IMA News

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Below are articles and summaries of magnesium related stories. IMA Member companies are asked to distribute the update to their employees and if their employees wish to receive the monthly IMA News issues, please send their email addresses to the IMA World Headquarters. The IMA appreciates all member company press releases and announcements for inclusion in the monthly IMA News issues.

INDUSTRY CALENDAR

IMA Events
June 1 – 3, 2014
IMA 71st Annual World Magnesium Conference
Westin Grand München
Munich, Germany

Industry Events
February 16 – 20, 2014
TMS 2014 143rd Annual Meeting & Exhibition
San Diego, California, USA

March 26 – 27, 2014
Global Automotive Lightweight Materials Asia
Shanghai, China

April 22 – 24, 2014
3rd International Conference and Exhibition "Magnesium - Broad Horizons"
St. Petersburg, Russia

April 23 – 24, 2014
Global Automotive Lightweight Materials 2014
London, UK

June 16 – 19, 2014
25th Advanced Aerospace Materials and Processes (AeroMat) Conference
Orlando, Florida, USA

September 22 – 24, 2014
NADCA Die Casting Congress & Tabletop
Milwaukee, Wisconsin, USA

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ASSOCIATION NEWS

Join U.S. for the 71st Annual World Magnesium Conference in Munich, Germany – Online registration Now Open!

2014 Awards of Excellence and Environmental Responsibility Award – Call for Entries Now Open!

Welcome our New IMA Member: Extrusion Research and Development Center (FZS) of the Technische Universität Berlin!

IMA Announces the return of the China Magnesium Industry and Market Bulletin

2014 Member Dues – Final Invoices

IMA Member Conference Discounts Available:

- Global Automotive Lightweight Materials Asia – Dr. Zisheng Zhen, Magontec Xi’an Co., Ltd., to Present
- 3rd International Conference and Exhibition "Magnesium-21/Broad Horizons" – Prof. Dr.-Ing Karl Kainer, IMA President, Helmholtz-Zentrum Geesthacht and Mr. Martyn Alderman, Magnesium Elektron, to Present

Global Automotive Lightweight Materials 2014 - IMA Member and 71st Annual World Magnesium Conference Programme Chair, Dr. Martin Tauber, Magontec, to Present

Articles follow below

INDUSTRY NEWS

IMA Members Only: February Magnesium Review from Metal-Pages

US Magnesium Announces Next Phase of its Long-term Expansion Project

Toyota to Follow GM and Ford, End Manufacturing in Australia

Articles follow below

EUROPE NEWS

TRW Will Add Romania Plant on Airbag Demand

Article follows below

ASIA NEWS

China Magnesium Industry and Market Bulletin

Article follows below
ASSOCIATION NEWS

Join us for the 71st Annual World Magnesium Conference in Munich, Germany – Online Registration Now Open!

The 71st Annual World Magnesium Conference which will be held from June 1 – 3, 2014 at the Westin Grand München, Munich, Germany. This event is the premier international magnesium industry conference that highlights the latest technological advances, innovative applications, and emerging developments in the global marketplace.

New this year: you may register online for all conference registrations, exhibition space and sponsorships, both for the conference as well as individual events such as the President's Reception which will take place at the BMW Museum or the Closing Banquet at which all 2014 Award winners will be recognized.

Please note that early-bird conference registration rates expire on Sunday, March 31, 2014. Register early to save $200 USD.

Truly international in scope, this unique gathering successfully blends association business, presentations of papers featuring the latest industry technical innovations and business market developments, recognition of the 2014 Awards of Excellence and Environmental Responsibility Award winners and participants, networking opportunities and social activities.

Please mark your calendar and visit the website at www.IMAworldconference.org to get all the conference details including speakers, travel, lodging and registration information, the exhibition floor plan and booth availability as well as sponsorship opportunities.

2014 Awards of Excellence and Environmental Responsibility Award – Call for Entries Now Open!

The International Magnesium Association annually honors several organizations through its awards program. The IMA awards program features the Awards of Excellence and Environmental Responsibility Award.

Winning entries will be recognized during the IMA's 71st Annual World Magnesium Conference, June 1 - 3, 2014 in Munich, Germany. Winners will receive plaques and have their entry prominently displayed throughout the entire Conference.

Please support the IMA Awards program by entering your own company's award nomination or by inviting your colleagues to submit an entry. The deadline for Award entries is Friday, March 7, 2014.

Welcome our New IMA Member: Extrusion Research and Development Center (FZS) of the Technische Universität Berlin!

The IMA is happy to introduce our newest University member. We welcome Dr. Soeren Mueller and his colleagues to the IMA!

- Extrusion Research and Development Center (FZS) of the Technische Universität Berlin; University member (February 2014)
IMA Announces the return of the *China Magnesium Industry and Market Bulletin*

The IMA is pleased to announce the return of the monthly *China Magnesium Industry and Market Bulletin* that is produced by Sunlight Metals Beijing. The IMA is again partnering with Sunlight Metals to provide this valuable IMA member benefit on a monthly basis in the IMA News. We thank Sunlight Metals for their partnership and look forward our members benefiting from the return of this publication!

**2014 Member Dues – Final Invoices**

We would like to thank all IMA members who have renewed membership through 2014! The third, and final round of 2014 IMA Member Dues for all Regular, Associate, University and Student members were distributed on Monday, January 20, 2014.

If you have not yet paid your membership dues and are in need of an invoice, please email Ann Scheible, Director Member Services at info@intlmag.org. Your company’s membership must be in good standing in order to receive the member rates at the 71st Annual World Magnesium Conference in Munich, Germany.

Please also take advantage of this time at renewal to review your Member Profile on the newly redesigned IMA current member listing and Buyers’ Guide. Forward any changes you have to IMA Headquarters at info@intlmag.org or via fax at +1-847-526-3993. You may also copy the form location into your browser:


If you have any questions please do not hesitate to contact IMA staff at +1-847-526-2010 or at our email address, info@intlmag.org.

**IMA Member Conference Discounts Available:**

**Global Automotive Lightweight Materials Asia**

The IMA has been invited to partner with the [Global Automotive Lightweight Materials (GALM) Initiative](http://intlmag.org/members/secureDocument.cfm?docID=48) that takes place March 26 – 27, 2014 in Shanghai, China.

With increasingly stringent CO2 emissions targets in Asia, Europe and USA, OEMs around the world are rapidly developing strategies to drive the development of low cost, high volume lightweight solutions and improve manufacturing capabilities to reduce material cost, ensure quality supply and create more fuel efficient vehicles on a global platform.

It is the mission of the Global Automotive Lightweight Materials Asia 2014 to drive down the cost of attaining, designing and applying lightweight materials including high strength steel, aluminium, magnesium and composites, to enable the mass production of lightweight, fuel efficient vehicles in Asia.

IMA Members can join this exclusive event as GALM brings together OEMs, Material Suppliers and Tier 1s to assess current capabilities and future strategies being developed to drive the development of low cost, high volume lightweight vehicles on a global platform.

Please note that [Dr. Zisheng Zhen, Technical Director Asia, Magontec Xi’an Co., Ltd.](http://intlmag.org/members/secureDocument.cfm?docID=48) and IMA Member, will be among the presenters at the event.

As an IMA Member, you can claim a 15% discount on the advertised rates. To claim this offer, please email info@london-business-conferences.co.uk or call +44 (0)20 7033 4970.

**3rd International Conference and Exhibition "Magnesium-21/Broad Horizons"**

The IMA has been invited to partner with the [3rd International Conference and Exhibition "Magnesium-21/Broad Horizons"](http://intlmag.org/members/secureDocument.cfm?docID=48) that takes place April 22 – 24, 2014 in St. Petersburg, Russia.

The goal of the coming Forum is to thoroughly discuss the status and the main tendencies of the present market of magnesium and its alloys and to demonstrate the latest achievements in science and technology.
Taking into account the results of the previous Conferences the Organizing Committee is confident that the Forum will raise great interest in the professional circles and will attract companies specializing in magnesium production and application, producers of equipment and raw materials, and major consumers of these products.

Please note that IMA President, Prof. Dr.-Ing Karl Kainer, Head of the Magnesium Innovation Center MagIC, Helmholtz-Zentrum Geesthacht, and Mr. Martyn Alderman, Director of Technology, Magnesium Elektron and IMA Member, will be among the presenters at the conference.

As an IMA Member, you can claim a 7% discount on the advertised rates. To claim this offer, please email Ms. Olga Feskova at conference2@alusil.ru or by phone at +7 (495) 785 20 05.

Global Automotive Lightweight Materials 2014

This year, the internationally renowned Global Automotive Lightweight Materials (GALM) Initiative returns to London with the mission of supporting the delivery of aggressive lightweighting by securing the global supply base for aluminium, magnesium, high strength steel and composites, and integrating joining and forming technologies for multi-material manufacturing to enable commercially feasible, high volume, lightweight vehicle manufacturing on a global platform.

Please note that Dr. Martin Tauber, Vice President, Magontec, and IMA Member, will be among the presenters at the event.

INDUSTRY NEWS

IMA Members Only: February Magnesium Review from Metal-Pages

The price of magnesium in the US has reversed a downward trend seen at the start of the New Year amid a tightening supply pipeline and a slight increase in demand, according to trade sources. Producers of magnesium are understood to be well sold under long-term contracts and are holding thin inventories, while overseas producers in countries like Russia and Kazakhstan are set to supply less material into the US market this year.

It comes as market participants report signs of life in the spot market with some smaller consumers who are not covered under contract agreements showing interest for occasional truckloads. The US price for pure magnesium min 99.9% material has moved up to a range of $1.95-2.10/lb delivered from a previous level of $1.90-2.05/lb delivered. Secondary 90/10 magnesium has also edged up to a range of $1.75-1.80/lb delivered from $1.70-1.75/lb delivered. Spot market activity is expected to build traction heading into the second quarter as some consumers may look to replenish thin inventories and could require additional units due to robust order books.

The US magnesium industry is set to be underpinned again this year by the aluminium alloying sector due to the booming automotive market, while volumes into the extrusions industry are expected to improve as the construction market picks up through the busier spring period. Latest figures show total US auto sales in January dropped more than 3% to about 1,011,188 units.

The European magnesium market has been unchanged in the past week, awaiting the next move from China, its key supplier, although demand in Europe is expected to extend its low key pattern through the rest of this quarter, industry sources said this week. The European spot market is some $2,740-2,780 a tonne delivered.

The European market has been moving around a four-year low since the start of 2013 and well off a peak average of some $3,325/tonne in January of that year when Beijing abolished export duties on magnesium metal. “Some of the Chinese producers in the outer provinces are having trouble getting their material to the ports due to heavy snows, which should prices for a little while,” one source said. Moreover, Chinese supplier stock levels are fairly low, which should cement market prices around their current range, they said.
In China, consumers restocked in early January and had quietened buying interest shortly before the Chinese holiday. Chinese production costs in Shanxi province are around RMB15,000/tonne, about RMB3,000/tonne more expensive compared with Shaanxi province, Chinese sources said. Chinese exporters reckoned export business was thin last week, while buyers in the West had been bidding below export offers, with one deal done at $2,620/tonne basis CIF Italy after an exporter offer of $2,700/tonne.

The Chinese magnesium metal market has been stable in the first week after the Chinese New Year holiday (January 31-February 6). Producers are cautious as market outlook is not clear. Prices of magnesium 99.9% grade have stayed at RMB15,000-15,500/tonne, the same as a week ago.

“We are holding offers at RMB15,000/tonne, but no deals have been done as consumers have not returned from holiday,” a Shaanxi-based producer source said. The source said that stocks have accumulated during the week-long holiday, but delivery has been delayed due to heavy snow in the past few days.

A trader from north China reported that he bought four truckloads (152 tonnes) of metal last Friday, but trucks have been stuck on the snow-covered road. “Prices have been stable at RMB15,000/tonne, but some producers, who want to liquidate stocks, are willing to accept lower bargains.”

A trader in Shanxi told Metal-Pages that most producers are watching the market and waiting for big producers to publish their offers. He said that the market is expected to pick up next week. Export prices are unchanged in line with the stable domestic market with prices in the range of $2,580-2,640/tonne FOB.

For the latest magnesium news and prices visit www.metal-pages.com. To subscribe at the special IMA membership rate, email Metal-Pages at info@metal-pages.com.

US Magnesium Announces Next Phase of its Long-term Expansion Project

US Magnesium LLC announces expansion of its primary magnesium production facility from 63,500 to 76,500 metric tons per annum. This next phase comes on the heels of multiple expansions, with the latest completed in 2012. Over 130 new jobs will have been created since the company started expanding in 2005. The larger facility requires new equipment in both the chemical and metallurgical sections of the plant. Equipment procurement has commenced which will facilitate additional metal production in 2015.

Ron Thayer, President of US Magnesium, commented “This next phase of our expansion takes us one step closer to the optimum process scale of 90,000 metric tons per year. The associated unit cost reductions, combined with a favorable energy outlook for USA manufacturing, should solidify our position as a sustainable long-term low cost producer of magnesium.” “Brownfield expansions in this relatively small industry carry much less risk than the large capital associated with a new greenfield facility” added Susan Slade, Vice President of Marketing. “Of course, this expansion project would not have been possible without the continuation of the antidumping duty orders on imports from China.”

US Magnesium is one of the Renco Group Family of Companies. The plant in Rowley, Utah processes minerals present in the Great Salt Lake to produce magnesium metal, water purification chemicals, hydrochloric acid, and various salts used in de-icing and fertilizer products.

*Source: For Immediate Release by US Magnesium LLC (10-Feb-2014)*

Toyota to Follow GM and Ford, End Manufacturing in Australia

Toyota Motor Corp. will stop building cars in Australia in 2017, spelling the end of the local industry after Ford Motor Co. and General Motors Co. announced last year they also plan to pull out.

The Japanese company, which started making cars in the country in 1963, cited high manufacturing costs, an elevated Australian dollar and low economies of scale. Toyota has 2,500 manufacturing employees in the country, it said in an e-mailed statement today.

Toyota’s decision marks the end of an Australian car industry that traces its roots to 1901, as a fall in trade tariffs, the small scale of local plants and an Australian dollar that surged almost 50 percent against the U.S. currency from 2009 to 2012 pushed consumers to cheaper imports. Ford said in May that it would stop output in October 2016, while GM’s Holden unit announced a 2017 departure in December.
"Once Ford and Holden went, it was always going to be hard for the last one to survive," said Stephen Walters, JPMorgan Chase & Co.'s chief economist in Australia, citing the strength of the currency, small scale of local production and high costs.

"There will be spillover effects in terms of employment lost in the car industry itself and related industries."

Australia's biggest

Toyota's manufacturing halt will leave Australia with no consumer carmaker for the first time in peacetime since at least 1925, when Ford established a plant in the southern city of Geelong to assemble the Model T. The industry, including parts manufacturers who supply the three carmakers, employed 50,370 in February 2013, according to government data.

The Japanese company is Australia's biggest automotive exporter, sending overseas about 73 percent of the 101,424 cars produced in 2012, according to a November submission to a government inquiry on the future of the industry.

"We did everything that we could to transform our business, but the reality is that there are too many factors beyond our control that make it unviable to build cars in Australia," Toyota Australia President Max Yasuda said in the statement. "Our manufacturing operations have continued to be loss-making despite our best efforts."

Global restructuring

Tony Abbott's government, which was elected last September vowing to cut taxes and ease red tape for businesses, has said it doesn't believe in "corporate welfare" to prop up ailing companies.

It wouldn't "run down the road after Holden waving a blank check," Abbott said during the election campaign last August, criticizing A$700 million ($624 million) of extra funding for the industry promised by the government at the time.

Toyota's decision is "a reflection on a restructuring globally that's going on," industry minister Ian Macfarlane told a media event in Canberra today. "The automotive industry has been facing significant challenges in Australia perhaps for over a decade."

The decision is devastating "for thousands of Australian workers and the entire Australian manufacturing industry," Paul Bastian, the national secretary of the Australian Manufacturing Workers Union, said by e-mail.

Toyota had been attempting to amend its contract with plant workers under plans to cut the cost of producing cars locally by about A$3,800 a vehicle. It had appealed a Dec. 12 decision by Australia's Federal Court blocking a vote among.

Source: www.autonews.com (12-Jan-2014)

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EUROPE NEWS

TRW Will Add Romania Plant on Airbag Demand

TRW Automotive Holdings will open a new airbag sewing factory in Roman, Romania, to meet anticipated growth in demand for airbag cushions over the next five years.

"By 2018, we expect that an additional 12 million sewn bags will be needed. The new facility will support our airbag plants across Europe," Frank Mueller, the company's vice president and general manager for global occupant safety systems, said in a statement.

The plant is expected to employ 400 people by the end of 2014 and up to 1,000 people by 2017.

The new facility reflects growing interest in Romania from both suppliers and automakers. TRW opened its first facility in the country – a steering wheel leather wrapping plant at Timisoara – in 2004. It opened a similar facility in Baia Mare, 600km north of the capital Bucharest, in January 2012 and last May announced plans for a fivefold increase in production there.
The U.S.-based safety systems supplier also has sites in Oravita, Lupeni and Marghita, where its activities include die casting, foaming and airbag production.

Another large U.S.-based supplier, Lear Corp. is opening a new seating plant in Iasi this month. The factory, which will employ an estimated 1,500 workers, will be the company's fourth Romanian facility. Lear also operates electrical power management and distribution facilities in Pitesti and Campulung.

Automakers operating in Romania include Daimler, Ford and Renault.

Last April Daimler announced plans for a new factory in Sebes, close to an existing parts factory in Cugir, to assemble transmissions for its Mercedes-Benz brand. The company has produced parts for engines and transmissions in Romania through a joint venture since 2001.

Ford makes the B-Max in Craiova, Romania's sixth largest city, and Renault's plant in Pitesti makes the Dacia Duster, Logan, Logan MCV, Logan van, Logan pickup and Sandero.

Source: www.europe.autonews.com (20-Jan-2014)

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**ASIA NEWS**

**China Magnesium Industry and Market Bulletin**

**Top 10 Stories in 2013 for the Magnesium Industry in China**

In January 2014, the China Magnesium Association kicked off top 10 stories in 2013:

1. **New tariff policy effective**
   From 2013, new tariff policy goes into effect. Three magnesium-related products are free from export tariff, i.e., from Jan. 1, 2013 magnesium products will be unlisted from export tariff.

2. **High-performance magnesium and wrought alloys into Guidance Catalogue of New Strategy Industry Products and Service**
   Aiming to transfer social funds into key sector of strategic and new industry, and to put into effect the related policy for new industry, National Development and Reform Commission releases Guidance Catalogue of New Strategy Industry Products and Service. Into the catalogue are high-performance magnesium and wrought alloys technology, magnesium alloy corrosion control and protection technology, and magnesium alloy forgings.

3. **The lightest magnesium hub forging by Yinguang Magnesium**
   On May 15, Yinguang Magnesium kicked off the lightest alloy hub worldwide. It is minimum 5.2kt for 17 inch product, only half weight of aluminum hub. The company announced its production line, the first one worldwide, is ready for operation with an output of 50,000 sets annually.

4. **No. 70 International Magnesium Conference in Xi’an**
   On May 20, the No. 70 International Magnesium Conference opened in Xi’an. The conference attracted over 700 representatives from over 30 countries and regions. Magnesium alloy hub through super plastic die forging by Jiangsu Rongmei Wheel-Hub was awarded the best processing for year 2013 issued by the International Magnesium Association.

5. **Magnesium alloy first into electronics chamber of Chang’e-3 mission**
   Electronic chamber for Chang’e-3 mission is of anti-corrosion, thermal control through its outer layers for internal temperature adjustment, and electric conduction for inter layer.

6. **No. 16 annual conference of China Magnesium Association in Yingkou**
   From October 17-18, 2013, the China Magnesium Association opened its No. 16 annual conference in Yingkou. Its topics include integral updating on China’s magnesium alloy process, enhancing application of magnesium, promoting industry scale of magnesium alloy, and aiming for strong country for magnesium industry.
7. **1.5m wide magnesium sheet by Yingkou Yinhe Magnesium**

Through seven years of R & D, Yingkou Yinke Magnesium realizes the industry production of wide magnesium sheet. The company leads the magnesium industry by 1.5m wide sheet.

8. **Wanfeng Auto Holding intended to acquire MLTH**

In Nov.13, Wanfeng Auto Holding announced its plan to acquire MLTH. Upon the operation, Wanfeng will obtain the whole ownership interest of MLTH.

9. **Ministry of Industry and Information Technology (MIIT) released the second group of up-to-standard magnesium companies**

MIIT announced the second group of qualified magnesium companies in its website. There are 24 companies meeting the admittance standard.

10. **Prof. Dingwenjiang from Shanghai Jiaotong University, new academician of Chinese Academy of Engineering (CAE)**

CAE released the new academicians for year 2013. Prof. Dingwenjiang, honorable director of China Magnesium Association, from Shanghai Jiaotong University, is elected as academician of the department of chemical, metallurgical and material projects, CAE.

**China Exported 411.1kt of Magnesium Products in 2013, up 10.8%**

From January to December 2013, export of magnesium products in China hit 411.1kt, up 10.8% y-on-y. Of which, ingot export closed at 212.1kt, up 21.9%; alloy at 101.9kt, up 10.4%; powder 85.4kt, down 2.6%; products at 5678.9t, down 38%; and semis at 4475t, down 37.9%.

As shown, year 2013 saw a steady growth against year 2013. Of which, both primary ingot and alloy indicated rapid growth owing to the withdrawal of related export tariff. However, powder, products and semis declined, especially both product and semis. So, raw material still plays an important role in export.

<table>
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<th>Item</th>
<th>Magnesium unwrought (min.99.8%)</th>
<th>Other magnesium and alloy unwrought</th>
<th>Waste and scrap</th>
<th>Magnesium rasplings/turning s/granules according to size &amp; powders</th>
<th>Magnesium wrought</th>
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**Top Exporters for Magnesium Alloy in 2013**

Data from China Customs show magnesium alloy export in 2013 ended at 101.9kt, average price up 10.4%, but unit price declined to 3176.4 US dollar/t, down 3.9%.

As shown, several producers and trading agents play top role as in 2012. Of which Magontec Xian ranks No. 1, at 9606.2t, 10.5% of total; followed by Shan’xi Int’l Import and Export, at 8707.4t, 9.5%; Nanjing Welbow Metal at 8500.4t, 9.3%, and it is wholly owned by Nanjing Special Metals, and the platform of global sales network of Nanjing Yunhai. Specially, Qinghai Sunglow Magnesium marches into export business since 2012, with steady growth, and ranks No. 4.
### Top 10 exporters of magnesium alloy (January to December 2013)

<table>
<thead>
<tr>
<th>No.</th>
<th>Exporter</th>
<th>Export (t)</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Magontec Xian</td>
<td>9606.2</td>
<td>10.5</td>
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<tr>
<td>2</td>
<td>Shanxi Int’l Import &amp; Export</td>
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<td>3</td>
<td>Nanjing Weilow Metals Co., Ltd</td>
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<td>4</td>
<td>Qinghai Sunglow Magnesium</td>
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<td>7.0</td>
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<td>5</td>
<td>Beian Xinmei Trading</td>
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<td>Shanxi Jinshuie Metal Material</td>
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Source: Sunlight Metal, China Customs

### Safety and Production Standard for Magnesium and Alloy Smelting (GB29742-2013)

AQSIQ and SAC jointly issue safety and production standard for magnesium and alloy smelting (GB 29742-2013). It will be effective in 2014.

For package, transport and storage, it says package for both magnesium ingot and alloy ingot are decided by supplier unless otherwise stated. The package should consider fully the capacity of transport media, and should be of anti-damage. As magnesium ingot and alloy ingot are not dangerous, the common transport is suitable but with water-proof means. During storage, they should be of water proof, anti-moisture and anti-corrosion, with ventilation and clean environment, and keep away from oxidants and acidic materials.

### Ministry of Industry and Information Technology (MIIT) Released the Second Group of Up-to-Standard Magnesium Smelters

On December 10, 2013, the Raw Material Industry Department, MIIT released up-to-standard magnesium producers, based on both Admittance to Magnesium Industry and Provisional Management on the Admittance to Magnesium Industry. Of 24 producers, 15 are located in Shaanxi, 8 in Shanxi and 1 in Ningxia.

Fifteen producers in Shaanxi are Shemu Dongfeng Magnesium, Shemu Xingyang Magnesium, Fugu Xiyuan Chemical, Fugu Huashun Magnesium, Fugu Yide Magnesium Alloy, Fugu Tongyuan Magnesium, Fugu Jujinbang Coal, Fugu Shengxin Magnesium, Fugu Jinchuan Magnesium, Fugu Xinhe Meiyuan Magnesium, Fugu Fengcheng Captive Power, Fugu Jinchuan Hongtai Magnesium Alloy, Fugu Fuxing Trading, Yulin Wanyuan Magnesium, and Fugu Tianyuan Magnesium. 8 producers in Shanxi are Yitong Magnesium, United Magnesium, Xinxing Hongda Magnesium, Golden Trust Magnesium, Jinxing Magnesium, Bada Magnesium, Wenxi Regal Magnesium, and Jinhai Magnesium. Taiyang Magnesium in Ningxia is also in the listing.

### Yinhe Magnesium Industrializes High-strength Magnesium Alloy Wheelchair

Yinhe Magnesium, through proprietary R & D, operates in the production of high-strength magnesium alloy wheelchair. It has 3 series, including sports and outdoor foldaway wheelchairs, and comes through the test from National Convalescence-Supporting Quality Supervision and Test Centre, Ministry of Civil Affairs of PRC.

Two series of high-strength and foldaway wheelchairs, YHY001M and KY908MA, each 12.5kg of net weight, weighs 4.2kt and 3.4kg for magnesium alloy parts. They are welded together from special magnesium alloy with high strength, light weight, lower noise and shock absorption. Magnesium alloy fits uneven surface well and of anti-deformation.

The company also makes high-strength and light sports wheelchair, KY778M. It is welded together by special magnesium alloy, with 9.8kt of net weight in which magnesium alloy weighs 2.2kg.
Yinhe Magnesium, located in Xingyuanlu Scientific and Technological Development Zone, Gujiao city was founded in 2007 with 20.1 million yuan of registered capital. Its first phase project attracted 80.8 million yuan of investment. As a high-tech company, Yinhe Magnesium plays an important role in local economy.

**Eontec Handed Over Application for Bio-compatible and Degradable Magnesium Alloy Nail**

Eontec announced the application for magnesium alloy implanting nail to National Institute for Food and Drug Control. The company said the nail, as a proprietary patent named a slowly degradable implanting magnesium alloy, should, before its operation and production, come through some approvals from national medical supervision departments, including handing over the certificates for production site and product registration. Against class I and class II medical devices, its production requires high standards and certifications. The company said the output of medical implanting material worldwide is worth 600 billion RMB yuan in which 30% is from medal material. Degradable magnesium alloy, as a new generation product, will grow in market share annually.

Eontec mainly engages in the R & D, production and sale of light alloys including magnesium and aluminum alloy.

**Semi-solid Thixmolding Mill Comes Through Test Run in Yinguang Yuyuan Light Metal Precision Molding**

Yinguang Yuyuan Light Metal Precision Molding puts semi-solid thixoforming mill into test run. The mill is imported from JSW, the largest and advanced producer for semi-solid thixoforming facility worldwide.

**Foxconn Puts First Phase Project into Operation in Hebi, Henan**

On November 27, the first phase project by Foxconn, locating in Magnesium Alloy Science and Technology Zone, Hebi city, comes on stream.

The project in No. A site attracts 1.36 billion yuan, including 8 workshops and 11 supporting facilities in which two workshops are in operation, and remaining are completed in construction. In No. A site, are ready the facilities related to power, water, gas, communication, road and green planting. In both No. B and No. C sites, design is under way, and their construction will begin in the first half 2014.

The project has casting, processing, grinding workshops. Its current product is the outer and inner shells for mobile phone, made of magnesium alloy and serving two brands of mobile phones, Xiaomi and Meizu.

**Magnesium Alloy Production Site in Chongqing is Under Construction by Juteng International**

Juteng International launches the construction of magnesium alloy line in Chongqing. The project, located in Youting Industrial Park, Shuangqiao Economic and Technological Development Zone, attracts 0.42 US dollars. In July 2014, it will go through complete construction and reach full capacity production in October. The line, aiming to serve notebook PC market in Chongqing, will supply 24 million pieces of Mg-Al shells and over 7 million pieces of plastic shells. Mr. Huangqifan, mayor of Chongqing municipal government, said that the notebook PCs each worth 6,000-8,000 yuan in current market are made of Mg-Al shells, but notebook PC without Mg-Al shells is 3,000-4,000 RMB yuan and is common in current Chongqing market. This project, upon its operation, will update Chongqing-made PCs, create additional value for electronic information industry, and plays a strategic role.

The project is 686,646 square meters, with 0.12 billion yuan of registered capital, and will bring in 0.4 billion US dollars of output value.

**Chunxing Precision Mechanical Plans to Construct Magnesium Alloy Structural Parts**

On November 21, Chunxing Precision Mechanical announced the No.19 temporary meeting of second session directorate conference approved the proposal on the construction of magnesium alloy structural parts project. The coming project locates in Shanghu Town, Changshu city, will attract 45 million yuan of investment in which 35 million yuan is for equipment, and 10 million yuan for workshop lease and flowing capital. It is mainly for the PCs casing, structural parts of mobile phone and desk computer, and power-driven tools.

Upon its operation, it will boast 200,000 pieces of capacity/a, bringing in 180 million yuan of monthly sale income and 25 million yuan of average net profit, with 2 years of capital return.
Yinguang Magnesium Trial - Produces Magnesium Alloy Parts for Airplane Cabin

The trial production of magnesium alloy parts for airplane is under way by Yinguang Magnesium through its sand casting workshop. Technician said the product, with up-to-standard rate at 70%, is competitive against the rates from other companies. It weighs only 6.5kg, but with higher sale price and bright future.

Yinguang Magnesium owns 11 companies, with 1.4 billion yuan of total capital. The group boasts 100kt/a of magnesium ingot, 30kt/a of magnesium alloy, and 10kt/a of deep processing products.

Magnesium Alloy Enters into Jade Rabbit Lunar Rover of Chang’e-3 Mission

On December 14, 2013, Change No.3 spacecraft landed as expected, and Jade Rabbit (Yutu in Chinese) lunar rover rolled into the moon. On December 22, the mechanical arm in the front of lunar rover first comes through operation as instructed. The arm weighs 3.5kg, 55 cm. long and 5 cm. in diameter. Yuhong, a known researcher from Shanghai Spaceflight Technology Institute and a leading role in designing the arm, said the arm is made of magnesium alloy, and its joint parts is mainly by titanium material.

The arm is really marvelous, because it can work on the moon 380,000 km. away from the earth, and can endure the austere atmosphere indicating the change of over 300 centigrade degree. Furthermore, its power is below 4W, but operation decision is within 2mm.

Yuhong said that from its design, preliminary sample to final sample, our team went through over 5 years of conscientious and diligent research, we met lots of difficulty to overcome, and we walked through the period full of self innovation. Lunar rover is an intellectual robot, its arm helps finish exploration task. The obstacle we met is the moon environment strange to us. The moon is a world without air, but with over 300 centigrade degrees of temperature change, along with dust everywhere and 1/6 gravity related to the earth.

Before its installation into Chang’e-3 mission, researchers from Shanghai Spaceflight Technology Institute made hundreds and thousands of tests for vacuum, super-low storage, longevity, reliance and anti-dust. Yuhong said the arm is 100% made in China. We apply for many patents relevant. Not only do we hope for its best performance on the moon, but also for its civil use in future.

Source: www.lightmetal.com.cn/en (04-Feb-2014)