&D facilities and new product developments by the companies are helping to cater to the demand in these developing countries, which are in growing stage and have huge potential in the near future," the report noted. "The companies dealing with antimicrobial coatings are consistently focusing to develop new coatings with different formulations having antibacterial and anti-odor properties with them and which follows the regulatory environmental standards defined by EPA, REACH, and other environment & health care agencies."

New Mongolian Vodka Distilled Through Silver Filters

A new vodka produced from Mongolian wheat and water from the Khuiten Peak is distilled at least six times through silver and platinum filters to remove any impurities, according to the company's founder.

The prime mover behind the new drink is David Solomon, who owns a 20-store Toys "R" Us franchise and founded Redbox, the DVD vending machine. On a trip to Mongolia, a friend asked for his help in bringing brands such as Toys 'R' Us, Starbucks and Redbox to the country, Solomon related in an online interview with *The Drink Nation* on <u>The Daily Meal</u>. "And I'm thinking, 'OK, in Mongolia what you've got is 3 million people and 20 million goats, and the goats don't buy a lot of toys, drink a lot of coffee, or rent a lot of movies, you know?' At the time we were drinking this vodka, so I said, 'I've got a much better idea. This is the greatest vodka I've ever had, so let's take this vodka to the rest of the world.' That's kinda how it got started."

Solomon added: "We distill each batch at least six times through silver and platinum filters. That removes any impurities. In fact, because of that, if you're on a gluten-free regimen, you can still drink our vodka without a problem."

Golia Vodka is available in New Jersey and Pennsylvania, but the company is looking to expand distribution throughout the U.S.



This Mongolian vodka is distilled at least six times through silver and platinum filters.

Upcoming Events

The 2014 edition of the *World Silver Survey* will be released on May 14 at a New York City event, and the following day in Mexico City. The annual *World Silver Survey* is the authoritative publication on the silver market. The 2014 edition will report on all aspects of the 2013 silver market, providing comprehensive detail on demand, supply, investment, and price action. Thomson Reuters GFMS will produce the *World Silver Survey 2014* on behalf of the Silver Institute, which has been publishing the Survey since 1990.

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