Below are articles and summaries of magnesium related stories. Members are asked to distribute the update to their employees – if their employees wish to receive the IMA Weekly Update, please send their email addresses to the IMA Head Office. We appreciate your company press releases and announcements for inclusion in the Weekly Update.

<table>
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<th>CONTACT IMA</th>
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<tbody>
<tr>
<td>Mike Schultze, Deputy Executive Director</td>
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<td>E-mail: <a href="mailto:mschultze@tso.net">mschultze@tso.net</a></td>
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<tr>
<td>Ann Scheible, Director Member Services</td>
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<tr>
<td>E-mail: <a href="mailto:ascheible@tso.net">ascheible@tso.net</a></td>
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INDUSTRY CALENDAR

May 19 – 22, 2013
70th Annual IMA World Magnesium Conference
Xi’an, China
www.IMAworldconference.org

February – March 1, 2013
Minor Metal Conference
London, England
http://www.metalbulletin.com/EventDetails/0/5309/Minor-Metal-Conference.html

March 3 – 7, 2013
TMS 2013
San Antonio, Texas, USA
http://www.tms.org/meetings/annual-13/AM13home.aspx

March 27 – 28, 2013
Minor Metal Asia Conference
Hong Kong
http://www.metalbulletin.com/EventDetails/0/5329/Minor-Metals-Asia.html

June 10 – 13 2013
RAPID 2013
Pittsburgh, Pennsylvania, USA
http://rapid.sme.org/2013/public/enter.aspx

September 3 – 5, 2013
Euro LightMAT 2013
Bremen, Germany
http://www.dgm.de/dgm/lightMAT2013/

October 6 – 8, 2013
5th Asian Symposium on Magnesium Alloys
Toki Messe
Niigata, Japan

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ASSOCIATION NEWS

IMA World Conference: Important Time-Sensitive Visa Application Information

IMA Announces the 70th Annual World Magnesium Conference 2013 Call For Papers – Deadline Extended

IMA Membership Directory and Buyer’s Guide Form Now Available Online - Now Available Online

Please Join Us for the 70th Annual World Magnesium Conference in Xi’an, China

The IMA Invites You to Join Our LinkedIn Group

Articles follow below

INDUSTRY NEWS

Materials Lead the Way to Vehicle Mass Reduction

GM Researchers Have Way to Use Magnesium in Place of Steel, Aluminum

Magnesium-Air Fuel Cell May Compete with Hydrogen

Getac Upgrades Its Most Popular B300 Rugged Notebook

Articles follow below

ASIA NEWS

China Magnesium Industry Market Bulletin

Article follows below

EDITOR’S NOTE: IMA makes every possible effort to substantiate the articles which appear in the Weekly Update. However, as this is not always possible IMA does not warrant the details nor accuracy of any given article. Please keep in mind that materials are attained through press releases, outside articles from numerous sources and publications. Such materials often contain opinions which are not that of the association nor should they be construed as such. We realize that in the case of some materials, the translations might often lead to less than perfect grammar, etc. It is our position however to print as submitted rather than take upon ourselves the editing of such materials which would entail potential changes unwanted by any given author.
ASSOCIATION NEWS

IMA World Conference: Important Time-Sensitive Visa Application Information

It is recommended that all delegates prepare to apply for a Chinese visa as soon as possible. The IMA is working with the China Magnesium Association to obtain the required conference invitation letters (i.e., the governmental agency or company to be visited in China is responsible for providing the invitation).

For all U.S. passport holders, passports must be valid for six months beyond the length of the requested visa (for example, if you are requesting a 12 month visa your passport must be valid for 18 months ) and have at least one blank visa page (amendments and endorsement pages cannot be used to fulfill this requirement).

All U.S. passport holders are also required to provide a one color, passport-type photograph and a business introduction letter from their U.S.-based company. The visa approval timeline for U.S. passport holders is currently estimated to be 1-3 months.

Should U.S. passport holders need to expedite the visa process, or to find more information, visit the following websites:

Perry International: perryvisa.com (http://perryvisa.com/)
CIBTvisas: cibtvisas.com (http://cibtvisas.com/)

IMA Announces the 70th Annual World Magnesium Conference 2013 Call For Papers – Deadline Extended

The International Magnesium Association (IMA) has issued a Call for Papers in preparation for the 70th Annual World Magnesium Conference to be held May 19 – 22, 2012 in Xi’an, Shaanxi Province, China. Recognizing the global nature of the magnesium industry, IMA is seeking industry technical papers with an international perspective. Presentations at the annual event are expected to address topics related to new emerging and process technologies, automotive and non-automotive applications, finishing and joining, environmental considerations and part processing. The official submission document may be downloaded from our website at: http://www.intlmag.org/call_for_papers.html or click here.

***Deadline for abstract submission is now January 14, 2013. Please submit abstracts to info@intlmag.org***

IMA Membership Directory and Buyer’s Guide Update Form - Now Available Online

The 2013 IMA Membership Directory and Buyer’s Guide form is now available in the Members Only section of the IMA website. You are now able to download the form whenever your organization needs to make changes to primary contact information or capabilities and certifications. Please send the completed form at any time to info@intlmag.org or by fax to the IMA Head Office at ++1-847-526-3993. You can also mail the form to the IMA Head Office at International Magnesium Association, 1000 N. Rand Road, Suite 214, Wauconda, IL 60084, USA.

Please Join Us for the 70th Annual World Magnesium Conference in Xi’an, China

The World Magnesium Conference is scheduled for May 19-22, 2013. This event is the premier international magnesium industry conference that highlights the latest technological advances, innovative applications, and emerging developments in the global marketplace. The conference combines informative technical sessions, exhibits, networking and social opportunities for a well-rounded industry experience.
• Industry Updates
• Technical Program, provide a wealth of information for magnesium industry professionals and address topics ranging from an overview of the current state of the magnesium industry to magnesium process breakthroughs, applications, and business management issues.
• Social Program
• Sponsorship Opportunities
• Awards of Excellence, IMA's competition recognizing outstanding magnesium products and innovative manufacturing technologies
• International Environmental Responsibility Awards
• IMA Annual Membership Meeting
• Exhibit Showcase
• Spouse Program
• Tours

Xi'an today sits in the fertile Wei River valley, one of the epicenters of early Chinese civilization. The area was home to the capitals of several major dynasties (historians count 11), stretching all the way back to the Zhou in the 11th century BC. The remnants of this ancient world are everywhere – from the First Emperor's Terracotta Army to the Muslim influence that still characterizes the city. Many of the city's attractions are unique not only to the city itself, but to all of China.

Click here for the 2013 IMA Annual World Magnesium Conference flyer.

The IMA Invites You to Join Our LinkedIn Group

LinkedIn is an excellent virtual networking tool and knowledge sharing resource, allowing people to make connections without actually going out and meeting people face-to-face and exchanging business cards. The venue offers the opportunity to exchange strategic ideas with a much larger base of magnesium professionals from around the world. With the steady popularity of social networking usage, LinkedIn fits in perfectly within the magnesium business professional networking environment.

Our IMA Group community is growing very quickly. We have 294 members worldwide who use LinkedIn for connecting with current business contacts to build and develop relationships to further levels as well as meet new professional contacts. It offers group discussions that create awareness and information sharing within the thriving magnesium community.

We encourage all IMA members to take advantage of the opportunities for magnesium discussion contributions and networking expansion. Utilize the IMA Group to meet amazing professionals within the magnesium industry across the globe. LinkedIn provides key resources that magnesium professionals need to be informed and even continue to grow.

Please visit our IMA Group website on LinkedIn and join today! You can find us here:
http://www.linkedin.com/groups/International-Magnesium-Association-IMA-107283?goback=%2Eanp_107283_134687255081_1

INDUSTRY NEWS

Materials Lead the Way to Vehicle Mass Reduction

The lightweight materials menu features metals and non-metals, yet the selection process is not a one-size-fits-all solution. Without question, every lightweight material choice matters, especially with the industry working in overdrive to meet the U.S. federal mandate for a 54.5-mpg fleet average in the 2025MY. That's in addition to a bevy of other upcoming governmental fuel economy and CO2 emissions regulations around the globe.

Jeffrey Moyer, Vice President of Business Development & Engineering at Meridian Lightweight Technologies, said the reality is that only two critical model-year life cycles remain for automakers to reach the 54.5-mpg requirement.

Meridian’s current die-cast magnesium production application list includes instrument panels, transfer cases, lift gates/closures, front-end structures, steering wheels/steering columns, as well as seat structures.

While calorie cutting is important for all vehicle parts, the body-in-white is a major target.

According to Stephen Logan, Senior Technical Specialist for Advanced Lightweight Programs, Materials Engineering at Chrysler Group LLC, “in order to meet the challenges of increasing fuel economy and reduced greenhouse gas emissions, the body must play a critical role in vehicle weight reduction.”

Scott Miller, General Motors’ Global Director of Mass, Energy, and Aerodynamics, said a vehicle’s typical subsystem mass distribution is led by the body (37%), followed by the chassis (30%), powertrain (14%), interior (12%), electrical (4%), and HVAC and powertrain cooling (3%).

Recent lightweight material examples include a body structure prototype. Based on the 2003 Chrysler Sebring, this magnesium-intensive body structure—after an adhesive cure—weighed just 399 lb (181 kg). Lightweight production vehicle examples include the current all-aluminum bodied Jaguar XJ and the 2013 Mercedes-Benz SL550 roadster.

The SL550 uses Novelis-supplied aluminum for the doors, hood, and various structural pieces, including the transmission tunnel that is made from a new aluminum alloy, Anticorodal-300. At 560 lb (254 kg), the aluminum body is approximately 300 lb (136 kg) lighter than the predecessor.

Ganesh Panneer, Novelis’ Director of Sales & Marketing, Automotive Products, said aluminum usage on vehicles around the globe is projected to increase. Industry sources indicate that when comparing 2011 to 2016, aluminum hoods likely will jump from 11% to 15%; rear gates from 2% to 4%; doors from 1% to 5%; roofs from 1% to 2%; and structures from zero to 2%.

“We’re also seeing A- and B-segment vehicles using aluminum, so aluminum usage is moving to the smaller segments,” Panneer said.

Carbon fiber’s production applications have included roofs, hoods, and other Class A surfaces on low-volume sports cars. But an upcoming global production vehicle will have 75% of its body (including the hood, fenders, and roof) comprised of carbon fiber.

“It will be the first time that carbon fiber has been used this extensively on a base production car anywhere in the world,” said Gary Lownsdale, Chief Technology Officer of Plasan Carbon Composites. The key enabler for this up to 50,000-units-per-year vehicle application is Plasan’s patented Pressure Press processing technology.

In terms of current production vehicle applications, steel reigns as the dominant material choice with advanced high-strength steels (AHSSs) gaining steam, especially for crash management.

Industry projections indicate that in 2015, AHSS will account for 34.8% of body and closure content, with mild steel at 29%; bake hardenable and medium HSS at 23.5%; and conventional HSS at 10.2%. Aluminum and magnesium are predicted to be at 2.5%.

Development of third-generation AHSS is under way. The U.S. Automotive Materials Partnership (a research consortium of Chrysler Group, Ford Motor Co., and General Motors) and the Auto/Steel Partnership are the backbone of a four-year project that will use $6 million in funding from the U.S. Department of Energy.

According to Ronald Krupitzer, Vice President Automotive Market for the Steel Market Development Institute, the first phase of the project—which could begin as early as December 2012—will focus on applying the existing material modeling tools.

“The validation of the integrated materials model and the evaluation of the materials performance in vehicle components via CAE methods as well as materials coupon testing will be the major objectives of phase two,” Krupitzer told SAE Magazines.

Research work done by NASA could lead to new automotive applications within the next five to 10 years. Gregory Peterson, Senior Technical Specialist for Lotus Engineering, told SAE Magazines that many of
the technical papers written by NASA experts contain information that is highly valued as potential lightweight solutions for further reducing vehicle weight.

“NASA has been developing space-age materials for decades. And some of those materials are now commercially available through NASA as the technologies are no longer proprietary. We’ve had numerous meetings and discussions with the NASA team, and we’re moving forward in several different areas to potentially commercialize these products for passenger cars and trucks as well as for military vehicles,” said Peterson.

Nigel Giddons, Chief Vehicle Architecture Engineer at Tata Technologies, is leading a team tasked with designing and developing a passenger vehicle with a “weight target that is aggressive at this stage in the project.”

The job is indicative of what engineers are being asked to do on other vehicle programs, Giddons told SAE Magazines.

“It’s an all-point challenge at the moment. That challenge is dictated by legislation, but also in most instances it’s the customers who are demanding more fuel efficient and environmentally friendly vehicles. And, weight and powertrain stand together as a means to that end,” Giddons said.

Source: http://www.sae.org (03-Nov-2012)

GM Researchers Have Way to Use Magnesium in Place of Steel, Aluminum

General Motors researchers who tinkered with magnesium in the laboratory have developed a proprietary way to use the lightweight material as an alternative to steel and aluminum, the company said Tuesday.

GM has developed a new technology that improves magnesium’s strength and durability by applying intense heat that makes it easier to mold.

The advancement could help GM and suppliers improve fuel economy on future vehicles, saving consumers money at the gas pump.

"Using high-strength lightweight materials such as magnesium and aluminum is one of the most effective ways to improve vehicle fuel economy and driving performance," said Jon Lauckner, GM chief technology officer, in a statement.

The news comes after GM recently announced that it had achieved a breakthrough in welding technology that would allow more aluminum to be used in vehicles.

GM said it tested the new technology on a rear deck lid inner panel with magnesium. It’s 2.2 pounds lighter than a similar steel component.


Magnesium-Air Fuel Cell May Compete with Hydrogen

Developing a durable, long-lasting, efficient and lightweight power source has become the Holy Grail for energy industry groups, and hopes are growing that magnesium-air fuel cell technology will meet all of those criteria, levelling or bypassing the potential of hydrogen fuel cells.

MagPower Systems is one company that has faith in the power of magnesium. The Canadian firm has a lock on magnesium-air fuel cell technology, which, as a result of limited energy output caused by hydrogen generation, has never been commercialized until now. By using a gas diffusion cathode and magnesium immersed in an electrolyte, the patented technology generates a direct current.

MagPower argues that the fuel cell has “the electrolyte versatility of using a common saline (salt) solution” while the fuel cell’s performance capabilities can be enhanced by adding the company’s hydrogen inhibitors. Potential markets for the technology, which has an efficiency rate of 90 percent and an operating range of minus 20 to 55 degrees Celsius, include remote military and telecom sites. The fuel cell could also be used as a backup system for electric and solar power companies.
For now, demand for magnesium has remained steady since mid-June, trading in the range of $1.98 and $2.18 per pound during the week of August 16, a level that has not changed since June 26.

Yet with possibilities for the metal opening up, magnesium demand may trend upward. One attraction of magnesium-air fuel cell technology is its relative simplicity and lower cost compared to hydrogen fuel cells. Also, magnesium is less volatile, requires no special fuel storage, is easily recycled and has an indefinite storage life.

**Military Applications**

Such qualities have led the US military to consider the value of magnesium-air fuel cell technology. As part of a small business innovation research program, the Navy has mulled the potential of a hybridized magnesium-air fuel cell and nickel-zinc battery or electrochemical capacitor. Reveo, the New York-based company that proposed the idea, believes it may have hit on the ideal energy source for unmanned surface vehicle sensor payloads. The company describes the proposed hybridized magnesium-air fuel cell as “the best choice in terms of specific energy, energy density, fuel loss rate, ease of refueling, system cost and overall safety” and states that the technology can provide 25 kW of pulse power over more than two weeks.

“In addition to military USV [unmanned surface vehicle] applications, the most obvious, the most exciting, and largest market for these will be in electric vehicles or electric boat applications,” Reveo said, adding that “[s]uch technology will be immediately applicable in the marine market to be used as an environment friendly power supply, emergency backup power, and as a power source for communications. These power sources could be used on many types of unmanned and manned surface vehicles supporting many maritime industrial areas including oceanographic survey vessels, offshore oil exploration, salvage ships, the general shipping industry, Coast Guard and the Border Patrol.”

**7.5 Times More Effective Than Lithium-ion Batteries**

Academics too are interested in the advancement of magnesium fuel cell technology, albeit for more peaceful purposes. Takashi Yabe, a professor at the Tokyo Institute of Technology, has been pushing for greater use of magnesium as a solution to the tension between ever-growing energy needs and the immediate limitations of renewable energy sources. Indeed, Yabe’s commitment to using the 1,800 trillion tons of magnesium contained in sea water to meet the world’s energy needs made him one of Time magazine’s heroes of the environment in 2009. According to Yabe, an automobile with a zinc-air fuel cell achieved a mileage of 600 kilometers in 2003, and a magnesium-air fuel cell would be able to provide three times more energy than that, an amount that makes it 7.5 times more effective than a lithium-ion battery.

Granted, major technology drivers, including the US Department of Energy, still appear to be more focused on developing hydrogen fuel cell technology as a means to ensure greater use of renewable energy. Nonetheless, academic research, corporate investment and public demand will likely continue to drive the development of magnesium-air fuel cell technology, and will make it available on a large scale sooner rather than later.

*Source: [http://www.magnesiuminvestingnews.com](http://www.magnesiuminvestingnews.com) (24-Aug-2012)*

**Getac Upgrades Its Most Popular B300 Rugged Notebook**

Getac Inc., a leading manufacturer of rugged computers, announced today it has upgraded its best-selling B300 rugged notebook computer with faster processors, improved graphics and increased storage. Beginning with speed and performance, Getac offers a third generation 2.6 GHz Intel Core i5-3320M (MAX 3.3) or 2.9 GHz Core i7-3520M (MAX 3.6) processor to improve CPU performance by up to 67% and nearly double the graphic performance with a 91% gain over the previous generation. In addition, the B300 now comes standard with a 500GB hard drive and offers solid-state drive storage up to 256GB. For field workers and military personnel, this translates into greater productivity with a system designed to work in the most extreme working conditions.

Blazing-fast processors, improved graphics, 1400 NITs QuadraClear display, and fanless rugged design make working with the Getac B300 in any environment fast, efficient and effective. (Photo: Business Wire)
The Getac B300 rugged notebook has been built to effectively function in even the harshest working conditions, and the new B300 maintains that tradition of excellence. From the B300’s magnesium alloy housings to its fanless sealed design, the B300 is created to ensure continued operation in any environment, reducing the risk of failure and minimizing down time in the field.

While speed, performance and rugged design are critical to field and military personnel, easy and effective use under extreme conditions is equally important. The Getac B300 incorporates Getac’s industry-leading QuadraClear display technology. With a 1400 NITs option, the B300 can be easily viewed in extreme lighting conditions such as direct sunlight and reflective conditions including sand and snow. For military soldiers working in hostile areas, the B300 can also be configured with a filter-free night vision mode ensuring easy viewing without giving away your location.

Source: [http://www.freshnews.com](http://www.freshnews.com) (04-Dec-2012)

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**ASIA NEWS**

**China Magnesium Industry Market Bulletin**

**Market Focus**

**Magnesium Market Stepped Into New Era with Many Hopes**

From December 24th to December 28th, ex-works quotations for 99.9 minimum ingots from leading production bases kept stable in quiet market as indicated in Shanxi from 17,200 – 17,300 yuan, Shaanxi from 16,600 to 16,800 yuan and Ningxia from 16,800 – 17,100 yuan. Export prices fell to 2,900 - 2,950 US dollars.

One Ningxia-based sales manager said that he heard the price was increasing, with Shanxi 99.9 ingots quoting at 17,500-17,600 yuan; Shaanxi 17,100-17,200 yuan, 200 yuan higher than the previous week. “I think the market couldn’t go up suddenly, this week’s market has been quiet with rare inquiries and stable prices. According to my knowledge, it is impossible for the price to increase because January is a traditional off-season, plus producers were rushing for cash before the festival.” the manager said. “Currently, the price is close to costs, so it will be backed up by around 16,500 yuan in cash.”

Another source in Shanxi however was pessimistic about the market, “The overall demand for magnesium powder and sponge titanium was so weak. I heard some large overseas companies has got long-term contracts. We felt hard to get business, and customers told us that they can always get much lower magnesium. We are all looking forward to 2013’s market, however right now some businesses can’t hold anymore.”

In Yuncheng, Shanxi, a trader report quite stable price. Some trader purchased some ingots preparing for January’s overseas orders.

The new year is coming, and magnesium will turn into a new start with eliminated duty. People are looking forward to better era.

**Industry News**

**Output of Magnesium in China from January-November Hit 653.3 kt, Up 2.42%**

According to the statistics from China Nonferrous Metals Industry Assassination, China’s accumulated magnesium output of the past 11 months was 653,300 tons, up by 2.42 % y-on-y.

Of the output, Shaanxi contributed 281,700 tons, an increase of 29.98% y-on-y; Shanxi 206,400 tons, down by 25.72%; Ningxia 78,700 tons, down by 0.68%; Xinjiang 22,900 tons, up by 66.01%, Jilin 8,700 tons, increased by 147.30%, and Inner Mongolia 1,400 tons, down by 45.62%.

Magnesium output for the first 11 months still didn’t reach the level of the same period last year, but the gap shrank. It is expected that the whole year output will be closer or exceed last year’s level, with Shaanxi as vanguard in China and the world.
Liaoning Initiates Information Platform for Magnesium Patent

November 30th, Anshan saw the opening ceremony of information platform for magnesium industry patent in Liaoning, a unique information service platform in the world in magnesium industry which is designed to protect the magnesium industry intellectual property rights, which is of much importance to Anshan magnesium industry.

For years, technology innovations and patents of Anshan magnesium companies have been stolen frequently. The reason is in lack of valid protective measures for the proprietary intellectual property rights. This kind of situation is rather harmful to the industry development.

After the platform opens, the global magnesium new technologies and patents can be presented and is convenient for reference. So the platform can protect the technology patents at the same time. The database of the platform has 6 grades guide functions, including magnesium source, magnesium material, metallurgical assist material, magnesium building material, magnesium chemical, magnesium alloy and special magnesium material etc. referring to several big industry branches. The platform has the Chinese patents 180,000 pieces and 1,150,000 patents from the nine states like America, Germany etc., the world Intellectual Property Organization and the Europe Patent Office. These mass technology patents are the key of technology for reference and the source of study for the Anshan magnesium industry high-end development. Also it can let the Anshan magnesium enterprises know the global competition situation. Meanwhile it’s a direct window and a platform for current technology, aiming to avoid patent dispute and evade the competition risks.

Anshan has the advantaged magnesite source of 2.76 billion tons, accounting for 95 percent of Liaoning Province and 79 percent of the nation, among which Haicheng reserves 2.16 billions tons; Xiuyan reserves 0.6 billion tons. Currently Haicheng and Xiuyan has more than 100 enterprises exploring the magnetite with a total capacity of 8,000,000 to 10,000,000 tons. At present, magnesium industry has been upgraded to the provincial level strategy in Liaoning. Anshan City is focusing on developing high value-added and high-tech magnesium building materials, magnesium alloy, magnesium chemical. Now Anshan attracts hundreds of local and foreign enterprises for investment, including Vesuvius from UK and POSCO from South Korea. Some have finished construction and been put into operations.

Hebi Mingyuan Light Alloy to Start Magnesium Alloy Project With 55 kt Capacity

December 12th, the ground-breaking ceremony for the high-precision magnesium alloy project of Hebi Mingyuan Light Alloy was held in Jijiashan industrial park of Heshan district, Hebi, Henan province.

The project is divided into two phases. Phase one plans to produce high-precision magnesium alloy profile with 680 million investment and advanced processing equipment with top technologies. Phase one is expected to complete construction by the second half of 2014 with capacity of 35 kt of high-precision magnesium alloy extrusion profiles. Phase two aims at high-precision magnesium forgings with capacity of 20 kt.

China Eliminated 10 percent Export Duty of Magnesium and Its Alloy for 2013, Benefiting Magnesium Applications of the World

On December 17th, the Customs Tariff Commission of the State Council issued “Tariff Implementation Plan in 2013” which stated that magnesium and magnesium alloys export tariffs will be eliminated, effected from January 1, 2013.

Since January 1, 2008, China imposed 10 percent export duty on magnesium ingot and magnesium alloy, aiming at limiting the export of high-energy consumption, high-pollution, resource-consuming products. This time, the elimination of the duty will definitely affect the global magnesium industry and market. During 2010 to 2012, Sunlight Metal, for three times, initiated and coordinated with major magnesium producers like Fugu Magnesium Association, Nanjing Welbow and Shanxi Yinguang Magnesium to negotiate with related department for cancellation or lowering of magnesium export duty. For, magnesium is consuming less energy and has significantly increased resources comprehensive utilization rate. Cyclic economy model is on the main stream and shall not be labeled anymore as highly-energy consuming, and high-pollution. Meanwhile, they suggests to raise duty for magnesium alloy processing products, encouraging the export. On the third Session of the Eleventh CPPCC in 2010, Mr Pan Fusheng, director of CCmg and Mr Li Xiaohong, principal of Chongqing University proposed to lower or cancel the export duty for primary magnesium and magnesium alloy. Up to now, the proposal is settled, which was a significantly positive news to domestic magnesium companies.
Another background: In January, 2012, Dispute Settlement Body (DSB) of WTO released its reports on US, EU and Mexico's appeal against China's restriction on raw materials export. It said China restricted on 9 types of raw materials export including steel, aluminum, magnesium and so on. It ruled on China's action to lower export duty and remove export quota. After that, officials from export duty department of the Ministry of Finance expressed the willingness to take responsibilities to adjust export policies to fit with WTO rules.

China is the largest producer and exporter in the world, accounting for 85%. Nearly all of the magnesium and its alloy needed for Japan and Europe is supplied by China. For the past few years, due to the 10 percent tariff, the price ratio for magnesium to aluminum is comparably high, which in part restrict the application of magnesium alloy. 2013 will see lower magnesium price in the global market; ratio of magnesium to aluminum becoming more reasonable. As introduced by Mr Dong, the price ratio of magnesium to aluminum is an important market parameter. The ratio was 1.13 in Dec. 2012,. Now it is 1.55. Mr Dong estimated it could fell down to inbetween 1.3-1.35 in 2013. This, in long term, will benefit the magnesium applications on automobile, tools and electrical devices and so on. In the meantime, it could affect the current overseas magnesium smelting projects, so that China might get more market share in the globe.

However, in the short term, magnesium alloy market won't grow much because of the overcapacity in China and other substitute materials. Supply and demand won't change instantly. Mr Dong said related companies and investors need to be alert, avoiding to make mistakes. On the other hand, the elimination will lower the purchasing cost of the overseas magnesium alloy processors. This will give pressures to the domestic player who then need to response.

**China Customs Smashed Massive Magnesium Alloy Export Smuggling Case**

China Nanjing Customs recently announced that 2 magnesium alloy declared as wrought magnesium instead export smuggling cases were unearthed, involving a whopping 34.3 million yuan of tariff and 2 suspects. It is the biggest-ever case of export for China Customs.

Early in 2012, Nanjing Customs found two unusual companies with same corporate representatives and registered capital of 1 million yuan and 0.5 million yuan respectively. The two companies, during July 2009 to early 2012, exported 18,000 tons of wrought magnesium, valuing at 65 million US dollars. The surging business got attentions from police who then started related investigation.

Investigation found that after being setup in 2009, the two companies continuously purchased magnesium alloy from producers in Henan and other areas, whereas exported and declared the goods as wrought magnesium. According to the survey, their customer could be the world largest magnesium die caster based in Canada. After contacting with the Canada client, the company proved the customs code when imported in Canada was magnesium alloy ingots.

Up to now, the two suspects were arrested and they confessed declaring with wrought magnesium customs code instead to evade 10% tariff for magnesium alloy. All evidences including the contract between the Canadian customer an the two companies, invoices, packing list and bill of lading showed it was magnesium alloy ingot. For transaction record needed by China Customs, they made unreal Chinese contracts of wrought magnesium to cheat on China customs.

The case is still not closed yet.

According to Sunlight, many Chinese magnesium producers and exporters were happy to see the smashing of the case. They said these illegal businesses harmed legal ones greatly and made the normal exporting unprofitable. Also, there is another way. It was to refuse to subject to VAT when exporting magnesium. The later one has seen more happening and already got attentions from China Customs. Mr Dong Chunming, president of Sunlight Metal estimates that China Customs will carry on the investigations on tariff evasion and VAT escaping. Probably more cases will be unearthed. So, he suggests that except for prices, overseas clients also need to assess on the exporters, otherwise they might get trouble.
## Price Indicators

### Sunlight’s Price, Pure Magnesium (>99.8%) and Aluminium

#### Price Indicators

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<th>Item</th>
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<tr>
<td>FOB Xingang, Tianjin&lt;sup&gt;7&lt;/sup&gt;</td>
<td></td>
<td>3250-3300</td>
</tr>
<tr>
<td>CIF, Rotterdam Port</td>
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<td>3340-3390</td>
</tr>
<tr>
<td>CIF, Toronto Port</td>
<td></td>
<td>3360-3420</td>
</tr>
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</table>

#### Date

<table>
<thead>
<tr>
<th>Date</th>
<th>SHFE Spot Aluminium</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Sep.-2012</td>
<td>15440/</td>
<td>RMB yuan/ton</td>
</tr>
<tr>
<td>7-Sep.-2012</td>
<td>15500/</td>
<td>RMB yuan/ton</td>
</tr>
</tbody>
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### SHFE: Shanghai Future Exchange

(Exchange Rate of USD versus RMB is 6.2126 on Dec. 28th based on http://www.boc.cn/. We placed a Chinese map here to mark the major production bases and Xingang Port of Tianjin for your reference.)

**Note:**

1. All the ex-works price are VAT-paid.
2. The FOB price is based on ex-works basis, plus inland freight and miscellaneous expenses at Xingang Port of Tianjin. Because the distance from these six production bases to Xingang Port is different, their land freights also vary. FOB price includes 10-percent exports tariff from Jan. 1, 2008.
3. CIF prices are based on FOB price plus ocean freight and insurance, which will also vary time by time.
4. When getting ex-works price and FOB price, we give some weight numbers to each respondent and then get the weighted average prices.

Source: [http://www.metalbulletin.net.cn](http://www.metalbulletin.net.cn) (28-Dec-2012)
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