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Naishadh N. Parekh

■ The Indian Automobile industry is the key growth driver of the Indian foundries

■ Copper long term prospects to remain strong on EV adoption

■ Novelis joins First Movers Coalition to accelerate Decarbonization of Aluminum Industry

■ GSSE 2022: Global Stainless Steel Expo successfully concluded from 12th to 14th April in Mumbai

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D. A. Chandekar Editor

Dear Readers,

Like any microscope has different magnification levels, similarly metals industry will look different from different distances, angles. From outside, all looks well. The user industries such as infra, construction, auto are putting up a strong performance thus giving a strong support to the metals demand in this country. Government's (centre as well as many state governments) emphasis on developing infrastructure like roads, ports, airports, metros etc. gives a lot of confidence to a metals business professional. Today the industry sentiment is really quite high and a lot of greenfield and brownfield projects are being implemented. The banks and the financial institutions are eager to lend money to metallurgical projects and even the share market investors are (for a change) bullish about metal companies. So to say, as long as the economy wheel keeps rolling ahead, metals demand and the metal companies' performance will go north !

If one goes slightly closer to the industry and try to understand the situation from a purchase or even marketing perspective, we will come to

Editorial Desk



know that the raw material prices have skyrocketed post Russia-Ukraine war. Even the availability is an issue. Marketing guy will complain about high freight charges and non availability of containers. He has big export orders in hand but can't fulfill the commitment. With reduced Chinese exports and the war disturbance in part of Europe, Indian mills have tremendous export opportunity but for the hurdles mentioned above. Now of course the Indian government has introduced duties with the objective to soften the prices to some extent, to improve the domestic availability and to support the domestic demand curve.

What is the real scenario on the project side ? Almost all the projects, whether greenfield or brownfield, are getting delayed, not due to typical Indian bureaucracy, not due to finance, logistic or manpower bottleneck, but for non availability of the critical electronic components required for the today's automated plants. Most of these components are being imported from China and today with the outbreak of covid and lockdown in multiple cities in China, congestion at ports, these components can't reach India and the project can't be fully commissioned. Whether this is a well thought Chinese strategy is something to be debated at the government level and is outside the purview of the industry.

So friends, grass always looks greener from a distance. The metals industry, though looks vibrant and growing, has many fault lines. Let us be careful and cautious! ■

Write your comments :

<https://metalworlddac.wordpress.com>

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LEADING INNOVATION IN SPECTROSCOPY



The Indian Automobile industry is the key growth driver of the Indian foundries

Naishadh N. Parekh

Managing Director
Inductotherm (India) Pvt Ltd



"The Make in India initiative has triggered the foundry market in India. Various domestic and international players are looking to set up capacities in India. As we are a growing market there are certain challenges facing the sector, including raw material prices which have shot up significantly in the past few months" MD, Naishadh N Parekh.

Naishadh N. Parekh joined Inductotherm (India) Pvt Ltd, as a Test Engineer in Test & QC dept, in December 1981. Since then, he managed and headed the Test dept, Service dept, Electronics manufacturing dept, Engineering dept, and sales dept. He was appointed as Director of the company in July 2012. He had been elevated to the position of Vice President (Operations) on 1st April 2017. During April 2019, he has been appointed as Managing Director of the company. During this journey of 40 years, he has attended several "Technology Conferences" of our Group companies and presented various technical papers. Also visited several group companies situated in the USA, UK, China, Turkey & Indonesia. He received his Master's degree in Electrical Engineering from L.D. College of Engineering, Ahmedabad, during the year 1979 – 1981. He did a dissertation on "SMPS –24V, 10Amps" during this period. He completed his Bachelor's degree in Electrical Engineering with Electronics Group from B.V.M. Engineering College, Vallabh Vidyanagar, Gujarat during the year 1974 – 1978. He has done a paper presentation on "Generation of Harmonics & its effects" at the "International Conference on Harmonics" at CII New Delhi, during the year 2001 & at CII Chennai, in 2002.

How do you analyse the present situation of the Indian economy especially post-covid for the foundry sector?

India suffered economic losses due to lockdowns in the pandemic, but the country has emerged stronger despite the economic setbacks. Foundry market in India is segmented as below:

- **End-user:**
 - Automotive
 - Electrical and Construction
 - Industrial Machinery
 - Agriculture
 - Others
- **Type:**
 - Gray Iron Casting
 - Non-ferrous Casting
 - Ductile Iron Casting
 - Steel Casting
 - Malleable Casting

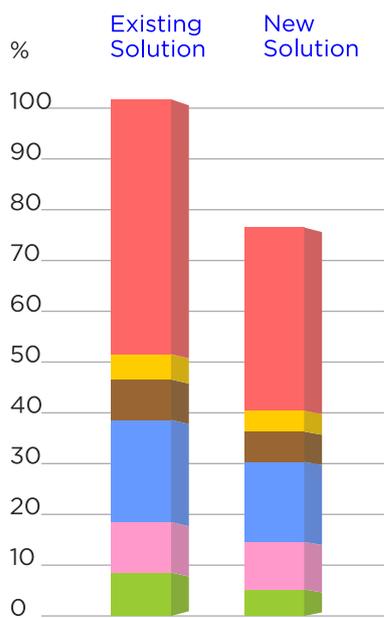
The foundry market in India is driven by the rising focus on technology upgrades. In addition, the Make in India

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Face to Face

initiative has triggered the foundry market in India. Various domestic and international players are looking to set up capacities in India. As we are a growing market there are certain challenges facing the sector, including raw material prices which have shot up significantly in the past few months.

How has Inductotherm been catering to the needs of the industry?

Inductotherm furnaces are recognized for their efficiency, safety, reliability and advanced technology. We keep educating our customers with our latest technology through our large sales & service network in India. We arrange training seminars/courses to improve the operational practices of our customers which eventually help in achieving the best furnace performance with safety.

How is Inductotherm responding to the industry's need for smart manufacturing?

Responding to the Industry need of smart manufacturing, Inductotherm has worked on various factors such as

1. Machine utilisation analysis
2. Equipment volume prediction
3. Maintenance schedule for uptime improvement
4. Smart energy management
5. Predictive quality

management

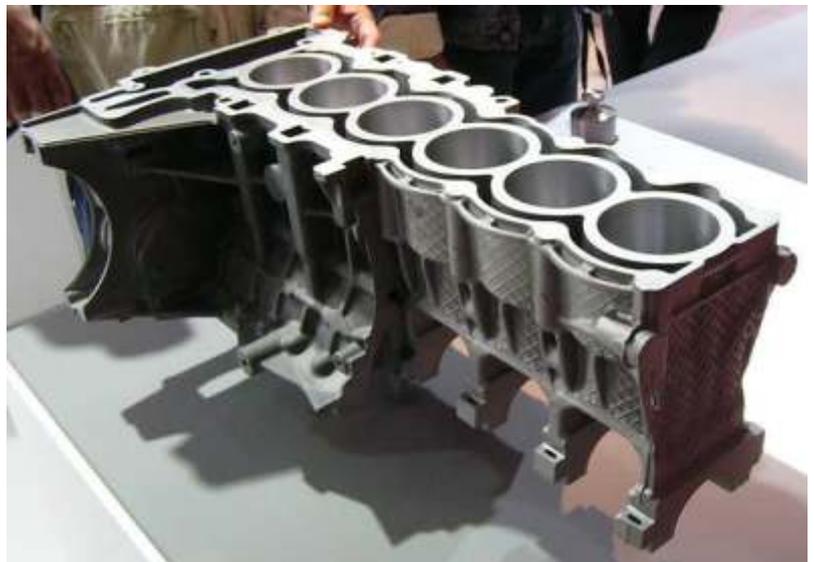
What are the emerging trends in metallurgical industry wrt carbon footprint and how is Inductotherm helping the industry to reduce the same?

Our furnaces are fast replacing Cupola/ Rotary/Coal fired furnaces for melting Iron & non-ferrous metals in foundry. This has not only helped in decreasing pollution but also helped in improving the quality of the finished product.



How do you see the future of the Indian foundry sector? Short term as well as long term?

India is one of the leading countries in the global foundry market. This is primarily because of the growing demand for metal casting from the automotive sector. The Indian auto components industry will continue to grow. The need for lightweight automobiles has



increased the use of non-ferrous metals in their production, contributing to the foundry market growth in India. The growth of the foundry market share in India by the automotive segment will be faster than the growth of the market by the other segments.

What are the latest technologies / products Inductotherm is offering to the industry ?

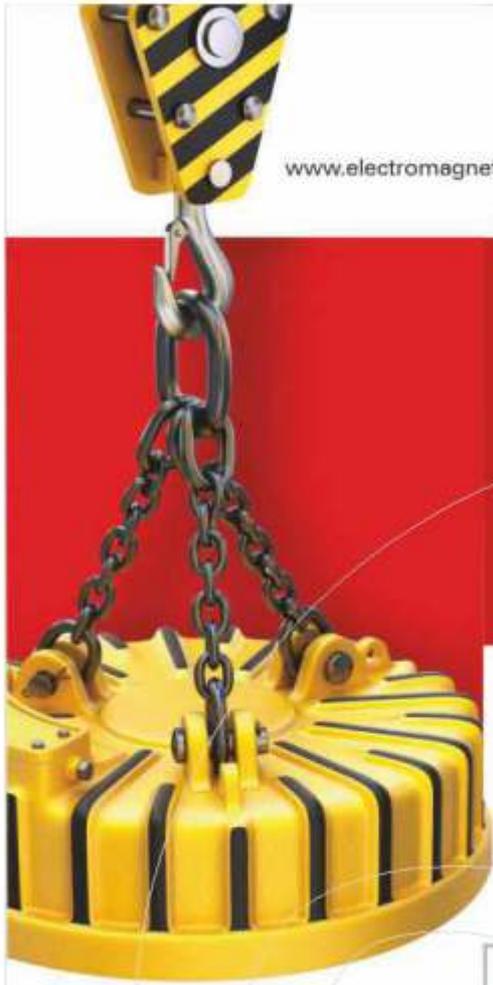
Inductotherm Group is structured to reach across the globe and organized to provide localized manufacturing, engineering, service and support in every region of the world. We do it through 40 remarkable full-service companies providing 50 individual product lines organized into 10 global brands. Each product is designed for superior and consistent performance and offered around the world by a highly developed technology transfer and manufacturing system. For more information on our product line please refer at www.inductothermgroupindia.com ■

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Copper long term prospects to remain strong on EV adoption

Copper

The year started on a very positive note for copper and by mid-March, copper had added roughly 150% to the rally from lows hit during Q1 2020. The recurrence of COVID-19 lockdowns in China and investors worrying about a recession led to a sharp fall in copper prices for the second straight month. However, the metal did attempt to rebound from technical oversold levels in recent days.

Copper after sliding towards \$9,050 later bounced back towards \$9,450, to a 2 week high, helped by a weaker U.S. dollar and as support measures and plans to end COVID-19 lockdowns in China lifted hopes for a recovery in demand. Shanghai, which has been under lockdown for seven weeks, has been slowly getting back to normal and plans to lift its city-wide lockdown and return to more normal life from June 1, which could lead to



Navneet Damani
Sr. Vice President,
Commodity & Currency
Research, Motilal Oswal

enhanced demand. Larger than expected China rate-cut is targeted at stimulating the property sector, which will provide a short-term bounce. Output of Shanghai's industries shrank 61.5% in April from a year earlier, slammed by a city-wide COVID lockdown. There is growing fear about stagflation and commodities are not immune to that cyclical slowdown. So, we could be seeing short covering or some re-entering on China demand. On the supply front, operations have been suspended at Khoemacau Zone 5 copper and



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Feature

silver mine in Botswana were suspended after an accident on site. Peru's prime minister failed to broker a deal with indigenous communities to allow for the restart of operations at MMG Ltd's Las Bambas copper mine.

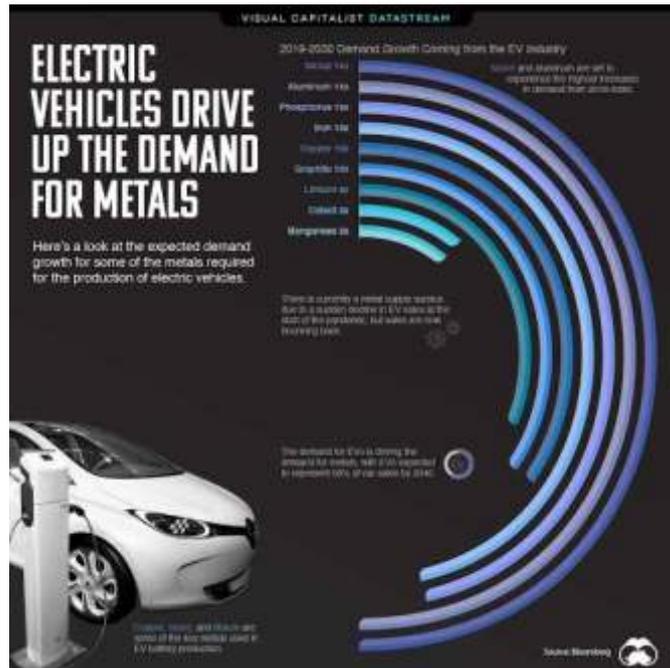
After hitting record highs in Q1 on the back of historically low global inventories, copper stocks have been steadily building and are now 55% higher than at the beginning of the year. The inventory build-up is almost entirely due to flows to the LME, while inventories in Shanghai have been drawn down as traders make the most of the arbitrage window provided by premium prices in China. The premium for cash copper over the 3M contract spiked to a record above \$1,000 a tonne on October 18 last year from \$7 a tonne on October 1 because of large draws on stocks in LME warehouses. It is now at a discount.

The long term prospects for the metals remain strong, not least because of the rapid adoption of electric vehicles. But investor exuberance has led to an oversupply. Copper has recently been caught between bullish and bearish influences and prices earlier advanced on investor hopes that China's lifting of lockdown restrictions would boost demand.

Aluminum

Just like other metals, aluminium was the sharpest to fall and quickest to

recover rallying from lows close to \$2,700 and bouncing back towards \$2950. After a nose dive fall over the last 2 months, Aluminum has been seeing some stability on shrinking inventory as other base metals wavered following a turbulent week dominated by growing concerns on the



state of the global economy. Aluminum available for withdrawal in LME plunged to a record low, providing some price support. But the latest sign of supply shortages still isn't enough to shake the bearish mood dominating metals markets as the demand outlook deteriorates.

Aluminium has for years been characterised by chronic oversupply thanks to China's relentless build-out of primary smelting capacity. Buyers in Europe and the US are paying up record high premiums to get hold of physical metal. The Chinese aluminium juggernaut has

run out of momentum and smelters in Europe are powering down as a rolling energy crunch takes a rising toll on the region's producers. Coal is still the globally dominant source of power for smelting aluminium, reflecting the market dominance of China, which last year accounted for around 58% of world primary output. Within China there has been a rush to swap coal-fired capacity for new plants in hydro-rich Yunnan province, but spaces are fast running out and most of the country's smelters continue to run on captive coal plants or draw energy from coal-based grids.

Weaker stock situation and China coming back on track along with higher energy prices are supportive for the metal. There has been concern that aluminium's race to go green would be abruptly halted by Russia's invasion of Ukraine and the possible sanctioning of Rusal metal. Overall aluminium looks to be a good long side trade in the medium term.

Nickel

Nickel prices were under pressure for much of the month, but later some smart recovery was seen and prices rose above \$30,000 in a just a few trading days. It has largely been calm in the aftermath of extreme volatility in March that saw trading suspended and restrictions imposed. That strength is fundamentally based, with signs of lockdowns being lifted in China and low inventories which aren't there to cope with a potential pick-up in demand. The latest INSG data indicates global nickel



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Feature

market deficit deepened to 11,100 tonnes in March, compared with a shortfall a month earlier of 1,800 tonnes.

Nickel ore inventories across all Chinese ports decreased by 272,000 wmt to 5.37 million wmt. Nickel ore inventory at ports continued to decline, which

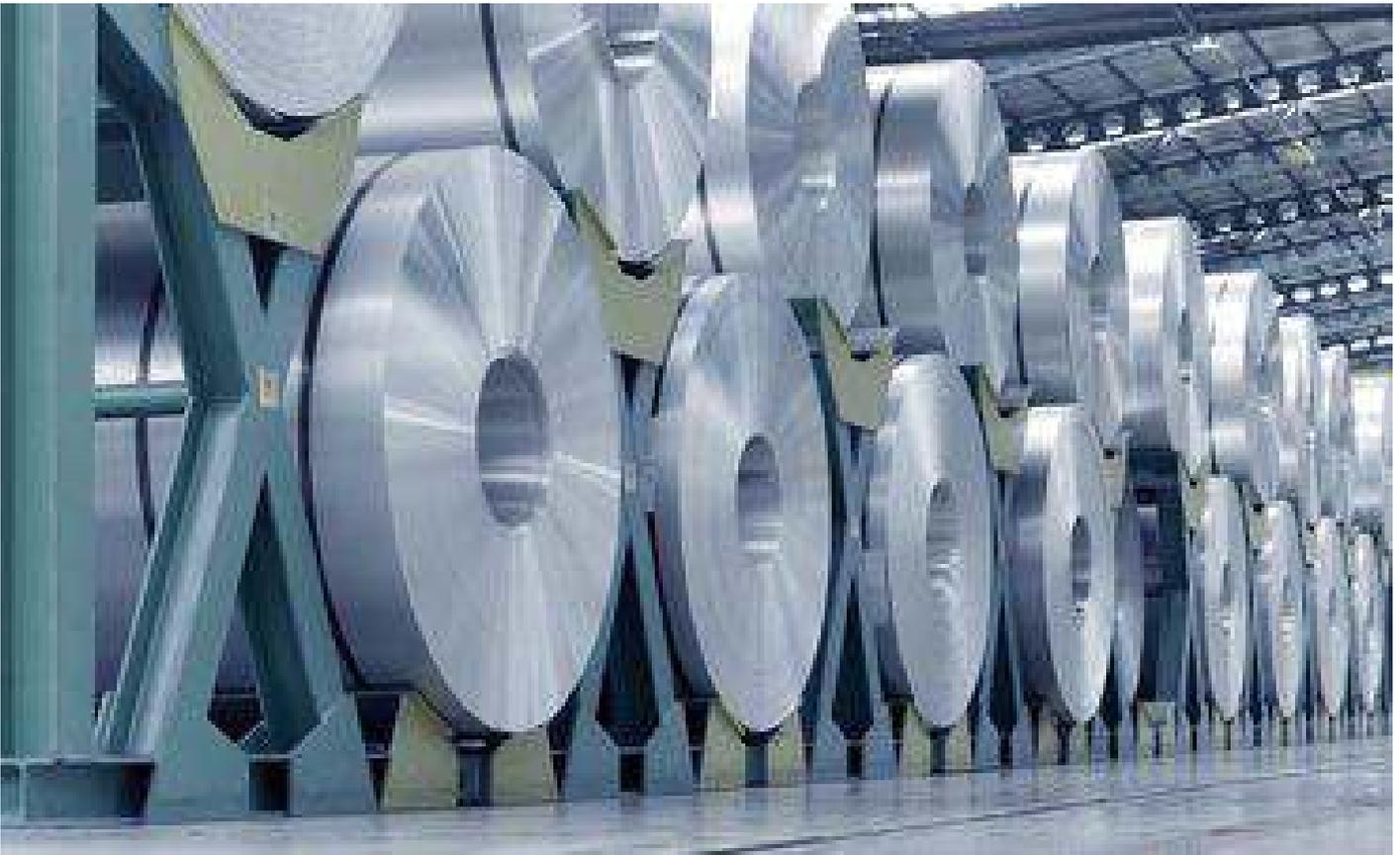
than expected, and the situation of sufficient supply has not come, which also makes the nickel ore port inventory at a historically low level.

On the demand side, stainless steel prices have dropped for several days, and the manufacturers mainly held a wait-and-see

Besides, the high premiums weakened the demand. To sum up, pure nickel was weak in both supply and demand, but some ease in situation could be seen soon.

Outlook

The metals complex has been bearing the heat of Chinese lockdown, rising Fed rate and weak macro data



decreased compared with the same period in previous years, with abnormal performance. The main reason was the unstable weather in Philippine. Although the rainy season has passed, there was still too much rain, which affected the mines, so the nickel ore shipment was poor. Some delayed goods since April were still not shipped till now. After the rainy season, the increase of nickel ore supply was less

attitude. On the cost side, NPI prices were stable even though the shipment of nickel ore from the Philippines was hindered. SHFE nickel prices stopped falling and rebounded due to the tight fundamentals, and the import window has opened for several days. In terms of alloy, the domestic pandemic situation has not completely improved, so the operating rates of downstream manufacturers were less than expected.

globally and has almost retracted the entire action garnered since the start of the year. Overall some metals have started to look very attractive at these levels and could be due for some strong bounce back in the short term. Medium term picture is still hazy, while short term bounce could give some more clarity. ■



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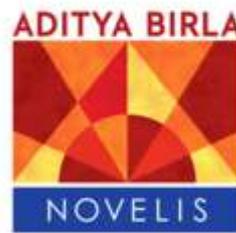


Novelis joins First Movers Coalition to accelerate Decarbonization of Aluminum Industry

Novelis Inc., the leading sustainable aluminum solutions provider and world leader in aluminum rolling and recycling, today announced it has joined the First Movers Coalition (FMC), a global initiative aimed at decarbonizing eight "hard to abate" sectors. Through the partnership, Novelis will take a prominent role among a global network of forward-thinking companies committed to jump starting demand for clean energy technologies aimed at dramatically

reducing carbon emissions from the aluminum manufacturing process.

The FMC — launched during the 26th United Nations Climate Change Conference (COP26) in October 2021 — is a joint venture of the World Economic Forum and the U.S. Department of State. The FMC serves as a platform for businesses around the world, alongside governments, to leverage their purchasing power and supply chains to create early markets for innovative, clean



energy technologies. As such, the improvements must reach commercial scale by 2030 to achieve net-zero emissions globally by 2050.

"Novelis is eager to continue our efforts to decarbonize the aluminum industry, as well as support decarbonization in numerous adjacent industries relying on aluminum, by joining the First Movers Coalition," said Steve Fisher, President and Chief Executive Officer, Novelis Inc. "Recycling aluminum is far less energy-intensive than producing



primary aluminum, and we want that energy to come from 'sustainable' sources. Aluminum has the potential to reach a near zero-carbon footprint, but it requires investment in clean energy and taking some risks to move the industry forward. Partnerships like the First Movers Coalition can spur those investments by supporting an emerging market for developing technologies. Novelis welcomes the opportunity to join FMC and accelerate innovation in our industry."

By joining the FMC, Novelis has pledged that by 2030, 10 percent of its primary aluminum purchases be near-zero, emitting less than 3t CO₂ per ton. The FMC pledge also includes an assurance that by 2030 at least 50% of all aluminum Novelis uses is from recycled sources, a metric that the company has already surpassed with 57% of its inputs from recycled sources.

Novelis' commitments to the FMC complement its goals to accomplish a 30% carbon footprint reduction by 2026 and to be carbon neutral by 2050 or sooner. The company has also set targets for 10% reductions in water and energy intensities, and a 20% reduction in waste to landfills by 2026. The company's decarbonization efforts will

also enable other industries reliant on aluminum to accelerate and realize their de-carbonization plans.

Steve Fisher will announce Novelis' commitment to the FMC during a panel session at the Industry Transition Dialogue in Stockholm on



June 1st, 2022. The panel will be chaired by Nancy Gillis, Programme Head of Climate Action and First Movers Coalition, with special remarks by John Kerry, U.S. Special Presidential Envoy for Climate.

"Novelis' widely respected commitment to sustainability makes the company a tremendous addition to the First Movers Coalition," said Gillis. "We look forward to collaborating with Novelis to encourage clean energy innovation and move the aluminum industry toward a zero-carbon future."

Novelis Inc. is driven by its purpose of shaping a sustainable world together. We are a global leader in the production of innovative aluminum products and solutions and the world's largest recycler of aluminum. It's ambition is to be the leading provider of low-carbon,

sustainable aluminum solutions and to achieve a fully circular economy by partnering with our suppliers, as well as our customers in the aerospace, automotive, beverage can and specialties industries throughout North America, Europe, Asia and South America.

Novelis had net sales of \$17.1 billion in fiscal year 2022. Novelis is a subsidiary of Hindalco Industries Limited, an industry leader in aluminum and copper, and the metals flagship company of the Aditya Birla Group, a multinational conglomerate based in Mumbai. ■



Smart crane scales - The Easy Step to Innovative weighing processes from EHP

What is the reality in the metal industry?

Everyone is talking about "networking systems", "Internet of Things" or "Industry 4.0". The possibilities for automating processes, saving time and costs and conserving resources are theoretically almost unlimited in the metal industry. But the reality along the whole value chain is often quite different. No matter if you are looking at foundries, coil manufacturers or steel trade companies as analysed by the weighing technology expert EHP.

For over 40 years, EHP has been developing and manufacturing crane scales all made in Germany. With more than 25,000 crane scales in use worldwide, EHP is the market leaders in terms of quality and product longevity. EHP is often on site with the customer and knows the processes and needs of the metal industry very well.

Many customers of the German company are located in India. In order to be able to support the customers here accordingly with advice and action, EHP India was already founded in 2007. The CEO of EHP India T. Sridhar from Chennai has built up over the decades a network of Weighing Associates to enable to best support and service for all Indian customers. No matter whether the customers are located in Delhi, Bangalore Mumbai or Calcutta.

Figure 1 - Weighing hot material? No problem for the heat protected KGW crane

scale

EHP knows exactly the needs of the metal industry

for time and money saving but also to improve processes and reduce failure". "Customers



and develops therefore special solutions like the heat protected KGW crane scale. Engineered for foundry needs – heat protected to weigh material up to 1,600°C safe and precise.

At the same time, the scale is extremely robustly built and can easily withstand the tough demands of foundries. Or the KGY scale series – precise, robust and durable – the ideal crane scale for multi-shift continuous operation. Ideal for heavy-duty use in production or at loading terminals.

Figure 2 - Precise coil weighing with the KGY crane scale

"More and more often customers ask us for intelligent weighing solutions and want to make their processes leaner." says Sridhar from EHP India "But even today at most plants the weight values are still read from the crane scale display and then have to be entered manually into an IT system by the employee. There is enormous potential



Figure 2

know that there is a lot of potential here and would also like to improve further. Often, however, many do not dare to take the first step because many IoT solutions are far too comprehensive and complex



and change the entire process in one big step. The risk of losing a lot of money and choosing the wrong solution is very justified”, says Jan Friedmann from EHP Headquarter in Bühl, Baden-Württemberg, Germany. “Customers want to improve step by step to find the solution that suits them best and fits their individual needs.” Figure 2 - Precise coil weighing with the KGY crane scale

Therefore EHP developed its IoT-Box. The target of this little, white box is that every customer can transfer weighing data easily and quickly into his own PLC. From here, the possibilities are endless: either the crane scale data can easily be displayed and saved, commands can be controlled such as "overload" or "required quantity reached" or more complex communication with other PLC participants is possible. For example, the crane scale could save the measured value in the ERP system at the touch of your smartphone, automatically customer documents are created/send and the goods are directly transported away with the crane to its unloading point.

allocate bottle necks in the weighing processes and rebalance the workload at every station. "With our IoT-Box, we enable the customer to significantly simplify and automate the weighing processes.

The IoT-Box has a radio range of up to 500m and can control 16 EHP scales at the same time if required." states Markus Ebel.

"Commissioning is very simple: connect the power and Ethernet connection and integrate the preconfigured GSDML file. All scale data and functions are already integrated in the customer's PLC system!" About EHP Wägetechnik GmbH EHP was founded in 1979 and was initially active in the field of machine and plant controls. Today, with more than 25,000 crane scales in use worldwide, EHP with its weighing technology is the leading suppliers of systems for weighing tasks.

EHP crane scales are used wherever goods are transported and handled by crane the same time have to be weighed quickly and efficiently. State technology transmits weight data from EHP crane scales over a distance of up to 500m to the user's IT infrastructure,

portfolio data can be further processed



DESCRIPTION	IMAGE / PICTURE	USE
USB BOX		For online Computer connectivity
LARGE DISPLAY- Data Displayed		Height of figures 120 mm for better visibility
TELE DATA - Data Printed		For Online Printing on the Shop floor
NET SCALE - Data Stored in Databases		Management of up to 16 scales on one transmission frequency

The second pillar of EHP Weighing Technology is



:Compact and High-Precision Load Cells. With a nominal load of up to 100,000 kg per unit, these precision assemblies are used in the components business. As crane scale and load cell manufacturer research, software/hardware development, design and production all comes from one source – all "Made in Germany".



Contact Data

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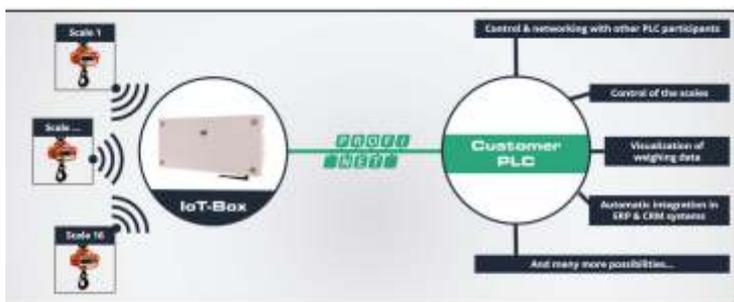


Figure 3 EHP-IoT Box: Easily transfer weighing data to your PLC-system

For continuous improvement a daily report will be made to show all services. This helps to

even under the most difficult environmental conditions.

Figure 4 - EHP Product Portfolio

Figure 4 - EHP Product Portfolio In the EHP product



GSSE 2022: Global Stainless Steel Expo successfully concluded from 12th to 14th April in Mumbai

Virgo Communications and Exhibitions successfully hosted the first-ever GSSE 2022: Global Stainless Steel Expo powered by Jindal

manufacturers, buyers, influencers, regulators, industry associations and media, to converge under one roof. The exhibition

from the country and beyond.

GSSE presented a gateway to various end-user industries to familiarize themselves with cutting edge technology from across the world, deliberate on emerging business trends during knowledge-packed topical sessions, lay down a road map to accelerate industry's growth and jointly devise ways to reclaim India's position as second largest stainless steel producer. Incidentally, the cyclical and structural factors have been driving growth in the country's stainless steel segment post the pandemic. The event indeed helped the industry to leverage and discuss issues pertinent to the growth of India's stainless steel industry and solutions needed to raise the bar for the whole country in the stainless steel ecosystem comprising of suppliers, users, traders, associations and



Stainless and supported by the Ministry of Steel, Government of India from 12th to 14th April at Jio World Convention Centre, Mumbai.

The 3-day conclave provided an exclusive platform for the stainless steel industry stakeholders which included

spread across 5000 sq. mts. space offered 80+ producers an opportunity to network, showcase products, build presence, and engage with their target audience and explore business opportunities. The exhibition was well attended by about 8000 trade visitors which included industry captains



regulators.

The maiden B2B exhibition-cum-conference

by fiscal year 2047.

India is the second largest consumer of stainless steel



was inaugurated by Chief Guest, Smt. Rasika Chaube, Addl. Secretary, Ministry of Steel, Govt. of India in presence of Mr. Abhyuday Jindal, MD, Jindal Stainless; Mr. Prakash Sanghvi, CMD, Ratnamani Metals & Tubes; Mr. K KPahuja, President, Indian Stainless Steel Development Association (ISSDA) and Mr. Sanjeev Taneja, ED (SSP), Steel Authority of India Ltd (SAIL).

A brief research report Stainless Vision 2047 prepared by CRISIL in close coordination with ISSDA was also released by Smt. Rasika Chaube, Addl. Secretary, Ministry of Steel, Govt. of India during the Inaugural. The findings of the report aligned with new aspirational India and overall vision of the Ministry of Steel. The report stated that domestic stainless steel demand is expected to reach 20 million tons (MT)

and one of the fastest growing markets. The country's per capita stainless steel consumption has more than doubled to 2.5 kg in 2022 fiscal from 1.2 kg in 2010. In 2021-22, the country's demand for stainless steel was 3.7-3.9 MT and as of March 2022, India's installed stainless steel capacity is at 6.6-6.8 MT. The capacity utilization is estimated to have improved from 50 per cent in 2021 fiscal year to 58-60 per cent in 2022.

The industry is further expected to register a compound annual growth rate (CAGR) of 6.6-7.5 per cent over fiscals 2022-2025 and reach 4.6-4.8 MT. Further, the consumption is expected to reach 12.5-12.7 MT and 19-20 MT by fiscal years 2040 and 2047 respectively. Remarkably, sectors like Construction, Infrastructure and

Manufacturing are expected to drive the industry's growth and become key contributors to the country's GDP.

A by-invitation CEO Roundtable chaired by Smt. Rasika Chaube in presence of Smt. Aruna Sharma, Former Secretary, Ministry of Steel as Special Invitee was also held to discuss and deliberate various issues having a bearing on the survival, growth, and sustainability of the stainless steel industry.

The exhibits at GSSE mainly included flat & long products, duplex, bars, rebars, ingots, pipes, tubes, sheets, coils, wires, finished goods and latest machinery & technology from India and overseas. The trade visitors represented sectors like Architecture, Building & Construction, Automotive, Railways, Transportation, Dairy, White Goods, Water & Waste management, Oil, Gas & Energy, Pharmaceutical / Medical Devices, Food Processing/Wine/Alcohol/Beverage, Hospitality/Lifestyle, HVAC & Refrigeration, Defence, Cookware/Utensils, Laminate/Hardware, 3D Printing and others.

GSSE attracted major industry players like *Outokumpu*, *Ratnamani*, *Laxcon Steel* and *Minox Metal* as Gold Sponsors and *Sunflag Steel* as Entry Badge Sponsor. The exhibition was supported by Indian Stainless Steel Development Association (ISSDA) as Lead Association, Pegasus Consulting as Knowledge Partner, Stainless Bazaar as Digital Partner and other leading trade associations like



Stainless Steel Pipe & Tube Manufacturer Association (SSPTMA), Metal and Stainless Steel Merchants Association (MASSMA), All India Stainless Steel Industries Association (AISSIA), Stainless Steel Merchants Association (SSMA), Process Plant & Machinery Association of India (PPMAI) and Non-Ferrous Metals Association-Karnataka (N'MAK).

Other key participants included *Rimjhim Stainless, Jindal Saw, Aperam, Tubacex, Venus Pipes, Synergy Steel, Chandan Steel, Ambica Steels, Rajputana Stainless, Divine Tubes, Scoda Tubes, Welspun, Balaji Niryaat, Suncity, Shiv Ganga, Shree Ramdev, Alok Ingots, Vizinox, Avtar Steels, Phoenix Foils, Navbharat Tubes, Salem SS Suppliers, Steamline Industries, Krystal, Fronius, Hisar Metal Inds, ASB Tubes, S Plus Tube Tech, TBS Metal, Shree Tubes, Panchratan Steels, Quality Foils, Anil*

Metals, Ratnesh Metal Inds, Calico Metal Alloys, Laxmi Pipes, Mangalam Sarloha, Moonlight, Riddhi Siddhi Impex, Arnav Tubes, Shree Venkatesh Wires & Steel, Kumar Steelways, Fortran Steel, Chaman International, SNB Enterprises, Grind Master, Rockford Abrasives, Dev Abrasives and many others.

The theme for the concurrent 3-day conference



was Moving towards Building a Stainless Future which boasted of 12 power-packed sessions, 50+

Renowned Speakers and 1000+ Delegates from 500+ Organizations.

The key topics discussed were *Opportunities and the role of Stainless Steel in Nation Building; Accelerating Growth: How can India's per capita consumption rise from 2.5 KG to world average of 6 KG; Quality Enhancement and Role of BIS; Skill Development for Stainless Ecosystem; Boosting Applications in Architecture, Building and Construction; Building Sustainable Infrastructure; Analyzing the growth potential of long products market in India; Master class on Welding, Corrosion and Fabrication; Powering Railway and Surface Transportation in India; The Role of Digital in enabling Business Transformation for MSMEs; Fueling new Applications for end-user industries and Emerging markets – Hydrogen & Ethanol*



Bühler Die-Casting showcase digital services to the next level at Euroguss 2022



Bühler's presenting Die-Casting Dashboard and Downtime Analysis services at the Euroguss 2022, the International Trade Fair for Die Casting, Nuremberg, Germany which was held during June 08-10.

"The benefits of Industry 4.0, based on continuous, connected data, have long been talked about in die casting. Now, they are a reality for our customers," says Cornel Mendler, Managing Director Bühler Die Casting. "Die casting is a complex manufacturing process, and we have been working hard to make sure

the customer has the right information at the right time. Real-time data drives quality consistency, enables better management of energy consumption resources and overall costs, and boosts productivity."

Bühler's digital services are available on all Bühler's solutions: Carat, Bühler's two-platen machine with locking forces of 10,500 to 92,000 kN, designed for die casting large and complex parts; Evolution, the proven die-casting solution for aluminum and magnesium parts, and Fusion, the next generation, three-platen die-

casting platform, offering 3500 to 14,000 kN locking force.

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Industry Update

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Production activity at a glance

"We live in a world relying on interactions and cooperation. Challenges can't be conquered alone. Thanks to these connected services, we can work with our customers to solve problems through remote support and together define a proper improvement plan,"

says Oudi Zhao, Product Manager Bühler Die Casting. With the Die Casting Dashboard, it is possible to look at individual die-casting cells in detail. Charts, curves, and Key Performance Indicators (KPIs) make it easy for the user to keep an eye on production, being able to better plan, manage and improve performance based on real data. The Die Casting Dashboard also enables the user to compare performance across die-casting machines and plants, so the production staff can quickly identify areas for improvement.

In addition, all information can be displayed centrally on any device, 24 hours, 7 days a week, giving managers comparisons between machines, shifts, die programs or facilities. This

feature is powered by Bühler Insights, the central platform for connected products and services, optimizing plant's efficiency and reducing maintenance times, energy consumption, and wastage. Increasing operational effectiveness

Downtime Analysis is a comprehensive analysis tool of production events and provides root cause reporting from each die-casting cell. A few building blocks constitute this tool. At first glance, the cell performance can be interpreted via "uptime" and "downtime." Additionally, the most critical downtime causes are ranked for frequency or duration. The maintenance experts and technologists can then analyze each category of technical issue and define proper counter measures. Regularly using Downtime

Analysis can help customers to effectively increase uptime.

"By monitoring and analyzing real-time performance, and bench marking across time periods, equipment and shifts, the Die Casting Dashboard and Downtime Analysis used together enable die casters to drive best practice and improve Overall Equipment Effectiveness (OEE)," says Cornel Mender.

The Die Casting Dashboard and Downtime Analysis tools, which are now available, guarantee a profitable, stable, and secure production. Framed by an individual Total Care service agreement, the customer will have access to regular checks, updates, and full support of Bühler experts. ■





IIT-M team develops Zinc-air batteries that could power E-scooters



At a time when concerns are being raised in India over the safety record of electric scooters amid countless instances of vehicles catching fire, an indigenous solution is in the works. This gets to the root of the issue and is an attempt to replace the Lithium-ion batteries (which power contemporary EVs) with made-in-India Zinc-air batteries, which have considerable advantages over the former.

WION spoke to Dr Aravind Kumar Chandiran, Assistant Professor, Dept. of Chemical Engineering, IIT Madras, whose team is behind this Zinc-air battery prototype.

According to him, when compared to Lithium-ion batteries, the Zinc-air batteries are more environmentally friendly, costs less, provide similar mileage as Li-ion batteries, are easier to manufacture and maintain and can easily be mass-produced in India, given how the country has abundant resources of Zinc.

"Zinc is actually a nutrient found in our food and is safer when compared to lithium. In Zinc-air batteries one electrode is zinc and another is oxygen (derived from the air) and this setup sits in an aqueous electrolyte. This makes it water-based and hence can fully prevent any possibility of fire. The worst-case scenario in case of a failure or malfunction is that the battery won't deliver power" he explained.

While Lithium-ion batteries have to be swapped (discharged battery replaced with a fully charged one), Zinc-air ones don't need a total replacement. Only a small component of the battery, such as its 'Zinc cassette' (anode) has to be replaced. In layman's terms, the Zinc cassette replacement can be compared to how a memory card is removed and replaced from a gadget.

However, it has to be performed at dedicated Zinc cassette replacement facilities or charging stations (similar to fuel stations or EV charging stations). This process is also said to be sustainable, as the spent Zinc oxide cassette can be removed and converted back to Zinc. The process of replacing the Zinc cassette could safely be carried out at home by a layperson, with basic

training on the procedure.

With Lithium-ion batteries used in Electric vehicles and other devices majorly being imported from China, the Researchers from IIT-M feel that further work on Zinc-air batteries can provide a home-grown solution for India. India being home to large Zinc reserves also helps accelerate the large-scale manufacturing of such batteries, it is said. The team is also in talks with automobile OEMs to integrate these new-age batteries into the vehicles, in about a year's time.

Queried about the power holding capacity of their batteries, Dr Chandiran said, "We have built batteries that can store up to 1.3-2.6 Kilo Watt Hour (KWh) and this is sufficient as most E-scooters use 2KWh batteries. The Zinc-air batteries that we have developed are far simpler to manufacture and the process can be done even in a normal room with ambient conditions and standard machines. This is in contrast to Li-ion batteries that require special ultradry conditions and high pure chemicals at the manufacturing facility.

However, there is one technical aspect where these Zinc-ion batteries fall significantly behind their Lithium-ion counterparts. "Such batteries can only be used in two or three-wheelers and not cars, as cars require high power and these batteries can't cater to that need. Simply put, these Zinc-air batteries are capable of storing high amounts of energy (on par with Li-ion ones), but cannot deliver power as rapidly as Li-ion" Dr Chandiran explained.

LME hit by \$450mn lawsuit over nickel market chaos from Elliott Management



US hedge fund Elliott Management is suing the London Metal Exchange for more than \$456mn over its decision to cancel nickel trades in March after an unprecedented surge in the price of the metal. The judicial review claim was filed against the LME and its clearing house last week, according to a statement issued on Monday by Hong Kong Exchanges and Clearing, the LME's parent company. LME will contest the claim "vigorously" and



News Update

views it as “without merit”, HKEX said. It has 21 days to file a response — at which point a UK court will decide whether there is a case to hear.

The legal action heaps further pressure on the 145-year-old exchange, which is battling to repair its reputation as UK financial regulators examine its handling of the crisis. The decision to suspend trading on March 8 came after nickel surged as much as 250 per cent in just two days to trade briefly above \$100,000 a tonne. The violent price spike was triggered by a short squeeze as banks and brokers rushed to close part of a large position amassed by Xiang Guangda, the billionaire founder of China's leading stainless steel producer Tsingshan Holding Group. Elliott alleges the LME “acted unlawfully in that it exceeded its powers when it cancelled those trades, or that it exercised the powers that it did have unreasonably and irrationally”. It also claims that the LME considered “irrelevant factors (including its own financial position)” and failed to take “other relevant factors” into account when it made the decision.

The \$456mn being claimed by Elliott is roughly equivalent to about 9,000 tonnes of nickel being sold at \$50,000 a tonne — the price nickel was reset at after the trades were cancelled — rather than the peak of \$100,000 it hit on March 8. Nickel is now trading at almost \$29,000 a tonne. The LME's decision to erase a day of trading because of the price surge — which it claimed pushed several smaller members of the exchange to the brink of failure — provoked uproar among some traders who saw their profits wiped out by the move. Recommended Person in the News Xiang Guangda, the metals 'visionary' who brought the nickel market to a standstill Other lawsuits could emerge from other hedge funds that incurred losses on March 8, with a three-month deadline to submit judicial review claims set to expire on Wednesday.

AQR Capital Management, one of the world's largest hedge funds, was exploring its legal options, people familiar with the matter said in March. The fund's founder accused the LME of “reversing trades to save your favoured cronies and robbing your non-crony customers”. LME has denied that parent company HKEX influenced its decision. LME has said that one reason it did not react earlier to the nickel price squeeze was that it did not know just how much business was being done over-the-counter via derivatives. Its chief executive Matthew Chamberlain is trying to push through a plan for more regular reporting of these positions in all of the LME's physically delivered metals. However, members have resisted similar moves for greater transparency in the past. Under its rule book, the LME has the power to suspend trading and cancel trades in the “interest of

maintaining a fair and orderly market”. Sarah Taylor, a partner at law firm HFW, said it would be difficult to show that the LME's decision to suspend trading of its nickel contract was “capricious” given the price volatility, but the cancellation of trades could be different.

“The basis of the decision to cancel those trades has been questioned and it has been suggested the decision was prompted by the interests of the LME's parent company HKEX,” she said. As a regulated exchange the LME can be subject to judicial review. In 2014 it saw off such a legal challenge from Rusal, the Russian aluminium producer, over reforms to its warehouse system.

Nickel Prices continued to fall due to the macro factors On the supply side, the rising purchases on rigid demand led to rare sources of pure nickel in the spot market, which will ease early this week. The NPI prices fell because steel mills put huge pressure on the costs of raw materials. In China, the NPI supply was sufficient, which was bearish for the NPI prices. In terms of nickel sulphate, the number of long-term orders of nickel salt increased, and the recovery of the new energy market was strong.

However, small order trading in the nickel salt market was slack, and the available goods were scarce. On the demand side, the decrease in inventory of a large steel mill was not quick, though the traders got low inventory, according to SMM research. Besides, the downstream consumption remained sluggish.

In terms of alloys, the shortage of stocks in the market and the rising premiums gradually weakened spot trading. SHFE nickel prices may remain range-bound with downward potential this week due to the continuous impact of the Fed's interest rate hike.

Cabinet clears sale of govt's 29.58% stake in Hindustan Zinc valued at Rs 38,000 crore

The Union Cabinet on Wednesday approved the sale of the government's residual 29.58 per cent stake in Hindustan Zinc which would fetch over Rs 38,000 crore to the exchequer, sources said.

The Cabinet Committee on Economic Affairs (CCEA) approved the sale of 124.9 crore shares government holds in the zinc producer which was sold to mining mogul Anil Agarwal's Sterlite Industries in 2002. Sources with direct knowledge of the development said the stake sale modalities will be decided by the DIPAM.

HZL has been taken up after privatisation of Bharat Petroleum Corporation Ltd (BPCL) got stalled following two of the three bidders walking out of the contest. Other strategic disinvestments such as Shipping Corporation of India (SCI) are facing procedural delays. The government had in 2002 sold its 26 per cent



shareholding along with management control to Sterlite, which is part of Agarwal's Vedanta group, for Rs 40.5 per share. A year later, another 18.92 per cent was bought by the mining conglomerate. In the two transactions, the government got around Rs 769 crore.

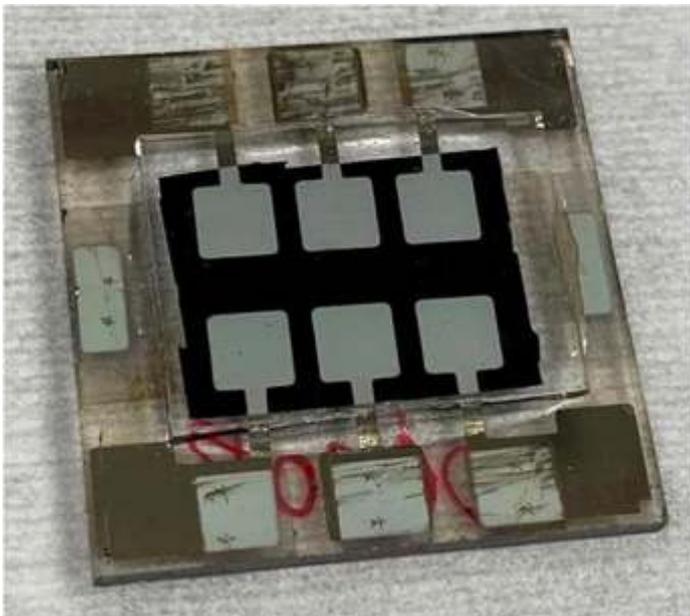
Vedanta exercised a call option as per the share purchase agreement but the government contested it. The firm dragged the government to arbitration but later withdrew it, paving the way for the stake sale. In April 2002, the government offloaded a 26 per cent stake in HZL to Sterlite Opportunities and

Ventures Ltd (SOVL) for Rs 445 crore -- thereby giving Vedanta group management control in HZL.

Vedanta group later bought 20 per cent from the market and another 18.92 per cent from the government in November 2003, raising its ownership in HZL to 64.92 per cent.

Scientists Develop Tin-Lead Perovskite Cells to Enhance Efficiency and Stability

Scientists at the National Renewable Energy Laboratory (NREL) of the U.S. Department of Energy have created a tin-lead perovskite cell that solves stability issues and enhances efficiency. The efficiency of the new cell, which is a tandem design with two layers of perovskites, was 25.5%.



Researchers were able to fabricate this perovskite solar cell that overcomes problems with stability. Image Credit: National Renewable Energy Laboratory (NREL).

Perovskites have evolved as an important efficient solar cell material, although research is still on to extend the technology's lifespan.

Following 1,500 hours of continuous operation or more than 62 days, the new NREL cell maintained 80% of its full

efficiency.

This represents an accelerated aging test in the lab. At this tandem efficiency level, the best reported stability in literature is normally several hundred hours.

Kai Zhu, Paper Co-Author and Senior Scientist, National Renewable Energy Laboratory

The paper was published in the journal *Nature Energy*, which explains the new cell in detail.

The solar cells are formed from a chemical solution glued to a substrate, and perovskite alludes to a crystalline structure rather than a particular element such as silicon.

A tandem perovskite cell, in which two layers are linked to catch slightly distinct slices of the solar spectrum, can be more than 30% efficient, according to the two corresponding authors, Kai Zhu and Jinhui Tong.

Qi Jiang (co-first author), Andrew Ferguson, Axel Palmstrom, Ji Hao, Sean Dunfield, Amy Louks, Steven Harvey, Haipeng Lu, Ryan France, Fei Zhang, Mengjin Yang, John Geisz, Matthew Beard, Darius Kuciauskas, and Joseph Berry are the other co-authors from NREL. Researchers from the University of Colorado–Boulder and the University of Toledo are among the other contributors.

In an article published in the journal *Science* in 2019, many of these researchers showed a tin-lead tandem perovskite cell with a 23.1% efficiency. They compensated for any tin-related issues by using the chemical compound guanidinium thiocyanate, which improved the cell's structural and optoelectronic capabilities significantly.

When sunlight causes electrons to flow, solar cells generate energy. The cell's efficiency is improved by a longer carrier lifetime associated with mobility. The addition of guanidinium thiocyanate increased the carrier lifetime from less than 200 nanoseconds to 1 microsecond (a nanosecond is a billionth of a second or a millionth of a second).

The scientists improved on the previous experiment by adding phenethylammonium iodide and guanidinium thiocyanate. The carrier lifetime of the enhanced tin-lead perovskite increased to roughly 9 microseconds.

The combined additives also lowered the fault density associated with tin oxidation to levels previously unheard of in tin-lead perovskites and comparable to lead-only perovskites.

The voltage generated by the new cell was also improved, reaching 2.1142 volts. The best-approved tandem equipment, on the other hand, measured 2.048 volts.

The research was sponsored by the Solar Energy Technologies Office of the U.S. Department of Energy.



To accelerate EV push, battery solutions per Indian needs

NITI Aayog, DST meet battery makers, academia amid incidents of electric two-wheeler fires; govt, industry plan open source battery management system. Government think tank NITI Aayog and the Department of Science & Technology (DST) have kicked off deliberations with the industry and academia on developing an open source battery management system (BMS) for two- and three-wheeler EVs.

Sterlite Copper puts Tuticorin Copper smelter on sale



Vedanta Group company, Sterlite Copper has issued advertisements about the sale, inviting Expressions of Interest for the Tuticorin plant, in a process executed in collaboration with Axis Capital. A person aware of the developments related to the advertisement told ET that the company was expected to make a statement on Monday.

A person aware of the developments related to the advertisement told ET that the company was expected to make a statement on Monday. Another official with Vedanta confirmed the corporate decision to sell the plant.

In the advertisement, Vedanta pegs the plant capacity at 4 lakh tonnes a year. The copper smelter plant, along with its sulphuric acid plant and copper refinery, are on sale. Vedanta said the plant contributed to 40% of the country's national demand for copper and held the lion's share of the sulphuric acid market in Tamil Nadu.

In its heyday, Sterlite Copper employed in several thousands, and contributed significantly to indirect employment in Thoothukudi.

In May 2018, the local population in Thoothukudi rose in protest against an expansion plan—on concerns that the plant was causing environmental pollution. Following the violent protests that led to the closure of the plant during the AIADMK Government headed by Edappadi Palaniswami, Vedanta had taken the legal route

to fight the state pollution regulator's order to close the plant.

The case is in Supreme Court now, after Vedanta appealed against a Madras High Court's decision to dismiss its plea to reverse the original order of the state pollution regulator closing the plant.

Vedanta, meanwhile, had significantly reduced Human Resource at the plant, relocating them to factories elsewhere.

Demand, margin worries weighing on aluminium prices



The global aluminium supply and demand situation may have altered for the worse. Prices have dropped 35 per cent in the last two months on the LME. Some of the concerns are due to demand reduction in China during the lockdowns, while global demand elsewhere has also been hit by high inflation.

Alu Smelters' profits declined amid plummeting prices

In terms of raw materials, alumina prices inched lower last week. Despite a mild rally of thermal coal prices, the electricity prices of aluminium smelters were little changed as they were still digesting coal inventories stockpiled previously.

Prebaked anode prices traded at highs. The average cost of smelters slid 38.5 yuan/mt from a week ago to 18,087 yuan/mt as of last Friday, while the profit of smelters shrank 551 yuan/mt to 1,822 yuan/mt due to plummeting aluminium prices.

The SMM spot aluminium prices averaged 19,910 yuan/mt. In the short term, the prices of raw materials and auxiliary materials are expected to fall. However, given the approaching peak of power use, coal prices may not fall back in a short period of time. As such, the full costs of smelters will remain at a high level.



China's may aluminium imports drop 16% year on year

China's aluminium imports in May fell 16.4 per cent from the same month a year earlier, government data showed on Saturday (Jun 18), amid high overseas prices and weaker domestic consumption.

The country brought in 188,469 tonnes of unwrought aluminium and products – including primary metal and unwrought, alloyed aluminium – last month, according to data from the General Administration of Customs.

Monthly aluminium imports into China, the world's biggest producer and consumer of the metal, have been below 200,000 tonnes so far this year as an arbitrage window for cheaper overseas metal shut and downstream demand weakened due to Covid-19 induced lockdowns.

The May imports were up slightly from 175,289 tonnes in April however.

China's exports of unwrought aluminium and aluminium products jumped 54 per cent from a year earlier to 676,605 tonnes in May, its highest in at least 9 years. Imports of bauxite, the main aluminium ore source, were 11.97 million tonnes last month, up slightly from April's 11.13 million tonnes, and compared with 9.11 million tonnes in May a year earlier.

Bruker Clean Technology for Sustainable Energy and Battery Research

A major new installation by Bruker is enabling sustainable energy leader, US-based Dragonfly Energy, to accelerate its pioneering battery technology research with a differentiated high performance in-house research facility.



Dedicated to lithium and next-generation solid-state battery optimization, the site features a range of high-tech analytical instrumentation to help drive the global conversion to renewable energy.

Dragonfly Energy has invested in the new facility in response to rapid growth in demand for its sustainable battery technology. Its research focuses on developing

non-toxic lithium batteries in a solvent-free process and on exploring new innovations within its patented solid-state cell technology, for high grade, renewable energy storage.

Dr. Denis Phares, co-founder and CEO at Dragonfly Energy



Bringing research and development capabilities in house reduces the need to collaborate with external partners or rely on third party technology, especially for the more complex and highly innovative aspects of our business. Now, our lab is fully equipped with best-in-class analytical technology to dramatically speed up our new product innovation. As the world continues to reduce its reliance on fossil fuels, enhanced battery technology will play a key role.

Producing renewable energy from sources such as solar power or wind farms is just the start. Finding a way to store that energy effectively and in an optimized, long-life format suitable for electric grid applications is essential. We chose to work with a market leading supplier to benefit from their product quality and experience in creating a fully integrated lab, with a comprehensive service contract that covers the entire installation – enhancing our research and development.

Dr. Mark Munch, President of the Bruker Nano Group

Effective energy storage will continue to play a significant role in driving sustainable initiatives in areas such as electric vehicles and smart phone technology. In the global drive to generate and store new, cleaner sources of energy, we can provide the technology and support to give new and agile businesses the space to innovate.



MECSPE and METEF 2022

Manufacturing and aluminium supply chains get together in Bologna, to the satisfaction of operators : 39.348 visitors and 2,000 exhibiting companies



Milan, June 15, 2022 - The 20th edition of MECSPE, the exhibition on technologies and innovation for manufacturing, and the 12th edition of METEF, the international expo devoted to aluminium, organized by Senaf took place simultaneously for the first time, from June 9th to June 11th, at BolognaFiere, closing with an actual success. The two events, whose inauguration was also attended by Deputy Minister of Economy and Finance Laura Castelli, have reflected the vibrancy of the market and also confirmed themselves as important hubs for the whole Italian and international industrial sector in 2022: suffice to say that 39.348 professionals have visited the 13 thematic halls and stands of the 2,000 exhibiting companies and participated in the many special initiatives and conferences organized in the halls, which have covered 92,000 square meters of exhibition space. The 2022 MECSPE event was a transit edition: in 2023, the historic dates of

March in 2023 will be restored. However, the 2022 edition has met the expectations of professionals, who come to the exhibition expecting a strong payoff, "come find the idea you're missing." The motor, white, luxury, automatic machinery, mechanical and plastic processing, logistics and aluminium districts have been able to visit the stands of 2,000 companies on display, finding innovative people and solutions. From new materials produced by recycling coffee pods, to the most innovative plastic, metal and large-scale additive manufacturing machines, from reverse engineering equipment to the extreme accuracies of the latest chip removal machines. After being welcomed by a well-wishing industrial robot placed at the main entrance of Piazza Costituzione, visitors were able to appreciate the installation of information holograms introducing them to the Mecspe

Live Academy area, the exhibition heart of the 2022 edition, created in collaboration with the six Competence Centres and companies. The holograms' purpose was explaining how the application of new technologies can improve the companies' production process and involve young people in the fascinating world of industrial processes. Mecspe, has thus relaunched its strategic role in pooling, comparing and promoting synergies between professional operators in the specialized mechanics and Industry 4.0 sectors, also thanks to the presence of foreign buyers. The program, rich in content and special initiatives, was developed along the three themes of digitization, sustainability, and education, which are essential for business growth. The 20th edition also has also seen the debut of the Facilitated Finance Square, managed by Innova Finance, which organized some 50 meetings to show entrepreneurs the financial and fiscal tools available to businesses; this activity is vital to obtain funding at more advantageous



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conditions than those of the market, thus allowing business development, optimizing resources, supporting investment and promoting innovation. Great focus was placed on one of the most heartfelt issues in the business world, namely sustainability. Aluminium is among the key players of this transformation: it has been defined as the "metal of the future" because of its

field of sustainability and innovation by its die-cast. For next year, MECSPE will go back to its historic dates and double the exhibition days: in fact, it will be held at the same time as METEF, from March 30 to April 1, 2023, in BolognaFiere. For the second time, MECSPE will also be held in Bari, from November 23 to 25 with "Focus Mediterraneo," an edition devoted

companies, which continue to look to the future. The next steps will have to be taken in the direction of digital transformation and green transition; in this MECSPE, we will continue to develop innovative projects to support SMEs in the upgrading of the skills required for the proper use of new technologies and bring new generations closer to modern manufacturing. Therefore, choosing to return to Bari also



flexibility and endless re-usability, which are key features in making the industrial sector even more sustainable and efficient. The Green Aluminum Conference has stood out at METEF 2022, showing the metal's potential on the circular economy and energy efficiency front. This edition has also marked the debut of the new Premio Pressocolato Italia awarded to Fondital due to the important contribution in the

to the development of 4.0 technologies and a proposal increasingly focused on the sustainability and innovation of production processes. "We closed this edition with significant participation of manufacturing professionals: we can be really satisfied about it," Emilio Bianchi, director general of Senaf, has commented, "The challenges that the industrial sector has shown itself capable of tackling in recent months have not affected the growth drive of

in 2023, will be even more impactful: MECSPE will be held there for the second time, to continue the journey we have already started with local companies." "METEF continues to look to the future of the industry, and the large amount of attendees has confirmed that we are going into the right direction," Mario Conserva, President of METEF, has commented. "Our goal, also for next year, is to act as a connector between the diverse souls of the aluminium supply chain, at



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the national and international level. In 2022, METEF has regained its soul, confirming that it is an ideal place for exhibitors and trade visitors to get together and attract potential new customers, as well as for industry specialists to get to meet each other and renew their relationships and synergies." Facts of MECSPE and METEF 2022 92,000 square metres of exhibition space, 2,000 square metres of the Cuore Mostra MECSPE LIVE

Applications, Devices, Instrumentation and Intelligent Components for Process Interpretation and Interconnection; Logistics - Packaging, Packing, Handling, Material handling, Lean manufacturing, Warehouse management software, Supply chain management, Safety systems, PPE, Outsourcing; Mechanical Subcontracting - Precision mechanical processing, Metal carpentry, Mechanical construction, Fasteners, Foundries, Small parts, Wire

Auxiliary equipment, Innovative materials, Moulding, Extrusion, Packaging, Blowing, Moulds, Models, Standardised components for moulds, Design, Simulation and design software, Micromachining; Additive Manufacturing - 3D printing, Rapid prototyping, Rapid Manufacturing, Systems and services for reverse engineering, Additive technology, Materials, Services, Hardware: 3D printers and scanners, accessories, Simulation and design software; Treatments and Finishes - Surface Treatment Plants, Furnaces, Electroplating, Chemical and Electronic Processes, Washing, Metallization, Enamelling, Galvanizing, Products and accessories for treatments, Heat Treatments, Painting; Non-Ferrous Materials and Alloys - Processing of non-ferrous materials (Aluminium, Titanium, Magnesium, Light Alloys), Die Castings, Foundries, Contract Industrial Processing, Technologies, Design, Engineering; Automation and Robotics - Automation and Robotics, Assembly, Assembly and Handling; Control and Quality - Certification and quality control, Metrology, Measuring instruments, Laboratory testing, Calibration, Analytical equipment, Vision; Power Drive - Mechanical power transmission devices, Hydraulics, Pneumatics, Mechatronics, Motion control, Maintenance, Compressed air. ■



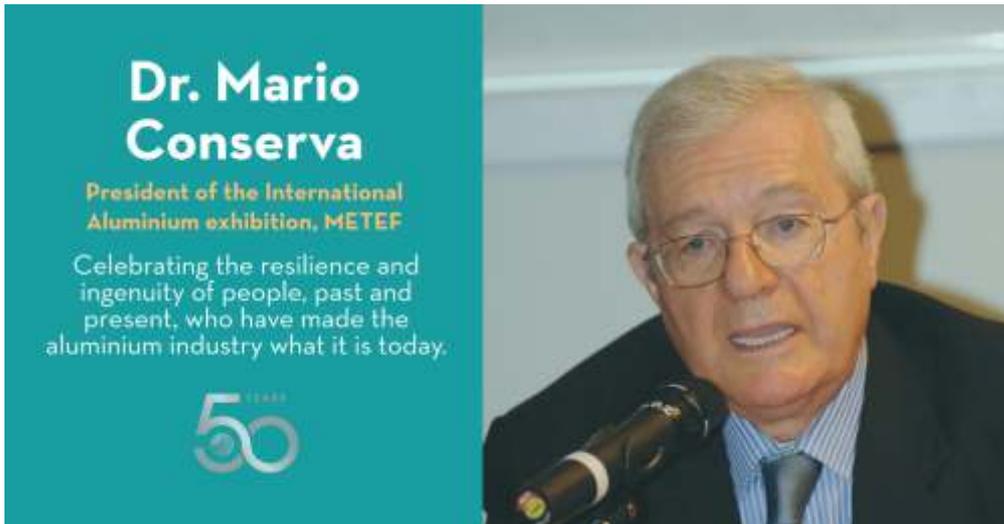
ACADEMY, 16 special initiatives and conferences. MECSPE Exhibitions Machines and Tools - Machine tools, Equipment, Tools and Design Software; Machines, Materials and Sheet Metal Working - Bending, Stamping, Cutting, Assembly, Welding, Materials and Software; Digital Factory - Industrial Informatics, IoT, Industrial Sensing, Cloud-manufacturing, Automatic Identification Technologies,

processing, Contract industrial processing, Micromachining; Electronic subcontracting - Cem (contract electronics manufacturer), Wiring harnesses, Ems (electronics manufacturing service), PCB (printed circuit board manufacturers), Engineering and design offices; Eurostampi, Machines and plastic, rubber and composites subcontracting - Plastics, rubber and composites processing, Machines and plants,

For further information, visit www.mecspe.com. METEF'S WORKING SECTORS



GREAT RECOGNITION FOR ITALY, MARIO CONSERVA AMONG WORLD ALUMINUM GREATS



The prestigious organization International Aluminium Institute celebrates its 50th anniversary and honors the president of METEF for his commitment to the industry Mario Conserva, President of METEF, the reference exhibition on aluminum in Italy created 25 years ago, Secretary General of FACE, the federation representing the interests of aluminum transformers and users in Europe, and Editor in Chief of the International magazine Aluminium & Its Alloys, has received from the world organization International Aluminium Institute a prestigious recognition that consecrates him as one of the 50 world figures who, with their commitment, have contributed to increasing the importance and centrality of the aluminum industry. "Mario Conserva has made a great contribution to the aluminum industry through his work spanning more than 60 years. He has worked along the whole

aluminum supply chain, from the metallurgical study of alloys, to the development of light metal applications, to the publication of manuals and countless technical papers, to the development of industry events, magazines and technical books. Twenty-five years ago, he created METEF, the first international aluminum exhibition in Italy." This is the motivation for the valuable recognition. So far, Dr. Conserva is the only Italian to have been mentioned among IAI's "50 people." Active for more than 60 years in the world of aluminum, Mario Conserva has worked for the National Research Council, at the Experimental Institute for Light Metals, Alumetal, Alumix, Alnord, Alfin-Edimet and Metra. He was a member of the Executive Board of the European Aluminium Association EA, chairman of the Alubuild Market Group and Extruders Division of EA, chairman of

the Centroal Aluminum Group of Assomet, and vice chairman of IGQ.

"I am proud of this award that valorizes what we have done in our country over many years in the field of

light alloys, from basic research on alloys and treatments, to application development, communication and

knowledge dissemination, to the preservation of the small and medium-sized companies that have made the vitality of the aluminum value chain in Italy and Europe."-and Mario Conserva continues- "Aluminum is a fundamental material for our future, it is a protagonist for smart solutions in all fields, from automotive to construction, packaging, mechanics, furniture and design, it is a master at recycling as well as being at the center of the ecological transition and the circular economy. I would like to share this important moment with the many colleagues I have been fortunate enough to have as collaborators over all these years of commitment; I dedicate in particular this precious recognition to the city of Brescia, where I have carried out the last 40 years of my activity in the field of aluminum, and which is one of the great hubs in Italy and Europe for the history of the development of our light metal, with great excellences that have made us famous all over the world". ■



Passenger vehicle sales rise 185% YoY to 2,51,052 units in May: SIAM

Total passenger vehicle (PVs) sales in May 2022 rose 185 per cent year-on-year (YoY) to 251,052 units. In May 2021, 88,045 passenger vehicle units were sold, newly released data from industry body Society of Indian Automobile Manufacturers (SIAM) showed.

Category & Segment	May (In Nos.)			
	2019	2020	2021	2022
Passenger Vehicles (PVs)*				
Passenger Cars	143,449	14,460	41,536	124,060
Utility Vehicles (UVs)	70,715	17,347	45,158	116,256
Vans	12,811	1,739	1,351	10,736
Total Passenger Vehicles	226,975	33,546	88,045	251,052
Three Wheelers				
Passenger Carrier	41,529	1,406	716	21,395
Goods Carrier	10,121	1,031	546	7,147
Total Three Wheelers	51,650	2,437	1,262	28,542
Two Wheelers				
Scooter/ Scooterette	511,724	69,216	52,409	398,099
Motorcycle/Step-Throughs	1,161,461	197,378	295,280	819,940
Mopeds	52,019	13,088	7,135	35,148
Total Two Wheelers	1,725,204	279,682	354,824	1,253,187
Quadricycle	308	-27	-	28
Grand Total	2,004,137	315,638	444,131	1,532,809

Cumulative Domestic Sales : April-May-2022

Category & Segment	April-May (In Nos.)			
	2019	2020	2021	2022
Passenger Vehicles (PVs)*				
Passenger Cars	297,622	14,460	182,730	236,917
Utility Vehicles (UVs)	137,981	17,347	154,029	243,539
Vans	25,525	1,739	12,919	22,247
Total Passenger Vehicles	461,128	33,546	349,678	502,703
Three Wheelers				
Passenger Carrier	77,910	1,406	9,995	34,732
Goods Carrier	20,002	1,054	5,123	14,748
Total Three Wheelers	97,912	2,460	15,118	49,480
Two Wheelers				
Scooter/ Scooterette	1,001,576	69,216	356,792	786,541
Motorcycle/Step-Throughs	2,246,272	197,378	963,139	1,555,300
Mopeds	115,744	13,088	33,112	73,928
Total Two Wheelers	3,363,592	279,682	1,353,043	2,415,769
Quadricycle	533	-27	-	54
Grand Total	3,923,165	315,661	1,717,839	2,968,006

* BMW, Mercedes, Tata Motors & Volvo Auto data are not available



Meanwhile, three-wheeler sales jumped manifold to 28,542 units sold in May 2022 against 1,262 units sold in May 2021. While two-wheeler sales rose over 253 per cent to 1,253,187 units against 354,824 units sold in May 2021.

Three-wheelers and two-wheelers sales are yet to surpass the pre-pandemic level of May 2019. In May 2022, 28,542 three-wheelers were sold against 51,650 units sold in the same month in 2019. In May 2022, 1,253,187 three-wheelers were sold against 1,725,204 units sold in the same month in 2019.

All in all, 1,532,809 the Indian automobile industry recorded total sales of 1,532,809 units in May 2022. The industry is yet to breach the pre-pandemic level of 2,004,137 units sold in April 2019. However, the industry did register a 245 per cent Y-o-Y growth against 444,131 units sold in May 2020.

While commenting on the May-2022 SIAM data, Mr Rajesh Menon, Director General, SIAM said, "Sales of Two-Wheelers and Three-Wheelers continue to remain sluggish in the month of May 2022, as they are even below of what it was 9 years and 14 years ago, respectively. Sales of Passenger Vehicle segment are also still below 2018 level. Recent Government interventions would help in easing of the supply side challenges, but second hike in repo-rates by RBI and increase in 3rd Party Insurance Rates, could become more challenging for the customers, thereby impacting demand."

© Society of Indian Automobile Manufacturers (SIAM)

Indian Aluminium Summit & Expo

16 - 23 July 2022

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NEW DATES

September 14-17, 2022

Courtyard Marriott, Raipur, INDIA



- Participation by more than 50 companies
- Over 200 delegates expected to attend
- Over 40 abstracts received
- Non-Ferrous metal recycling sessions by JNARDDC
- Aluminium Sustainability sessions by ASI

Special Sessions

Sustainability by Aluminium Stewardship Initiative ASI (September 16)

One day brainstorming on Non-Ferrous Metal Recycling in India to be organized by JNARDDC (September 17)

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