# METALWORLD

Devoted to Foundry & Non-Ferrous Metals Industry

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Vehicle Scrappage Policy to enhance the demand for the Castings

Global aluminum needs up to \$1.5 trillion investment to decarbonize energy supplies: IAI Extractive metallurgy research into academic is the need of the hour

**Deepak Ghate,** COO, Mahindra CIE Automotive Itd

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# METALWORLD

EDITOR D. A. Chandekar B.E. (Met.) DBM, DJMC

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# **Administrative Office**

1, Alpha, M. G. Road, Vile Parle (E), Mumbai - 400 057. India **Tel. :** 91-22-2619 2376, 2617 1575 / 2617 1866

# Email :

info@metalworld.co.in Editorial : editorial@metalworld.co.in Website : www.metalworld.co.in

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**D. A. Chandekar** Editor

Dear Readers,

ising demand and strong prices ! What else should the Indian metals sector ask for ? Indeed last few months presented more than one surprises for Indian metals industry. The demand started rising somewhere during July-August, the prices started firming around the same period and now in the month of March 2021, the sentiment in the industry seems completely positive. So much so that the government had to lower the import duty on the scrap and ore in order to put some pressure on prices. These proposals in the recently tabled union budget rightly aimed at giving some relief to the metal using sectors such as automobile, infra and construction.

Yes, we have reached the precovid production levels and that is really remarkable but is not the peak performance. If one recalls, the Indian economy was not doing well since 2017. The GDP growth rate started falling gradually. Many parameters along with the auto sales figures

# **Editorial Desk**



went southwards and the experts were busy debating whether this can be technically termed as 'recession'. It was also argued that in today's connected world, no country can progress in isolation. India also can not progress when most of the countries in the world (of course except China) are undergoing recessionary trends. Quite valid logic ! So my dear friends, hold your crackers and postpone your celebrations. Let us first understand that we have only climbed till the half way mark. A similar situation in Jan 2020 was termed as 'recession', so what is the big deal?

Friends, the most noteworthy fact about today's situation is that unlike in Jan 2020, its direction is northwards. We have bettered our situation and position in the last two guarters or so. Stabilised the production, strengthened the demand, rebuilt the logistic channels and imparted the required confidence to the user industry. Let me tell you this is a huge contribution not only to the growth of metals industry but also to national economy which was struggling to come back on the track at that point of time.

So what next ? I feel still a long way to go. If India has to become a 5 trillion economy, our economy has to grow by around 7.5 to 8 % annually. The 'Indian growth story' can emerge only out of 'Indian metals growth story'. Lets keep going, as said in some old poem 'Miles to go before I sleep' !

Write your comments : https://metalworlddac.wordpress.com

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Industrial metals in the focus

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# Vehicle Scrappage Policy to enhance the demand for the Castings

"Union Budget announcement of Vehicle Scrappage Policy for vehicles older than 15 years and further incentives for vehicle dismantling will boost the demand for the new Automobile in India and the castings manufactured by Foundry Sector" by Deepak Ghate, COO, Mahindra CIE Automotive Ltd,

Deepak Ghate is a B E ( Metallurgy ) with Diploma in Business Management. He has vast experience as a Business Head at Ferrous Foundries like Tata Motors, Mahindra and Amtek Auto etc.

Besides, Ghate has expertise in Foundry Greenfield project commissioning, Foundry Operations and TPM deployment, Business strategy, and planning.

He is the recipient of various industry awards which includes the Anand Mahindra Award for Excellence in New & Innovative Product Development. He has been inducted as an Expert Member on the National Council for Technical Services (NCTS) of Indian Institute of Foundryman.

He was the Guest of Honor for the FCON Pune (Futuristic Foundry

Technology ). He has presented technical paper presentation in Metal China Shanghai on ADI castings Development.



D A Chandekar, Editor & CEO, Metalworld had an exclusive interaction with Mr. Deepak Ghate, COO, Mahindra CEI to understand more about the company strategy to the way forward....

# Excerpts

How do you see the recovery in Indian Foundry after the Covid-19 pandemic effects?

The whole world and India too was fighting against Covid 19 for the last year. The Foundry sector has improved dramatically after Covid 19 after the secondquarter current fiscal year ended on 31<sup>st</sup> March 2021. During May and June, 2020 Foundry units were affected due to the migration of migrant workers and regulations of covid 19.

The Foundry sector has improved dramatically after Covid 19 and we have seen



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Face to Face



the V-shaped recovery in the foundry sector mainly because of Automobile, Electrical, And Construction, Industrial Machinery and Agricultural equipment demand has been increased and coming back the precovid level.

# How post-pandemic situation bodes well for the Indian Foundries?

The present situation after the Pandemic is very encouraging, as the whole world mainly Europe and the US lost confidence in China and they are looking at India as an emerging market. Many MNC and OEM from the US and Europe are offering business to India and to Foundries. Also, the Domestic demand is robust, and mostly in Tractor and MHCV segments

How do you analyze the Union Budget 2021-22 to enhance the demand for foundry?

India's Union Budget, 2021-

2022 announcement has given more thrust on domestic manufacturing and ease of doing business. Also presented a balanced approach to foreign direct investment (FDI) that further strengthens India's attractiveness as an investment destination. More importantly, infrastructure projects spending and sops for MSME with Export oriented units could be one of the enabler to increase the demand in the Foundry industry.

It has announced the scrapping policy of vehicles older than 15 Yrs, and they are offering incentives on the same, this will boost the demand for the new Automobile industry in India and the Foundry and also minimized the cost of raw material used to manufacture the casting. India is the biggest foundry casting exporter to the rest

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of the world which will have a cost-competitive advantage in the export market. Besides, the An increase in import duty on automotive spare parts will be a boon for local manufacturers and will further increase the demand of foundry produce.

# Tell us more about the role of energy efficiency and waste management in the foundry?

We are focusing on Improving Efficiency and Eliminating the waste by a) Use of Real-time data and Its Integrated Analysis to improve processes b) Implement TPM c) Conserve Energy d) Many programs were

- taken to reduce energy consumption
- e) Developing the Team through relevant training

# What would be your strategy for business enhancement to remain tall among all market peers?

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GRO

# **Obituary Message**



My dear Friends Late Shri Prem Kumar Aurora

It is with great sadness that I write to inform you that my dearest friend, Shri Prem Kumar Aurora passed away which is a shocking news to foundry, metal and Material Science fraternity . He was a GEM of the person in my life. I was fortunate to work in his Team under the banner of The Institute of Indian Foundrymen (IIF) Greater Mumbai Chapter and ASM International, India Chapter.

With 36 years of experience in the industry, he had involved with major projects for designing and manufacturing various capacities of furnaces from laboratory to computerized SCADA production furnaces. During his tenure, he was actively involved as convener/organizing secretary at various conferences/exhibitions in India to bring forth the latest in materials science and technology to the fore for industry.

He had been successfully organized the various events include HEAT Treat Shows (HTS), Materials Engg. Technology (MET), Melting Metallurgy and Technology (MELTMETTECH), Transportation Materials (TRANSMAT), Microstructure Analysis of

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Shivnath Prasad Oudhia

The Institute of Indian

Foundarymen

Failure Investigation of Industries (MAFII) and Intl. Space Enabling Materials and Processes (ISEMP).

We had jointly organized several events, conferences and Industrial visits. He, as a TRUE leader always used to put the total efforts for the event and bestow the CREDIT to his fellow teammate. We organized a Conference on Ductile Iron, at Hotel Centaur. Near Domestic Airport, Vile Parle, Mumbai under the banner of ASM International, India Chapter in the year 1996. The event was attended by a large number of Delegates from all over India. Several papers were presented from UK, Switzerland, USA, Japan, and experts from India. The conference had been a Grand success.

Thanks to the dedicated efforts of Prem Bhai, as we used to addressed him with affection.

After the event, a dinner meeting of the ASM India Chapter meeting was held. He ensured my felicitation for the success of the conference, whereas full credit goes to Prem Bhai. He never used to work for any credit with full enthusiasm and dedication.

The last time when Indian Foundry Congress was held in Mumbai, Prem Arora was the organizing secretary. In 1997, congress had broken all records of success till that time.

Although he had no direct business interest in the field of Metal Casings,



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Prem Bhai actively got himself involved in the activities of The Institute Of Indian Foundrymen. He became the CHAIRMAN of Greater Mumbai Chapter and rose to the rank of CHAIRMAN, the western region of IIF. As a leader of ASM International, India Chapter, Prem organized many Conferences and expositions. I worked closely with him in all the events where Metal Castings activities were involved.

We had organized a conference on FOUNDRY related TOPICS at Kolhapur, where attendance was so heavy that the auditorium was packed. The event organized at NAGPUR, we supported by all prominent Foundries there. The Two day's conference was well attended. For this conference planning, PREM visited Nagpur for meeting the Chairman of NECO group.

Under his leadership, "Meltmetech" conference and the exposition were successfully organized in Mumbai.

Apart from these Technical bodies, PREM Arora had been associated with Rotary International and its social welfare activities. My pleasant memories of working in his team are many. He was a TRUE leader, a great organizer, and a dedicated worker. He had been the Backbone of ASM International and had been TRUSTEE of the organization.

We are deeply saddened by the demise of PREM, I have lost my dearest friend and guide. With his death, a vacuum has been created in the Foundry Industry and Material Science Industry. However, his memories will always motivate us, at The Institute Of Indian Foundrymen GMC, to keep serving our community with similar dedication.

God bless the departed soul.

# **Tribute to Prem Kumar Aurora**

Mr. Prem, Aurora was the most accepted person in the material community in India. He was the person if some one in pain worked as pain killer, if moment of joy he would enjoy most.

I have been very fortunate to work with him very closely for about 2 decades, in all material

societies. Possible he must have been only person so far to head all materiel Society Chair i.e.

IIM, IIF & ASM.

IIM, Mumbai chapter chair, IIF Greater Mumbai Chapter Chair, IIF Western Region Chair ASM Chapter Chair, ASM India Council Chair and ASM Member Board of trustee in the USA, whenever he was Chair I have been Secretary. He was the person of mission, one of the most down to earth, having ability to deal in any situation and person too, we always read that one should not have words impossible in our directory, but I think Prem Bhai really meant it and made everything possible. Many National & International programmes where he was instrumental few to them are ASM FLAGSHIP EVENT MET & HTS,

**Dr. A. K. Tiwari** Chemi – Chem IIF GMC MELTMETECH. IIM ADMAT 16 & ADMAT 18.

Prem Bhai we will all miss you, As Brother I pay my homage to you on behalf of IIF, IIM &

ASM I pray almighty for resting your soul in peace also to provide the strength to Shri. Lalit

Bhai & Shri. Shashi Bhai and their families.

We all promise that whatever unfinished work you have left pertaining to material fraternity try to finish up to your expectations so wherever you are you could bless all. OM Shanti .

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COVID 19! A fearful term that created havoc and literally wiped out the full year 2020. And there is no sign of its abatement as yet. Fear only got aggravated by the continuous streaming of news of the loss of human lives through pictures and numbers from across the globe. However, after a while, such news becomes the order of the day until tragedy strikes close to you and snatches someone as near to you as Prem Aurora.

On the fateful day of 10<sup>th</sup> March 2021, a vibrant, eversmiling personality of Prembhai as he was popularly known among his Indian friends & colleagues, was lost to this dreaded pandemic.

Prembhai was a mechanical engineer by profession, having completed his graduation from Mumbai University. He proceeded to do his master's from Kansas State University, the USA in 1979.

# Indian Metal Industry will always remember Prem Aroraji

After a brief stint of work with M/s Chemetron, Illinois, he returned to join his family business of manufacturing heat treatment furnaces at M/s Aurora Engineering Co., Mumbai.

He took up a number of challenging jobs of indigenous design, development & manufacturing of furnaces of critical designs and supplying to government and R&D associations like Hindustan aeronautics Ltd., Bhabha Atomic Research Centre, DMRL, MIDHANI, AIR INDIA, etc. He had many first to his credit in this field e.g.

- 1<sup>st</sup> indigenously designed rapid air quenching furnace with SCADA system for Air India for the heat treatment of aircraft components under Pratt & Whitney supervision & approval.
- 1<sup>st</sup> CVD heating furnace indigenization for ISRO ...and many more

It brought recognition to him and the company in the heat treatment area. It was here while working as a director of the company, that a new personality was born. He became a member of India Chapter of ASM **S.S. Sabnis** ASM International (American Society of Metals then), the world-renowned professional international association of material scientists in 1986. With his sincerity and hard work, he impressed one and all & was soon entrusted with different roles in the executive committee of the ASM India Chapter.

With his newly developed contacts in the heat treatment and related areas, he brought many of them in the ASM fold thus not only creating a strong member base of the ASM India Chapter but, also giving an organized platform to this segment. First time in the history of the the chapter he took a delegation of MSME representatives for the heat treatment exhibition abroad in the year 1987.

The trip convinced him about the usefulness of such a show. He immediately got down to meticulous planning of holding such an event here under the ASM India chapter. It had set the tone for the start of chapter exhibitions in India called -Heat Treat Show from 1989, thanks the stellar role played by Prembhai. The show has since become a biennial event of the ASM India Chapter.

He did not stop with Heat Treat Shows but, went on to play the important role of organizing secretary for many other conferences and exhibitions like TRANSMAT (transport materials, in 2004), MELTMETECH (Melting materials technology, with IIF, in 2012), three editions of MET + HTS (Materials Engineering Technology and Heat Treat Show) in 2014, 2016 and 2018, and ADMAT (Advances in Materials -Aerospace with ISRO, 2017 & Defence Materials - with DRDO, in 2019).

With his continuous involvement in ASM chapter activities, getting to lead the chapter as Chairman was a matter of time (1996 - 2000 and 2010 - 12). As chapter Chair, he was instrumental in further increasing the visibility of ASM in India by initiating a number of training courses like Metallurgy for the nonmetallurgists, Basic and Advanced courses in heat treatment, a short course in Metallography, Corrosion, Failure analysis etc.

With the single-minded devotion, he had helped to develop six more ASM chapters in India, identifying suitable persons from the area to lead the chapter activities and guiding them. His dedication and knowledge of the Indian diaspora did not go unnoticed by other Metallurgical associations like the Institute of Indian Foundrymen (IIF) and Indian Institute of Metals (IIM). He was not only enrolled as a member of these professional bodies but, was also given the responsibility of leading their Mumbai chapters as Chairman. Although these associations had a similar mandate, Prembhai never thought of these associations as rivals but, rather considered them to be complementary to ASM. He took the first possible opportunity to collaborate for joint programs.

Prembhai's friendly demeanor, helping nature, and never say die attitude, soon found him at the helm of ASM India National Council - INC (2014 to 2017) the body set up to monitor and expand the presence of ASM in India. He excelled in the role of INC Chairman by strengthening the interchapter bond, guiding them whenever needed, cajoling them to conduct different programs if the chapter activities were found wanting, taking up the Indian chapters' problems with the HO, and so on. He was awarded the 1<sup>st</sup> of its kind "Volunteerism Award" in 2016 by the then President ASM International, Mr. Jon Tirpak. As Council Chair, he mooted the idea of holding Materials Day on Dr. APJ Kalam's birth anniversary, 15<sup>th</sup> October by different chapters by rotation. Yet

another idea instituted and implemented by him awards for students for their research work impacting the industry.

Because of his excellent representation of Indian condition at the HO, he could easily persuade quite a few ASM International Presidents to come to India.

Looking at his credentials, he was easily picked up as a member of, Board Of Trustees, at ASM International (2017 to 2020). His representation of the Indian Cause has brought the growth potential of ASM in India in sharp focus and led to the formation of the India Task Force (ITF). With his active role, ITF has already identified short and long-term goals and tap the hidden membership potential.

He constantly lived the dream of the all-around growth of ASM in India never ever getting tired to come up with new ideas for the purpose. He was considered as the spokesperson for not only ASM in India but, Indian Metal industry as a whole. Truly his sudden loss has crippled the growth engine and will take a while to fill this void.

Long Live Prembhai !!!

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# Demand for aluminium to rise in India : Survey

In its just released survey on the aluminium industry, the Indian Institute of Foreign Trade (IIFT) has indicated that the demand for aluminium is going to rise as a result of increasing urbanization, development of industrial corridors, rural electrification, Smart City projects, housing for all and various other infrastructural projects.

"We have used secondary data analysis to provide an overview of the Indian aluminium industry vis-à-vis global aluminium industry and assess the challenges faced by the Indian aluminium downstream sector and its potential along with ITC Trade Map data to explain and analyse the trade structure of the domestic aluminium industry," said Anil Agarwal, Patron, ASMA (Aluminium Secondary Manufactures Association).

"In order to analyse the dynamics of the aluminium industry after India signed FTA with some supplier countries and India's duty structure, we used customs tariff data from various sources including Central Board of Indirect Taxes (CBDT) and Supply-Use Table," he added.

The study also discusses the rising requirement of "green" properties of the aluminium and awareness of the climate change related requirement to assess the future path for Indian aluminium industry while World Integrated Trade Solution (WITS) SMART analysis has been conducted to build a hypothetical scenario to import high quality primary aluminium in India at lower tariffs with the reference case of Russia

# **Copper end-users urge Tamil Nadu to find solution to restart Tuticorin plant**



Copper end-user industry bodies have urged the Tamil Nadu government to "work out a solution" to restart operations at Sterlite Copper plant in Tuticorin, whi h catered to around 40 per cent of India's total requirement of the metal.

The industry bodies, whose members constitute SME and MSME units, told PTI that the closure of the plant has caused supply disruptions, leading to a rise in imports and increased cost of production.

In May 2018, the state government had ordered the pollution control board to seal and "permanently" close the plant, following violent protests over pollution concerns.

Sterlite Copper later moved the Supreme Court to resolve the issue, where the matter is pending.

Anil Saboo, President of the Indian Electrical & Electronics Manufacturers' Association (IEEMA), said copper is a major component used by the players of this industry and the plant used to cater around 35-40 per cent of the country's total copper requirement.

"The electrical equipment industry is suffering a lot because of it. Prices of copper have risen by 30-40 per cent in the last few months and fixed-rate contracts of electrical equipment makers with government or private are being affected. It has affected their cash flow also and their profitable orders are converting into losses," he said.

As per industry data, India's refined copper production was about 8,48,000 tonne in 2017-18, while the exports stood over 4,16,000 tonne and imports were at 2,15,000 tonne. In 2019-20, the country's production of refined copper reduced to 4,08,000 tonne, and exports fell to 29,000 tonne, while imports rose to 3,45,000 tonne.

# Copper TC/RCs hit decade-lows, market questions where bottom is

Treatment and refining charges for copper concentrate fell again to new 10-year-lows in the week ended Friday March 12, with Fastmarkets' copper concentrate index dropping to less than \$30 per tonne/3 cents per lb for the first time.

The spot market has been in a prolonged downtrend since 2014, but a recent bout of tightness has seen terms dip by 27% in the past two weeks.

TC/RCs, which are discounts to exchange prices paid to smelters for processing ores into metal, are at levels last seen in 2010-11, at the tail end of a commodities supercycle, when red-hot demand for copper from China was rapidly outpacing supply.

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Now, with tonnages beginning to trade closer to single-digit numbers, market participants have been left to wonder how the market will develop from here.

"Smelters are able to purchase material right now at extremely low TCs due to high prices for sulfuric acid, byproduct credits, higher value for free copper recovered, as well as high prices and premiums," Capstone Mining marketing director Ashley Woodhouse told Fastmarkets. The company had received "numerous" inquiries for concentrates, she added.

"Historically," she said, "smelters' average break-even TC would be around [\$60 per tonne/6 cents per lb], but in the current environment smelters are still making money buying in the [\$30s per tonne range], and we foresee that going even lower. [We] expect to see smelters, especially in China, buying at [TCs of \$0 per tonne/0 cents per lb] and they will still be profitable."

# Traders make bullish bets

Copper mine tenders, for concentrates sold into the spot market, have been sold to traders at terms in the 'teens' – less than \$20 per tonne/2 cents per lb, in the case of Antofagasta's Centinela material.

But in recent weeks, traders have been betting that the current tight situation for concentrates will last for significantly longer than the just the next few months.

# Bauxite Average Sale Price (ASP) needs correction for Indian Aluminium to be competitive

As India works tirelessly towards becoming a global manufacturing hub under Hon'ble Prime Minister NarendraModi's vision of AatmaNirbhar Bharat, Aluminum is set to play a pivotal role in realizing this dream. The world today is currently being constructed on the building blocks of Aluminium with this strategic metal finding its application in multiple core sectors like aerospace, space exploration, national defence, building and construction, transportation, automotive, electrical distribution, packaging and others. India's existing wealth of natural reserves of Bauxite (the ore from which Aluminium is produced) and industrial infrastructure to manufacture Aluminium and its products has positioned the country well to become a crucial source of the metal for the world. As a manufacturer of the base metal, this will place India on the global map as a one-stop destination for sourcing the metal, which will go a long way in helping India realize its dream of becoming a \$5 trillion economy.

Commenting on the unexplored potential of India's bauxite reserves, Dr. Tapan Kumar Chand, Ex-CMD, NALCO & Author of the Book - "Aluminium: The Strategic Metal" said, "Bringing enough bauxite blocks of the estimated deposits of 3.8 billion tons of bauxite in India into auction and increasing the capacity of existing mines by at least 50% will be key to moving India towards becoming AatmaNirbhar. This will also improve the global competitiveness of the Indian aluminium industry. Another important change that is required is in the methodology of the calculation of the Average Sale Price (ASP) of Bauxite which if continued in its current form, will have a negative impact on the overall growth of the domestic Aluminium industry. The price determined from the current ASP system is artificially increased up to 300% to 400% by including expenditures incurred beyond the mining lease." India is yet to leverage its significant bauxite deposits effectively for its economic and social advancement. With aluminium demand slated to double in the next five years, India can effectively fill the demand gap by utilizing its large reserves of bauxite and coal, 5th in the world, for aluminium production. It is to be noted that in the last 5 years, since the

inception of MMDR Act 2015, no Metallurgical Grade Bauxite Mine has been successfully auctioned. This is largely linked to the unviable and arbitrary determination of Average Sale Price (ASP) of Metallurgical Grade of Bauxite linked with the selling price of the end product Aluminium. This present pricing structure is responsible for the most part, for various state governments not being able to auction the bauxite mine leases. The present pricing structure links the selling price of the end-product (aluminium) to determine the ASP of metallurgical grade bauxite and ends up including costs such as transportation, quality control, rehandling cost etc., which should not be done. This will render Aluminium production unviable in the country. A repercussion of this is being seen in the pause of an additional investment of over Rs. 50,000 crores in the Aluminium sector.

Bauxite mines not being successfully auctioned has led to a surge in the import of bauxite, one of India's most abundant ores, to feed the rapidly increasing domestic consumption and has caused a loss of USD \$400 million to the Indian exchequer over the past five years.



# LME aluminium price hits \$2,200/t, cancellations follow 600kt inflow

Aluminium's London Metal Exchange three-month price rose above \$2,200 per tonne in early morning trading on Monday March 15, while the rest of the complex were consolidating from "early March weakness."

Aluminium's price was up by 0.9% at \$2,191 per tonne at 9am on Monday, having reached as high as \$2,204 per tonne during early trading. LME aluminium warehouse data showed 44,725 tonnes of material were canceled on Monday, following inflows of over 600,000 tonnes on Thursday and Friday of last week. The cancellation was entirely at warehouses in Port Klang, Malaysia, where the vast majority of material delivered in last week was placed.

# Copper gains in thin volume, aluminium jumps on China power cuts

Copper prices gained on Monday after stronger-thanexpected industrial growth in top metals consumer China, while energy-intensive aluminium surged as a Chinese city clamped down on power consumption.

Volumes were low, with investors cautious ahead of central bank meetings this week.

Benchmark copper on the London Metal Exchange had gained 0.4% to \$9,122.50 a tonne by 1700 GMT, off the session high of \$9,199.50, the highest since March 3.

"We had some positive Chinese data, which helps to confirm a V-shaped recovery, but volumes are low and there's no real conviction," said Geordie Wilkes, head of research at Sucden Financial.

China's industrial output increased by a forecast-beating 35.1% in January-February from a year ago, suggesting a sharp rebound in the world's second-largest economy in the first quarter.

But investors were wary ahead of meetings of the U.S. Federal Reserve and other centrals banks this week, Wilkes said.

\* LME three month aluminium climbed 2% to \$2,213.50 a tonne, the strongest since March 4, after the Chinese city of Baotou in Inner Mongolia ordered some industrial production and power plants to shut down in a bid to meet its energy consumption targets for the first quarter. Aluminium is the most energy-intensive base metal.

\* China's aluminium production rose 8.4% in the first two months of 2021 compared with the same period last year, official data showed, as smelters added new capacity and cashed in on soaring prices.

https://www.reuters.com/article/global-metals/metalscopper-gains-in-thin-volume-aluminium-jumps-on-chinapower-cuts-idUSL1N2LD0M1

China Jan-Feb aluminium output rises on new capacity increase

China's Aluminium production rose 8.4% in the first two months of 2021 compared with the same period last year, official data showed on Monday, as smelters added new capacity and cashed in on soaring prices. Primary Aluminum output in China, the world's biggest aluminium producer, was 6.45 million tonnes in January and February combined, the National Bureau of Statistics. It combined data for the first two months to account for the distortions of the week-long Lunar New Year holiday.

The data suggests output averaged around 109,300 tonnes per day in January-February, setting a new daily record, versus around 105,400 tonnes per day in December and beating the previous record of about 106,000 tonnes in November.

https://auto.economictimes.indiatimes.com/news/autocomponents/china-jan-feb-aluminium-output-rises-onnew-capacity-increase/81514405

Champion industry, aluminium, looks for 5% RoDTEP rate to boost exports

This announcement is a huge relief for exporters post withdrawal of the MEIS and will provide much needed impetus to boost Indian exports.

However, the pendency of notifying the sector-wise remission rates under RoDTEP Scheme is creating a precarious situation and uncertainty for Indian exporters due to ambiguity w.r.t. pricing of goods and thereby impacting Indian exports.

The recently announced Union Budget 2021-22 has kept provision of Rs 13,000 crore for RoDTEP, which has been significantly curtailed from Rs 50,000 allocation for RoDTEP Scheme when first announced by the Finance Minister in Sept, 2019.

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# Rio Tinto Announces First Sale of its Aluminium-Scandium Alloy for 3D Printing



Rio Tinto, a leading global mining group, announced the signing of an agreement to provide a first commercial batch of high-performance aluminium-scandium alloy from its North American operations to Amaero, a leader in metal additive manufacturing.

This first sale is being delivered through Rio Tinto's unique position as a producer of both aluminium and scandium, and its technical capability to develop specialised alloys.

Under the agreement, Rio Tinto will deliver alloy billets made of responsibly produced, low carbon aluminium from its hydro-powered Canadian smelters and high purity scandium oxide from its Rio Tinto FeretTitane (RTFT) metallurgical complex in Sorel-Tracy, Quebec. The billets will be processed by Amaero into powder for 3D printing and offered to the market for high temperature applications. The scandium oxide will be supplied from a new plant Rio Tinto is building in Sorel-Tracy, Quebec, bringing the first North American supply source to the world. The plant will use an innovative recovery process developed by Rio Tinto scientists to extract high purity scandium oxide from the waste streams of titanium dioxide production, without the need for any additional mining.

https://manufactur3dmag.com/rio-tinto-announces-firstsale-of-its-aluminium-scandium-alloy-for-3d-printing/

# European premiums at record-highs, US premium close to all-time high

Aluminium billet premiums in Europe reached all-time highs on Friday March 12, with the US billet premium now barely below a record high, and supply squeezed across the globe. Europe Billet premiums in Europe continued to soar on Friday due to continued supply tightness and logistics issues. The premium has overtaken the multi-year highs reached when US sanctions imposed on producer Rusal caused panic in the aluminium market.

As per the Fastmarkets assessed report indicated that the aluminium 6063 extrusion billet premium, ddp North Germany (Ruhr region) was quoted at \$580-620 per tonne on Friday, up from \$550-590 per tonne the previous week.

The premium has soared by 66% since the start of 2021, when it was at \$340-380 per tonne.

"The availability of billet is getting worse, and the premiums are continuing to climb. Every day, they are going higher, and people are getting desperate," a trader said.

High freight rates and container issues continue to prevent imports from coming into Europe, and strong demand is causing a shortage of availability.

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"The pandemic put us all to the test last year. Yet, Hydro managed an extraordinary 2020 carefully, emerging stronger and well positioned to deliver on our agenda to become a profitable and more sustainable industry leader," commented President and CEO Hilde Merete Aasheim in a related press release.

"We have accelerated our improvement efforts in 2020. Our extended program targets NOK 8.5 billion by 2025 across all business areas and staffs. I am happy that we exceeded our improvement target and achieved savings of NOK 4.2 billion for 2020, amounting to about half of the overall 2025 ambition."

"This March we reached another milestone with the finalization of the strategic review of the Rolling business and with a conclusion to sell the business to the U.S.based private equity firm KPS Capital Partners," she continued. "The agreement marks another step toward making Hydro a profitable and more sustainable industry leader – to the benefit of our employees, our customers and our shareholders."



# Extruded Aluminium Buoys Norsk Hydro Financial Results In 2020

Norwegian aluminium producer Norsk Hydro ASA released its annual report on Friday. Despite the challenges to the global economy and the worldwide aluminium market, the firm reported strong results even in the face of coronavirus's impact.

For the year 2020 Hydro reported income of NOK138,118 million, down from the prior year's income of NOK149,766 million. Underlying EBITDA totaled NOK6,051 million, nearly doubling 2019's number of NOK3,359 million. Leading the charge was its extrusion business, which contributed NOK2,196 million, up slightly from the year prior's total of NOK2,009 million. Following that was its bauxite and alumina business, which doubled 2019's total at NOK1,806 million. Hydro's aluminuim metal business followed that by inverting 2019's loss of NOK1,259 million to generate NOK1,225 million in positive underlying EBITDA in 2020.

Net income last year totaled NOK1,660 million, reversing a net loss of NOK2,370 million the year prior.

From a production standpoint, Hydro had a strong year in 2020. The firm mined 8,640 thousand metric tons of bauxite, up from last year's total of 7,360 thousand metric tons. Alumina production rose from 4,487 thousand metric tons in 2019 to 5,457 thousand metric tons last year. Meanwhile, primary aluminium production was essentially level, rising 53 thousand metric tons from 2019 to a total of 2,091 thousand metric tons last year.

# ASI Certifies Three Of Jupiter Aluminum's Scrap Plants Under Chain of Custody Standard

The Aluminium Stewardship Initiative (ASI) announced the certification of a trio of plants in the United States operated by Jupiter Alumium against its Chain of Custody standard.

Two of the plants certified by the ASI are located in Indiana, and the third is in West Virginia. All three plants collect scrap aluminium and melt it into various aluminium alloys for sale in the North American market.

Fiona Solomon, Chief Executive Officer at ASI, noted the importance of Jupiter's certifications in a related press release.

"We warmly congratulate Jupiter Aluminum on their CoC Standard certification for their coil production and coating operations. We're pleased to see the company continue to lead the way in the United States by achieving the first USbased ASI Chain of Custody Standard Certifications. The achievement of the Performance Standard and CoC Standard Certifications provides robust assurance to their customers that the company's aluminium scrapbased products are produced following responsible practices."

ASI's Performance Standard is the product of consultations with a multitude of stakeholders throughout the aluminium value chain, which ASI asserts is the sole comprehensive voluntary sustainability standard initiative in the aluminium sector. The certifications, which each last for three years, were audited by DNV GL.

Paul-Henri Chevalier, CEO of Jupiter Aluminum, said the certification is a testament to the firm's focus upon sustainability.

"We are very honored to be the first, fully US based remelting, rolling, finishing and coating operation, to achieve Certification to the ASI Performance and Chain of Custody Standard across our entire Company. This confirms Jupiter's long-lasting dedication to a more sustainable aluminum world. Certification to these Standards is much more than an achievement, it is also a fresh start with a commitment to keep improving."

The ASI is a worldwide organization dedicated to setting industrial standards and certifications in the aluminium industry. The association attempts to bring together the various stakeholders in the aluminium industry in order to achieve objectives including sustainable production methods, material chain-of-custody procedures, recycling, social impacts related to aluminium production, and production standards.

https://aluminiuminsider.com/asi-certifies-three-ofjupiter-aluminums-scrap-aluminium-remelting-plantsunder-chain-of-custody-standard/

# Vimetco to Invest €10 MM In New Automated Aluminium Extrusion Line Built By Presezzi

Romanian aluminium producer ALRO S.A.'s downstream subsidiary Vimetco Extrusion said Tuesday that it will soon begin a €10 million program to increase high- and very-high value-added aluminium products by installing new machinery produced by Italy's Presezzi Extrusion spa.

The investment in question will consist of a new automated 7" extrusion line capable of extruding profiles of up to 60 meters at a rate of 50 meters per minute. Fueled by an energy-savings system and supplied by independent water- and air-cooling zones, the equipment will be funded by both commercial credit and bank credit lines.

Vimetco notes that the project will accomplish several aims, including adding new value-added aluminium

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products for its clients, reducing overall environmental impact, increasing operational efficiency, and generating new cost savings.

"The expertise in creating high and very high value-added products is obtained only through constant investments in innovation and outstanding employee training, and Vimetco Extrusion has shown that it is not only willing to embrace these responsibilities, but it also excels in executing them very efficiently. This recent investment is another step in achieving the Company's long-term vision, along with the recent partnerships with companies from industries that are recognized for the high standards of materials used, precision in execution, stability and predictability in delivery of the finished products."

Vimetco Chairman Igor Higer said that the current project is part of an ongoing improvement program by the firm.

"Vimetco Extrusion continues to invest in technology, securing the path for a sustainable, efficient and customeroriented business. We consider Presezzi the right partner for this endeavour as we are confident that this project represents only the first step towards a successful, long-term partnership."

"Presezzi Extrusion is grateful for this new partnership and for trusting our Company's technology and quality for this ambitious and complex project and we are willing to provide further support to Vimetco Extrusion in its next plans, as well," opined the Founder and President of Presezzi Extrusion, Valerio Presezzi.

Vimetco is Romania's vertically-integrated aluminium extrusion firm. Founded in 2006, the firm operates a pair of extrusion presses and employs over 200 individuals.

# **Agitation hits Nalco mining operations**

Work at Nalco mines near its Damanjodi plant has been adversely hit owing to an ongoing agitation by family members of land displaced persons residing in Aanlabadi Colony. The agitators who are the second generation of land displaced families, are demanding jobs in Nalco in lieu of land acquired by the PSU.

Their parents who were given jobs at the PSU three decades back and settled at Aanlabadi Colony have now either retired or dead. Sources said Nalco had acquired land from 600 families of 15 villages in the periphery of its Damanjodi plant three decades back.

The protestors have blocked the road to Damanjodi since Wednesday affecting transportation of bauxite from Nalco mines to its plant. Nalco officials said the land displaced persons have already been compensated as per norms and efforts are on to end the stalemate. "We are holding discussions with the district administration to find a solution to the issue," said a senior official. Sources said mining and processing of 50,000 tonne alumina have been affected till now due to the stir.

# Trafigura Sees Green Copper Supercycle Driving Prices to \$15,000

The world's biggest copper trader expects the metal to hit \$15,000 a ton in the coming decade as demand from global decarbonization produces a deep market deficit. Even in the early stages of the Covid-19 crisis, Trafigura Group was betting on the rebound that's seen copper double over the past year to trade at more than \$9,000 a ton. Now the commodities giant sees the metal soaring past record highs above \$10,000 as western economies pull out of the pandemic and the green revolution takes hold, head of copper trading Kostas Bintas said in an interview. So far, the rally has been fueled by virus-related supply disruptions and an unprecedented buying spree in China, consumer of half of the world's copper. But as global investment in renewable energy and electric-vehicle infrastructure surges over the next few years, Trafigura sees prices of the bellwether raw material marching even higher. "We thought copper would come out of this Covid crisis stronger, and that's exactly what's happened," Bintas said. "What Covid has done is it has made the rest of the world a major factor in consumption growth, compared to the past, when copper was all about China."

Trafigura expects the metal to breach \$10,000 a ton this year, before entering a range of \$12,000 to \$15,000 a ton over the coming decade. Other ardent copper bulls including Goldman Sachs Group Inc., Bank of America Corp. and Citigroup Inc. have similarly strong near-term forecasts, but Trafigura has set itself apart with its lofty long-term target. Goldman expects copper to hit \$10,500 a ton within 12 months, while Citi sees it reaching \$12,000 next year in its bull-case forecast. In the years to come, that's likely to become the floor for prices as the industry revalues the metal, according to Trafigura.



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# Global aluminum needs up to \$1.5 trillion investment to decarbonize energy supplies: IAI

Today more than ever, we know that addressing climate change effectively requires businesses, governments and society to work together. Similarly, every industry needs to embrace this challenge: progress against our targets will come from many projects across our business and collaboration with our partners. In many important applications, there are no low-carbon alternatives to steel, aluminium and copper; furthermore, these materials are essential to enable the low-carbon transition. The challenge is to produce

them sustainably - not only with lower emissions, but also in a way that respects communities.

In order to meet the decarbonize target, it has been estimated that global investments of around \$500 billion and \$1.5 trillion may be needed to decarbonize energy supplies to the electro-intensive global aluminum industry targets by 2050, according to executives of the International Aluminium Institute, a producers' association.

Much of this cost will be concentrated in China, which has grown over the past 20 Source : IAI Report

years to account for around 55% of the world's aluminum production and demand, and which currently uses predominantly coal-based energy for aluminum production.

"However, we already see the movement there [in China]", said IAI Deputy Secretary General Chris Bayliss in a call with reporters to mark the March 16 launch of the institute's Aluminium Sector Greenhouse Gas Pathways to 2050 report. "The move back to growth of hydropower [to fuel the aluminum industry] is happening there."

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Supportive government and industrial policies worldwide, including in recycling and the circular economy, are also needed to enable the investments and decarbonization required, he said.

# Primary demand growing

Currently electricity accounts for around 60% of the aluminum sector's carbon footprint, Bayliss said. Aluminum is a "hard-toabate" sector, accounting for around 2% of global carbon emissions, a similar level to global aviation or shipping, he said.

The electro-intensive global aluminum industry needs to slash its emissions 80% by 2050 to keep in line with the International Energy Agency's Beyond 2 Degree Scenario, while demand for primary aluminum is expected to grow by up to 40% during the same period, according to the IAI, highlighting the decarbonization challenges facing the sector.

In 2018, global demand for aluminum was 95 million mt; two thirds (64 million mt) of which was met by primary aluminum (produced from ore) and one third (31 million mt) from recycled aluminum. Rapid population and economic growth over the coming decades means global demand for aluminum will increase by up to 80% by 2050, including both recycled and primary metal, according to IAI. Despite increased projected recycled metal supply, IAI estimates that up to 90 million mt of primary aluminum will be required per annum in 2050. Aluminum demand will grow partly because it is an enabler of energy transition: it is used to lightweight in electric vehicles, green building and cabling, Bayliss said.

"Emissions reduction is a challenge for every sector," said Miles Prosser, IAI secretary general. "It is, however, a challenge that the aluminium sector is poised to address". The institute, its members and regional associations have been intensively working on planning out the necessary pathways to achieve the goals for the past 18 months, he said.

The research has shown that simultaneously reducing emissions while meeting increasing demand will require huge investment in production technologies, along with commitment from all along the value chain, IAI said.

# Three pathways

There are three credible and realistic approaches to emissions reductions for the aluminum industry, in line with the International Energy Agency's Beyond 2 Degree

# Feature



Scenario, IAI said in its new report.

The routes are electricity decarbonization, cutting direct emissions and boosting recycling and resource efficiency, it said.

# Electricity decarbonization

More than 60% of the aluminum sector's 1.1 billion mt of CO2 equivalent emissions in 2018 were from the production of electricity consumed during the smelting process, according to the report. Of the total emissions, 752 million mt were from installations in China. Decarbonized power generation and the deployment of carbon capture utilization and storage (CCUS) therefore offer the most significant opportunity to reduce emissions to near zero by 2050, it said.

Under a Beyond 2 Degree Scenario, the industry would need to reduce its total emissions to 250 million mt CO2e, said IAI.

Continuing business as usual (BAU), adding new smelter capacity without decarbonizing, could boost carbon emissions to 1.6 billion mt annually by 2050, according to Bayliss. Fuel combustion makes up 15% of the industry's

emissions, according to the report.



Industry Update

# **National Metallurgist's Day**

# "Extractive metallurgy research is the need of the hour" – Dr. V K Saraswat

Despite the covid-19 fallout, National Metallurgist's Day (NMD) and Annual Technical Meeting (ATM) which are the annual flagship events of The Indian Institute of the various parts of the Conference. The events started with the opening session of the 74th ATM and International conference on 23rd February



Metals (IIM) had been successfully organized the International Conference and IIM Platinum Jubilee celebrations with 58th NMD and 74th ATM from 23rd to 26th February 2021 via online mode. The events were originally planned for November 2020. The event was organized by the IIM Mumbai with Pune, Nagpur, Dolvi, Goa and Baroda Chapters, and IIT Bombay. Among the office bearer attended the event includes IIM President, Prof Amol A Gokhale. Vice President (Ferrous) Mr. T V Narendran, Vice President (Metal Sciences) Dr. S V Kamat and Vice President (Non-ferrous) Mr. Satish Pai were among others former Presidents were also presented d led

23rd February 2021. The opening sessions were graced by the presence of Dr. V K Saraswat, NITI Aayog Science Member as Chief Guest.

In the opening remarks, Dr. Saraswat has emphasized more on the need to reviving extractive metallurgy research in academic institutes and working on critical raw materials required for the country. The ATM was an impressive ensemble of an inaugural keynote lecture by Prof Subra Suresh, President, NTU Singapore. Besides, it had successfully conducted plenary sessions, panel discussions, various invited and contributed talks spread over 7 parallel tracks with 41 sessions, posters, Microstructures contest, and exhibits from various industries.

The talks encompassed topics ranging from state-ofthe-art materials modeling,

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**Prof. Amber Shrivastava** Jt. Hon. Secretary, IIM

cutting edge new materials to industrial metals and materials. Topics covered the science, technology, engineering, applications, and prospects of different materials. The talks were delivered by the speakers from academia (IITs, IISc, NITs, etc.), industries (Tata Steel, JSW, SAIL, AMNS(I), L&T, SS HF, HZL, Nalco, etc.) and research labs (DMRL, BARC, NML, IGCAR, VSSC, IMMT, etc.). Two important trends were captured: Digitalisation, and Electric Vehicle making

Electric Vehicle making inroads in the mobility sector and its impact on battery materials.

Two-panel discussions covered two very different ends of the spectrum. The first panel discussion, moderated by Mr. Kunal Bose, was focused on enhancing the global competitiveness of Indian metals industries, which was very interesting for the big businesses. For this discussion, the panelists were industry leaders from Steel, Aluminium, and strategic materials industries.

The second-panel discussion, which was moderated by Prof Parag Bhargava was more focused on the young entrepreneur in



# **Industry Update**

materials. The online mode of the conference allowed easy implementation of voting-based popular poster and metallography contests. The overwhelming voting response indicated the excitement among the participants.

The international conference consisted of 13 talks delivered by distinguished speakers from Japan, Singapore, India, Portugal, Switzerland, Germany, UK, and the USA.

In order to accommodate different time zones, these talks were organized after ATM, in the evening as per Indian Standard Time. Despite being later in the day, the turnout of the conference delegates was very impressive. All the informative talks were followed by very interesting questions and answer sessions.

Overall, this year event allowed researchers from various global locations to come together and interact over some of the very relevant topics and issues related to materials of our time. The second day of the conference was marked by the 58th NMD. Keeping up with the tradition of the NMD, this year's N P Gandhi Memorial lecture, Daya Swaroop Memorial lecture, and GD Birla Gold Medal lecture was delivered by Prof B K Mishra, Director IIT Goa, Prof Manna, VC, BIT Mesra, and Prof Satyam Suwas,

Head, Materials Engg, IISc, respectively. The gracious presence of



Shri Dharmendra Pradhan. Honourable Minister of Steel, Shri Faqqan Singh Kulaste, Honourable Minister of State for Steel and Dr Rasika Chaube, Addl.Secretary, Ministry of Steel enlightened the NMD Award ceremony. Shri Vikram Kirloskar, Chairman Kirloskar Systems Ltd. received the JRD Tata Award, IIM National Sustainability Awards went to Tata Steel Ltd., JSW Steel Vidyanagar, and L&T Special Steels and Heavy Forgings Ltd. NALCO Angul. Hindustan Zinc Ltd Udaipur, Hindalco Hirakud and Foundry and Forge HAL was awarded under various IIM Non-Ferrous Best Performance categories. This ceremony was followed by IIM Awards Function. These awards included IIM Honorary Member Awards, IIM Platinum Medal, IIM Fellowship Awards and IIM

Springer award for the best reviewers.

Since the year 2020-21 is the platinum jubilee year of IIM, the year-long platinum jubilee events were launched with the release of Platinum Jubilee logo, IIM Vision Statement, and streaming of a short movie on Dr. Dara P. Antia, IIM President (1962-65).

On the occasion of the commencement of IIM's Platinum Jubilee celebrations, a special issue of the Transactions of IIM dated June 2021 focusing on 'Design and Manufacturing' was announced. Further, three books are announced to be published over the Platinum Jubilee year with titles "Metallurgy, Materials and Manufacturing", "Indian Metallurgy: The Platinum Years" and the Proceedings of the 74th ATM of IIM"

This conference turned out to be a special experience for the organizers and participants. On one hand, the online tools for bringing people together like websites and online platforms played a key role. These tools also posed new challenges. Although people could not connect in-person. however, desire to learn new things, seek better solutions to industry problems, and know more, made everyone overcome these challenges and make most of the conference.

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# Utility vehicles drive auto sales in February 2021

As per the latest data released by the Society of Indian Automobile Manufacturers (SIAM), the utility vehicles (UVs) segment, with a year-on-year (y-o-y) growth of more than 45 per cent, has driven the total passenger vehicles wholesales in the domestic market in February 2021.

While two-wheeler dispatches to dealers also rose 10.2 per cent to 14,26,865 units, compared to 12,94,787 units in February 2020. Motorcycle sales during the last month increased 11.47 per cent to 9,10,323 units as against 8,16,679 in February 2020. Scooter sales were also up 10.9

per cent at 4,64,744 units from 4,22,168 units a year ago. Three-wheeler sales, however, declined by 33.82 per cent to 27,331 units as compared with 41,300 units in February last year. Vehicle sales across categories rose by 10.21 per cent to 17,35,584 units last month as against 15,74,764 units in the year-ago period. Commenting on the sales data, SIAM Director General Rajesh Menon said total sales of passenger vehicles from April-February period was still below 2015-16 levels and for two-wheelers it is below 2014-15 levels.

Category	Domest	Domestic Sales (In Numbers) February		
Segment/Subsegment				
	2020	2021	% Change	
Passenger Vehicles (PVs)*				
Passenger Cars	148,541	155,128	4.43	
Utility Vehicles (UVs)	78,674	114,350	45.35	
Vans	11,407	11,902	4.34	
Total Passenger Vehicles (PVs)*	238,622	281,380	17.92	
Three Wheelers				
Passenger Carrier	32,423	18,514	-42.90	
Goods Carrier	8,877	8,817	-0.68	
Total Three Wheelers	41,300	27,331	-33.82	
Two Wheelers				
Scooter/ Scooterettee	422,168	464,744	10.09	
Motorcycle/Step-Throughs	816,679	910,323	11.47	
Mopeds	55,802	51,445	-7.81	
Electric Two Wheelers	138	353	155.80	
Total Two Wheelers	1,294,787	1,426,865	10.20	
Quadricycle				
Quadricycle	55	8	-85.45	
Total	55	8	-85.45	
Grand Total	1,574,764	1,735,584	10.21	

# **Society of Indian Automobile Manufacturers**

\* BMW, Mercedes, Tata Motors & Volvo Auto data is not available.

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**Statistics** 

# Society of Indian Automobile Manufacturers

Category	Domestic Sales (In Numbers)		
Segment/Subsegment	April-February		
	2019-2020	2020-2021	% Change
Passenger Vehicles (PVs)*			
Passenger Cars	1,594,821	1,336,473	-16.20
Utility Vehicles (UVs)	885,556	902,951	1.96
Vans	125,006	96,384	-22.90
Total Passenger Vehicles (PVs)**	2,605,383	2,335,808	-10.35
Three Wheelers			
Passenger Carrier	503,317	112,473	-77.65
Goods Carrier	106,140	71,794	-32.36
Total Three Wheelers	609,457	184,267	-69.77
Two Wheelers			
Scooter/ Scooterettee	5,302,614	4,022,171	-24.15
Motorcycle/Step-Throughs	10,642,804	9,025,840	-15.19
Mopeds	604,004	572,559	-5.21
Electric Two Wheelers	165	2,011	1118.79
Total Two Wheelers	16,549,587	13,622,581	-17.69
Quadricycle			
Quadricycle	1,073	-19	-101.77
Total	1,073	-19	-101.77
Grand Total of All Categories	19,765,500	16,142,637	-18.33

\*\* BMW, Mercedes and Volvo Auto data is not available and Tata Motors data is available for Apr-Dec only



**Statistics** 

For Reference:



Apr to Feb Sales Numbers are below 2015-16 Levels



Analysis

# Industrial metals in the focus

Even in times of the ongoing pandemic, the industrial metals spectrum hasn't failed to amaze the global markets. After the stellar rally in 2020, resurgence of the virus in China and other major economies at the very beginning of the year undermined the metal complex in January'21.

However, the entire pack seems to have returned back in action since February'21. Copper Aluminium and Zinc posted solid gains of 17 percent13 percent and 11 percent on the LME.

The Industrial metals flourished as enormous stimulus infused through various channels and paced vaccine rollouts around the globe raised bets on a recovery in the global economic scenario.

The rally for Zinc and other industrial metals was further strengthened as the massive virus relief bills triggered inflation worries. Investors took shelter under the base metals as a hedge against the possible inflation.

Another important factor behind the bullish sentiments is the booming Electric Vehicle segment. With the world moving towards a greener environment, the demand for industrial metals is bound to surge in the times to come.

Copper – leading from the front

LME Copper surged over \$9000 tonnes level mark (in the above-mentioned timeframe)

However, Copper continued to gain of the bullish sentiments and a bright outlook. While the current Copper consumption by the Electric Vehicle segment is just nearing 4 percent, the decarbonisation initiative taken by various nations around the globe is expected to multiply the demand for industrial metals in the years to come.

Also, fewer numbers of Covid-19 cases, speedy vaccine roll outs and the upcoming virus relief bill by the US underpinned the industrial metals prices.

Zinc gains on supply woes

Zinc prices extended its gains as depleting Zinc stocks, pandemic triggered curb in major producing nations amid rigid environmental norms in China raised genuine doubts over the supply of the galvanizing metal.

The tightness in the global Zinc markets was evident as China's zinc spot concentrate TC was down to \$80 per tonne in the end of January 2021 from a 12-year high of \$305 a tonne recorded in February 2020. The treatment charges (TCs) are usually lower when the mine output decreases and smelters have to compete to get concentrate to process. Resurgence of the pandemic in major Zinc producing nation amid halt in China's mining activities during winter undermined Zinc's TC margin.

above-mentioned timeframe) on the back of the similar narrative.

Boost in the infrastructural development as a tool against the pandemic triggered economic fallout amid the world moving towards a Greener environment has painted a very promising picture for Copper and other industrial metals.

The red metal gained despite of a modest economic outlook projected by China amid less than expected expansion in their manufacturing segment.

As per reports from the National Bureau of Statistics (NBS), China's official manufacturing Purchasing Managers' Index (PMI) for February'21 stood at 50.6, down from 51.3 reported in January 2021.

The fall came in the wake of the spring break and the COVID-19 outbreak earlier this year in China.

Even the Chinese central banks vowed to cool the credit expansion in order to contain their overall debt risk which surged in 2020 due to the large stimulus packages.



 Supply was further threatened with China moving towards a greener environment. Stricter
norms in order to limit the severe pollution issue fuelled
worries over production which further hampered the TC margin.

**O**utlook

While the recent sell off in Nickel prices triggered a huge fall in the base metals complex; the vaccine euphoria and optimism over the U.S. stimulus has painted a

favourable picture for the industrial metals in the near term.

Also, the globe trying to end the its dependency on fossils have shifted the focus on industrial metals, the primary element for decarbonisation. Rising bets on increasing demand seems to have outpaced the global worries and elevated Copper prices.

We expect MCX Copper prices to trade higher towards Rs.700 per kg by April 2021. (CMP: Rs.677)

Yash Sawant, Analyst, Angel Broking

METALWORLD 30 Mar 2021

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# Our Products

- Hexachioroethane
- Degaser 200 / 190 / N2
- Nucleant 2
- Lomag (Magnesium Remover)
- Sodium / Calcium Remover
- Foundry Fluxes
- Granulated Fluxes
- Fused + Granulated Fluxes (Scot-Mag)
- Coatings

- AlSr / AlTi Alloys
- AlTi5B1 Coils / Ingots
- AI -Mn, Al-Cu, Al-Cr Alloys
- Al-Boron 3-10%
- Mn / Fe / Cu / Cr / Ti Adal Tablets
- Magnesium Ingots
- Silicon Metal
- Ceramic Foam Filters
- Refractory Products

- Silicon Carbide Crucibles
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- Mobile Degassing Unit
- Hydrogen Testing Machine
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5th Floor | Span Center | South Avenue | Santacruz West | Mumbai 400054 | India. Ph +91 22 26056666 Fax +91 22 26056060 Mob +91 9820138620 Email scottish@vsnl.com

SANKET PRAKASHAN - 1, Alpha, M.G. Road, Vile Parle (East), Mumbai - 400 057.