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Constellium-UACJ Opens USA Automotive Body Sheet Plant

Meanwhile, UACJ Establishes Automotive Division and Constellium Opens Finishing Line



Aluminium rolls for the automotive industry. Photo by Gérard Uféras, courtesy of Constellium N.V.

Constellium-UACJ ABS LLC has opened its new manufacturing plant in Bowling Green, Kentucky, USA, that will supply aluminium automotive body sheet to the North American automotive industry.

The 23,200-square-metre (225,000-square-foot) facility has an initial capacity of 100,000 tonnes. It plans to offer flat rolled products for a wide range of applications, including closure panels and body structures, Constellium-UACJ says.

Constellium-UACJ is a joint venture between Constellium N.V., of the Netherlands, and UACJ Corp., of Japan.

"The opening of the first North American automotive body sheet finishing line, with our partner UACJ, is an important milestone in our goal to become a global leader in aluminium automotive solutions," Jean-Marc Germain, Constellium N.V. CEO, said in a press release. "As a one-stop shop, Constellium is well-positioned to provide automotive OEMs with innovative rolled and extruded products, which lighten vehicle weight, while offering exceptional performance characteristics."

The use of aluminium automotive body sheet in North America increased from 70 kilotonnes in 2012 to about 500 kilotonnes in 2015 and is expected to reach more than 1000 kilotonnes in 2020, Constellium-UACJ says.

Meanwhile, UACJ Corp. recently established an automotive business development division to strengthen its aluminium automotive materials business in anticipation of future market growth. The company is currently developing business in North America, Asia and Europe, UACJ says.

In North America, UACJ has acquired a company that manufactures automotive aluminium structural materials and other products and is known for its Whitehall Industries brand. The company is doing business as UACJ Automotive Whitehall Industries Inc.

UACJ's new automotive business development division will gather, consolidate and integrate information related to the market environment and trends in new automobile-related products and technologies that use aluminium. "We aim to contribute to efforts to make automobiles more lightweight and propose optimal solutions in response to customer requirements and future requests," UACJ said in a press release.

Separately, Constellium N.V. has opened a new finishing line at its plant in Neuf-Brisach, France, for a total investment of EUR€180 million (USD\$198 million). The new line's equipment will enable it to manufacture high-quality aluminium products for automotive closure inners, outers and body-in-white.

The 240-metre (787-foot) long finishing line has high-speed thermal treatment, precise temperature control, a highly efficient quenching process and greater flexibility on the thickness of processed alloys, Constellium says. It has a production capacity of 90,700 tonnes.

"On the heels of the launch of our new manufacturing plant with our joint venture partner UACJ Corporation in Bowling Green in the US, the opening of the new finishing line in Neuf-Brisach is another critical step in the execution of our worldwide automotive growth strategy," Germain said.

TRIMET Sees Increased Production, Plans More Investments

TRIMET Aluminium SE increased its sales of aluminium products during fiscal year 2016, which ended 30 June. It produced more than 700,000 tonnes of aluminium and cast iron products, 5 percent more than the previous fiscal year, the German company says. FY2016 revenues were EUR€1.7 billion (USD\$1.9 billion).

The company currently is continuing growth investments to meet demand, including needs for the automotive industry.

"We will continue our policy of qualitative growth. With continuous investments at all production locations, we are optimally positioning ourselves to face the rising demand for aluminium and are constantly improving our production efficiency," Martin Iffert, CEO of TRIMET, said in a press release. "Through the further development of production facilities and the tighter integration of our locations, we can more flexibly serve the current demand, secure long-term jobs and maintain our position as a provider of high-quality aluminium products for all stages of the material chain."

TRIMET plans to invest EUR€36 million (USD\$40 million) in an alternative energy initiative over the next two years. Because aluminium production requires a constant

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Pyrotek Heated Trough Cover System Improves Efficiency for Rod Caster

Heated cover systems can improve efficiency and quality in aluminium casting operations. They incorporate heaters as modules in trough cover sections, furnace lids, crucibles, filter boxes and other applications. They also allow for the preheat of refractories prior to the introduction of metal, to retain the metal's heat during transfer and to hold molten metal at the desired temperature during periods of inactivity.

In addition, heated cover systems keep refractory surfaces hot, thus avoiding refractory thermal shock. They improve startup casting due to no metal heat loss in the system, reduce furnace temperature and reduce energy costs through heat conservation.



Pyrotek heated cover system.

Case Study

One North American continuous rod caster that operates several rod mills wanted to replace its aging heated trough system. Pyrotek worked with the customer to design an electric conductive heated trough system to suit its operation.

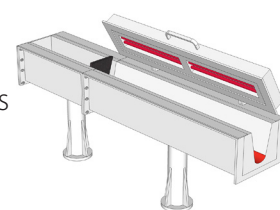
The rod caster needed to hold

Continued on page 6

Improve Metal Transfer

Covered and heated trough systems

- Uniform and controlled heating
- Reduced energy costs
- Increased refractory life



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Pyrotek Offers a Range of Billet Casting Consumables, Including Its New Base-insulated Tabletop Refractory

Pyrotek offers both new and time-tested consumables to support the billet casting process, all designed to improve metal quality and increase operational efficiency.

For the billet casting mould table, Pyrotek provides table refractories, thimbles, transition plates (T-plates), gasket seals, backup insulation, lubricants and coatings, along with other key products.

Refractories

The billet tabletop refractory is important for maintaining optimal casting temperature and allows for a continuous flow of metal to the casting mould, all while protecting the steelwork in the tabletop structure.

Pyrotek has developed a new and uniquely designed base-insulated tabletop refractory with a base recess to accommodate a bottom insulating board. It features a specially formulated composition that meets the demands of vertical direct chill (VDC) billet casting applications, providing mechanical toughness and optimum thermal insulation.

Pyrotek's base-insulated refractory minimizes the loss of molten aluminium temperature and lessens the temperature gradient from the filter bowl to the farthest mould position. More uniform temperatures across the casting table provide consistent billet metallurgy and quality. In practice, reducing the table's temperature gradient across its length allows casthouses to reduce energy needed for higher furnace temperatures. The product was engineered for this application and trialled by customers.

Additionally, the new refractory reduces maintenance costs for casthouses. Its performance in the field shows the table doesn't crack or fracture as often as common alternatives. It has low thermal expansion, resulting in excellent thermal-shock resistance.

Thimbles

Pyrotek thimbles are an essential consumable needed to get molten aluminium from the hot-top billet

table to the mould. The smooth inner surface reduces the buildup of oxides, and the precise casting of the attachment ring groove ensures compatible and uniform mating. Their durability ensures long life.

They are all engineered to original equipment manufacturer specifications.

T-plates

T-plates are fundamental to the hot-top VDC billet casting process. Pyrotek T-plates are strong and have both low thermal expansion and low thermal conductivity. They stand up to the repeated thermal shock that can crack other T-plates. They also provide the right amount of insulation to control heat transfer from the metal in the mould.

Pyrotek offers a variety of carbon fibre-reinforced calcium-silicate materials that are manufactured to specification.

Transition plates are generally coated with boron nitride at the time of manufacture to provide nonwetting properties. Graphite-based coatings are also available. This smooths the metal's transition from the thimble to the lubricated graphite ring.



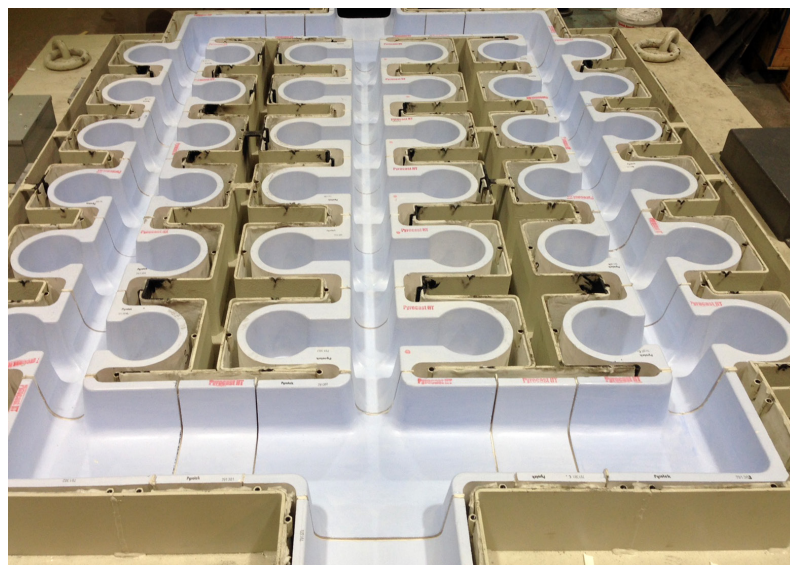
Pyrotek transition plate.

Refractory Protection

Coatings protect the refractory components of the casting table, helping provide a quality billet by creating a nonwetting surface to minimize metal and oxide adhesion.

Pyrotek is the exclusive worldwide distributor of ZYP Coatings Inc.'s premium boron nitride protective coatings, including the Wagstaff Inc.-approved Lubriccoat® EAS series of T-plate coatings. Boron nitride is the industry standard for refractory protection against the rigors of molten metal.

In addition to boron nitride, Pyrotek carries a complete line of graphite-based and ceramic-based coatings that have proven to prolong refractory life, reduce maintenance and increase product quality.



The billet table seen here features Pyrotek's new base-insulated refractory.

Pyrotek coatings are non-reactive and nonwetting to molten aluminium and are available in water, oil or solvent carriers and can be easily applied by brush or air-spray.

Casting Lubricants

Lubricants provide casting moulds with critical protection from molten aluminium or aluminium alloys, preventing molten or solidified metal from sticking to the mould wall surface.

Pyrotek offers a range of casting lubricants for VDC moulds. With its different families of oils and greases, Pyrotek's products can replace and improve on the performance of common oils like rapeseed and canola while also increasing the cast surface quality.

Use of Pyrotek's Perlube lubricants reduces the volume of lubricant needed for metal casting compared with generic oils like rapeseed, canola and castor. The reduction in oil lowers water treatment costs, maintains the cooling potential of water, and improves cleanliness by minimizing the amount of excess oil dripping into the casting pit.

Perlube lubricants also reduce water contamination, filter clogging and flocculent consumption.

- Perlube 2 and 225 replace rapeseed oil, while Perlube 250 and 500 can replace both rapeseed and canola oil and are biodegradable.
- Perlube 230 works with Wagstaff's AirSlip® technology. Pyrotek has had successful trials at Wagstaff's research and development center. Perlube 230 also is recommended for those who currently use a full synthetic oil.
- For moulds where oil isn't continuously pumped, Pyrotek offers Perlube 10, Perlube 2000 ES

and Perlube LIS 15R. These greases can be slathered on a mould at the start of a cast.

Pyrotek supplies these lubricants globally through its network of warehouses and distribution centers.

Backup Insulation

To minimize heat transfer and loss from the molten aluminium to the surrounding billet table steel shell, Pyrotek offers backup insulation for the precast distribution trough. Its offerings feature the Pyrotek Wollite series of lightweight mineral foam insulation. After being mixed and poured, Wollite expands to reinforce metal-facing refractory, reducing the effects of refractory cracking. Its low viscosity allows Wollite to fill very narrow cavities.

If a refractory cracks, the Wollite insulation stops molten aluminium from reaching equipment structures and warping or corroding the surrounding steel shell.

Gasket Seals

Gasket seals prevent leakage and loss of molten aluminium between the tabletop refractory components and thimbles and transition plates. Pyrotek gasket seals can be pre-cut to exact dimensions or they can be made using Fiberseal gasket materials, which have a variety of thicknesses, densities and heat tolerances.

Pyrotek sells these products and others to support the casthouse VDC billet casting processes. Pyrotek sales engineers and billet casting specialists provide in-plant consultation for all consumable needs, which is backed by Pyrotek's worldwide manufacturing and distribution network.

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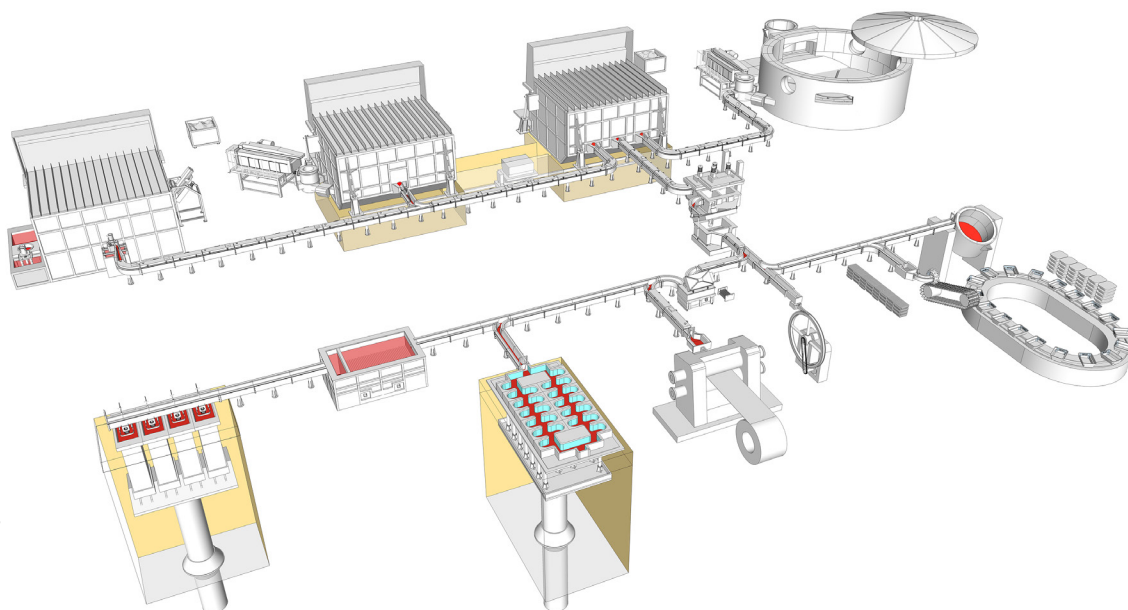
Pyrotek thimbles are engineered for durability.

Aluminium Solutions, from the Smelter to the Foundry



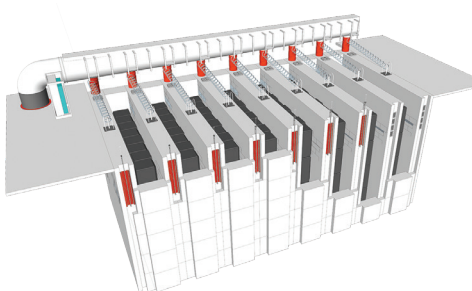
CASTHOUSE

- Metal Melting
 - Furnace Circulation
 - Metal Fluxing
 - Scrap Preparation and Remelting
- Metal Transfer
 - Crucibles
 - Molten Metal Pumps
 - Troughs and Launderers
- Melt Holding
 - Furnace Circulation
 - Metal Fluxing
- Metal Treatment
 - Degassing
 - Filtration
 - Fluxing
- Metal Casting
 - Refractory Shapes and Components
 - Refractory Options, Including RFM® and Ceramite®
 - Flow Control Systems
 - Release Coatings
 - Safety Coatings



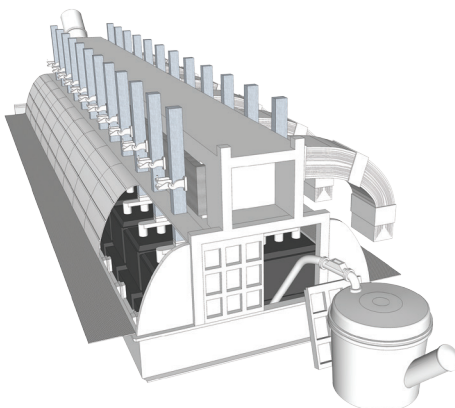
CARBON BAKE

- Seals and Gaskets
- Covers and Lids
- Flue-end Seals
- Expansion Joints
- Blankets and Sealing Materials
- Precast Refractory Shapes
- Thermocouples
- Customized Parts



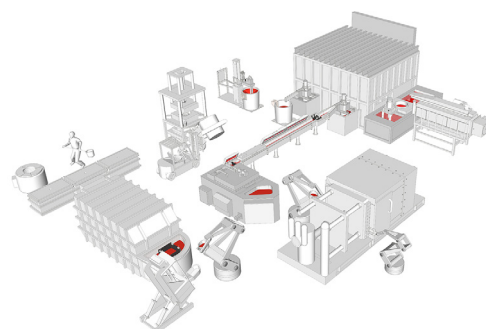
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- Anode Stub Coatings
- Electrical Insulation
- Fume Extraction Control Products
- Crust Breaker Components
- Cathode Sealing Materials
- Thermocouples
- Clads
- Bath Pans and Anode Crust Bins
- Tapping Crucible Siphons, Spouts, Gaskets, Seals, Refractory



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Gestamp Builds New Stamping Facility in the UK

Gestamp, a Madrid, Spain-based company that develops and manufactures metal automotive components, plans to build a new manufacturing facility in Four Ashes, West Midlands, UK, for a total investment of over GBP£70 million (USD\$85 million).

The new 50,000-square-metre (538,000-square-foot) plant will include state-of-the-art stamping equipment, such as a transfer servo press line, and is expected to open at the end of 2017. Gestamp plans to move progressively its operations and about 800 jobs there from nearby Cannock, although the company might retain part of that facility for training and development.

Gestamp says it is building the new plant to create a more

efficient factory and serve automakers in the region better, as well as position it for growth.

"The United Kingdom is one of Gestamp's top five global markets since the beginning of our operations here in 2011," Ian Middleton, Gestamp's UK Country Manager, said in a press release. "Our company is committed to helping our customers in key aspects such as quality, safety and lightweight innovations, therefore Gestamp wants its facilities to utilize the most modern stamping technologies available to fulfil its objectives."

Gestamp, which does business in the UK as Gestamp Tallent, operates six production plants and employs a total of 3600 in the region.



Gestamp's new 50,000-square-metre plant in the UK will feature state-of-the-art equipment. Rendering courtesy of Gestamp.

Noranda to Sell Smelter, Mining Operation, Other Assets

Noranda Aluminum Holding Corp., a USA-based aluminium producer who filed for Chapter 11 protection under the U.S. Bankruptcy Code, has entered into a global settlement agreement with its secured lenders and the Unsecured Creditors Committee that governs the handling of its remaining obligations and assets.

The company also agreed to sell its remaining assets to New Day Aluminum LLC, which won a court-sanctioned auction in October with a bid of USD\$24.4 million. The sale includes Noranda's alumina refinery in Gramercy, Louisiana, and bauxite mining operation in St. Ann, Jamaica, the company says.

Meanwhile, Noranda has sold its aluminium smelter and facilities in New Madrid, Missouri, USA, to Switzerland-based ARG International AG, for USD\$13.7 million. The sale followed an auction in September and bankruptcy court approval.

In August, Noranda sold its downstream business to Gränges AB, of Sweden, for an enterprise value of USD\$324.2 million on a cash and debt-free basis, Noranda says. Gränges said the transaction would double its sales volume and strengthen its position in North America, as well as add a number of market segments in rolled aluminium.

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Airbus delivered its 10,000th airplane to Singapore Airlines in October. The A350-900 aircraft was used to launch the airline's new non-stop services between Singapore and San Francisco, California, USA.

Chinese Investors to Buy Aleris, Airbus Contract Secured

Zhongwang USA LLC has agreed to buy Aleris Corp., a Cleveland, Ohio, USA-based aluminium rolled products producer. Zhongwang is majority-owned by Liu Zhongtian, founder of China Zhongwang Holdings Ltd., a large aluminum extrusions product developer and manufacturer based in China.

Aleris will continue to operate as a separate entity, retain its name and complete growth projects, including the expansion of its Lewisport, Kentucky, USA, plant, the company says.

"We are excited about this transition to strategic ownership as it will allow us to accelerate our strategy to expand our capabilities to support the production of high-value advanced materials for the global automotive and aerospace markets, while maintaining our position as a leading supplier to critical regional markets like building and construction," Sean Stack, President and CEO of Aleris, said in a press release.

The transaction is expected to be completed during the first quarter of 2017, depending on regulatory approvals.

"As the company enters the final phase of its Lewisport automotive project, I believe Aleris is well-positioned to capitalize on the positive demand trends we see globally," Zhongtian said in the release.

Aleris has been owned by a group led by investment funds of Oaktree Capital Management LP, with affiliates of Apollo Management LP and Sankaty Advisors LLC since 2010.

Separately, Aleris signed a new multi-year contract with aerospace company Airbus to supply aluminium plate and sheet. The contract will begin in 2017 and includes the supply of technically advanced wing skin material, which requires additional processing and pre-machining, Aleris says. The company's facilities in Koblenz, Germany, and Zhenjiang, China, will provide the products.

AMAG Experiences Growth, Signs Airbus Contract

AMAG Austria Metall AG saw record shipments and significant growth during the first half of 2016. The company shipped more than 206,000 tonnes of product during the period.

Net income increased 21 percent to EUR€25.9 million (USD\$28.4 million) compared to the first half of 2015.

AMAG is expanding its manufacturing complex in Ranshofen, Austria, to increase capacity and ability to produce product with larger dimensions. The company also recently began construction for a new cold rolling mill and additional heat treatment and upgrading capacity.

"The expansion of the Ranshofen site continues to progress rapidly. This expansion project, which will lift capacity for aluminium rolled products to more than 300,000 tonnes, is running on budget and on schedule. Commissioning will start in around a year's time. With these new plants, we are creating the foundation to expand our business with renowned customers, especially from the automotive, aerospace and packaging industries," Helmut Wieser, CEO of AMAG, said in a press release.

In July, AMAG signed a multiyear contract with Airbus to supply aluminium plate, sheet and coil. The contract, the largest AMAG has signed with the aircraft manufacturer, will begin in January.

"AMAG and Airbus have maintained a successful partnership since the year 2005. This contract will significantly expand our business with Airbus and strengthen our position as a valued supplier to the aircraft industry," Wieser said.

Products Nominated for European Aluminium Awards

Fifty-two products from 18 countries were entered into the 2016 European Aluminium Award competition, and 19 were nominated. Winners will be announced on 29 November at the ALUMINIUM 2016 trade fair in Düsseldorf, Germany.

Information on all entries will be showcased in the award pavilion in Hall 10. The display will include Pyrotek Inc.'s submissions for its new metal casting system to move metal between the holding furnace and a mould and Pyrotek rigid Glasweve filters for low-pressure casting that allow foundries to recycle excess sprue return aluminium without negative impact on aluminium quality or outside treatment.

Nominees include but are not limited to:

Architecture & Construction

- Aluminium wind wall, Bayards Aluminium Constructies BV
- Atrium walls, AVC Doors & Walls
- Custom high-tech façade, Groven +
- Parking garage façade, Van Campen Industries / APT Kurvers
- Façade for corporate headquarters of Cockerill Maintenance & Ingénierie in Belgium, Novelis AG
- Residence, BURO II & ARCHI+I

Automotive

- All-aluminium light e-body concept,



Hydro Aluminium Rolled Products

- REALCAR-recycled aluminium car, Novelis AG
- New aluminium product, Surfalex® HF, Constellium

Transportation

- High-pressure die casting, aluminium suspension cross beam for light commercial vehicles, Streparava SpA
- "SpaceInvader" packing system, SpaceInvader ApS

Production Techniques, Tools & Machinery

- ALUMASTER high-speed disc, August Rüggeberg GmbH & Co. KG - PFERD-Werkzeuge
- Carbon-reinforced aluminium spindle, HP Inc. and Engineering Community S.L.
- SiOx NANOMel® coating technology, SiOx

Design & Lifestyle

- Table system, GRUMDESIGN Troels Grum-Schwensen and LAMMHULTS
- Die cast part for solar system, Austria Druckguss
- Outdoor luminaire, ViaLuce van Project 21c / SAPA Extrusions Raeren

Alcoa Separates, Names Boards of Directors

Effective 1 November, Pittsburgh, Pennsylvania, USA-based aluminium company Alcoa Inc. is operating as two companies, Alcoa Corp. and its downstream affiliate, Arconic Inc.

Klaus Kleinfel is Chairman and CEO of Arconic while Michael Morris is non-executive Chairman of Alcoa, and Roy Harvey is Alcoa's CEO.

The following people have been named to Arconic's board: Amy Alving, Arthur Collins Jr., Rajiv Gupta, Klaus Kleinfel, Sean Mahoney, E. Stanley O'Neal, John Plant, L. Rafael Reif, Julie Richardson, Patricia Russo, Ulrich Schmidt, Martin Sorrell and Ratan Tata.

The following people comprise Alcoa Corp.'s board: Mary Anne Citrino, Timothy Flynn, Kathryn Fuller, Roy Harvey, James Hughes, Michael Morris, James Nevels, James Owens, Carol Roberts, Suzanne Sitherwood, Steve Williams and Ernesto Zedillo.

Report Predicts 30 percent Increase of Aluminium in Cars Produced in Europe by 2025

Ducker Worldwide has released a report forecasting that the aluminium content in vehicles produced in Europe will increase up to 30 percent by 2025, to 200 kilograms per vehicle. Rolled and extruded products will be the main factor in this increase. European Aluminium, a trade association, commissioned the study.

"Although we find total content growth in all forming processes, rolled and extruded products have been particularly identified as replacing steel in many instances for products used in body closures and body structures. For example, we expect the use of auto body sheet to double over the next decade," Wouter Vogelaar, of Ducker Worldwide, said in a European Aluminium press release.

Lighter cars help reduce pollution. Using 200 kilograms of aluminium in a car could reduce carbon-dioxide emissions by up to 16 grams per kilometre travelled, European Aluminium says. In 2014, the average vehicle carbon-dioxide emission was 123 grams per kilometre. The European Union has set a target of 95 grams per kilometre by 2021.

Alba Secures USD\$1.5 Billion Syndicated Loan, Reports Third-Quarter Sales

Aluminium Bahrain B.S.C. (Alba), a Bahrain-based aluminium smelter, has secured a USD\$1.5 billion syndicated loan for expansion of its Line 6. The loan is the largest corporate loan in the history of Bahrain, the company asserts.

"The success of the Line 6 syndicated loan facility underscores Alba's strong business fundamentals and the confidence the financial markets have in the Line 6 Expansion Project. We look forward to the full execution of the Line 6 project which upon completion will make Alba the largest single-site smelter in the world," Alba's board Chairman, Shaikh Daij Bin Salman Bin Daij Al Khalifa, said in a press release.

Gulf International Bank B.S.C., J.P. Morgan Ltd., and National Bank of Bahrain B.S.C. acted as global coordinators for the syndicated loan, whose investors include a number of banks.

The expansion is expected to be completed and begin producing metal in early 2019. It would produce about 540,000 tonnes per year, bringing Alba's total capacity to 1.5 million tonnes per year, the company says.

Alba reports its sales increased 3 percent to 246,300 tonnes, compared to 238,900 during the third quarter of 2015. Sales from January to September increased 2.6 percent to 717,600 tonnes. Production, meanwhile, increased 2.4 percent to 246,100 tonnes during the third quarter and slightly during the first nine months of the year to 720,750 tonnes.

"Alba continues to raise the bar on operational performance amidst difficult market conditions. As we move towards 2017, our focus on safety and operational excellence will remain our top priorities," Tim Murray, Alba's CEO, said in a press release.



Photo of the interior of Alba plant courtesy of Aluminium Bahrain B.S.C.

Beverage Maker Reintroduces Water in Aluminium Cans

Rhodium Mineralquellen, a Germany-based beverage maker, has reintroduced its mineral water into aluminium cans after more than 10 years. The 330 milliliter cans, made by Ardagh Group, contain either mineral water or mineral water-apple juice mix and are available throughout Germany, Ardagh says.

The bottler used cans for its water from 1974 to 2003, but switched to other packaging options when Germany introduced a mandatory deposit on beverage cans in 2003, Ardagh says. It had continued to use cans for other beverages, however.

"When we decided to relist canned mineral water, we closely cooperated with Ardagh Group right from the start. Together, we created a packaging design that reflects the premium character and naturalness of the product, while preserving the quality of the water," Lisa Hängsen, Product and PR Manager at Rhodium, said in a press release.



Rhodium Mineralquellen worked with Ardagh to create the new can. Photo courtesy of Ardagh Group.

Demand for European Aluminium Foil Increases

Demand for European-produced aluminium foil increased 1.8 percent during the first six months of 2016 while deliveries improved slightly. Deliveries of aluminium foil during the second quarter of 2016 increased 0.8 percent compared to a decline of 0.7 percent in quarter one, the European Aluminium Foil Association reports.

Thicker gauges, typically used for semi-rigid containers and technical applications, saw a 4 percent increase in deliveries during the first half of the year. Thinner gauges, used mainly for flexible packaging and household foils, increased 0.6 percent from January to June, compared to a drop of 3.2 percent during the first half of 2015.

Exports declined 13.1 percent during the first half of 2016, compared to a 7.8 percent decline during the same period in 2015.

"Foil rollers continue to see positive signs of improving demand. But challenges also continue to exist, notably the possible consequences of the UK's Brexit vote affecting Europe's entire economic performance," Willem Loué, Chairman of the association's roller group, said in a press release.

Aluminium foil's main markets, such as food and beverage, are growing, however.

Pyrotek Heated Trough Cover System Improves Efficiency for Rod Caster

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molten metal static in the troughs during furnace change-overs or minor maintenance. The new system had to more efficiently maintain constant metal temperature than the previous system's covers that used globar heating elements. The cover seal also needed to be improved to reduce heat loss and oxide formation. The customer wanted the covers to have a lower profile to improve visibility around the caster and also eliminate situations where operators must work under hot globars, increasing safety.

The project included Pyrotek's silicon-carbide (SiC) refractory material, a highly durable material in extreme applications that is thermally conductive enough to allow heat to transfer from the heating elements outside the trough side walls to the melt.

Pyrotek Wollite backup insulation was used to help maintain metal temperature more efficiently. Wollite is a pourable, lightweight mineral foam insulation material that has low viscosity and fills narrow and complex cavities. It also has a quick set time and low firing temperature and is easier to remove and reinstall than other types of insulation. In addition to Wollite's insulation benefits, it helps protect heater panels from molten aluminium if there is a leak.

A safety liner made from Pyrotek's patented reinforced fibreglass material (RFM®) was used to replace the stainless steel liner and eliminate any air gaps that had occurred due to the expansion difference between the steel liner and refractory trough. RFM is lightweight, has excellent mechanical strength and is impermeable to molten aluminium. It also has longer service life than cast iron, fibre laminated board stock and other precast ceramic and refractory materials.

The heated trough system's control mechanisms were adjusted to better manage metal temperature. For example, when the system senses low metal temperature (i.e. an empty trough), control reverts to heater thermocouples to maintain refractory temperature. Operators no longer have to open and close lids during casting to control temperature.

As a result of the new system and improvements, the rod caster has reported improved cast quality, less dross and increased safety and productivity. pyrotek.com



Pyrotek's conductive heated trough system reduces heat loss and oxide formation.

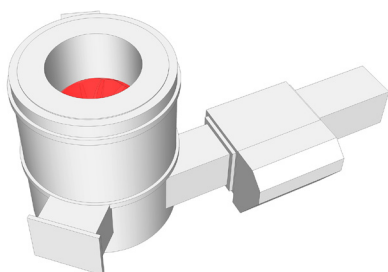
India's Aluminium Consumption to Increase 60 percent

Research firm Crisil has published a report, titled "Indian Aluminium Industry: Geared for Growth," that states annual aluminium consumption in India will increase more than 60 percent to 5.3 million tonnes by 2020, up from 3.3 million tonnes a year currently, Recycling Today reports.

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In Brief

Aluminum Association Releases Building Guide

The USA-based Aluminum Association has released its green building guide, titled "Aluminum in Green Buildings—A Guide to Environmental Declarations." The publication is part of a series of guidelines the association is developing for the building and construction sector.

Rusal Names Managing Directors of Two Smelters

Oleg Buts has been named Managing Director of UC Rusal's Irkutsk Aluminium Smelter. He succeeds Evgeny Kuriyanov, who has been named Managing Director of the company's Krasnoyarsk Aluminium Smelter.

Novelis Helps Launch Recycling Education Site

Novelis, a USA-based aluminium company, and Discovery Education, which provides digital content for young students, have launched an aluminium recycling education program called "Life of a Can—A Never Ending Story." The online program can be viewed at lifeofacan.com, Novelis says.

Aluminium Bahrain B.S.C. Investor Team Earns Awards

Aluminium Bahrain B.S.C. has received the Leading Corporate for Investor Relations in Bahrain and Best Investor Relations Professional awards in Bahrain from the Middle East Investor Relations Society.

TRIMET Sees Increased Production, Plans More Investments

Continued from page 1

energy supply, the company has developed a process that utilizes wind and solar power. TRIMET plans to test that process on an industrial scale. By the end of 2017, all 120 furnaces in an electrolysis hall of the company's Essen aluminium smelter will be converted, the company says.

"Aluminium is closely linked to climate protection: light weight, energy efficiency and recyclability make it the ideal material. With improved flexibility in the manufacturing process, we want to add a further climate friendly attribute to the product," Iffert said.

CALENDAR

29 NOVEMBER–1 DECEMBER

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New Delhi, India
zakaluminiumextrusions.com

7–8 FEBRUARY

14th International Aluminium Recycling Congress
Manchester, UK
european-aluminium.eu

26 FEBRUARY–2 MARCH

TMS 2017
San Diego, California, USA
www.tms.org/meetings/annual-17/AM17news.aspx?id=5578

4–5 MARCH

6th BMR International Conference
Dubai, UAE
bmr.ae

14–16 MARCH

23rd Bauxite & Alumina Conference
Conrad, Miami, USA
metalbulletin.com/events/bauxite-alumina-seminar/details.html

25–27 APRIL

7th International Conference on Electrodes for Primary Aluminium Smelters
Reykjavik, Iceland
rodding-conference.is

aluminium INSIGHT

Publisher: Pyrotek Inc.
705 W. 1st Avenue
Spokane, WA 99201 USA
pyrotek.com

Contributors: David Cole, Sandra Hosking

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