MCMA
METAL CONTAINER MANUFACTURERS' ASSOCIATION

mcma NEWS

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President's Message

Dear Friends,

This being the last issue of 2023, first of all let me convey my sincere good wishes to all the Members of Metal Packaging Industry & a very Happy and Prosperous New Year 2024. I am wishing you Happy New Year with the hope that you will have many blessings in the year to come.

In the year 2023, industry had to face many challenges like implementation of mandatory BIS on various inputs required by industry like Copper-wire, Aluminium Foil, Tinplate etc., and Ministry of Commerce and Industry has also issued Quality Control Order regarding mandatory BIS standards for Open Top Sanitary Cans and 15 Kilo containers. In addition to this, the industry is also contesting an Anti-dumping duty proceedings filed by a local manufacturer of Easy Open Ends, for import of such ends from China. Industry is struggling to maintain supply chain of inputs due to the above Quality Control Orders.

The only good news has been that M/s. Nippon Steel of Japan also got the BIS certification and they are now ready to supply Tinplate / Tin Free Steel to Indian Market. However, BIS Authorities have put on hold the renewal application of BIS License of M/s. Shougang Casey, Jingtang United Iron & Steel Co. Ltd., China. Weakening of Rupee against US Dollar is also another area of concern.

Inspite of all the above, we expect our industry to further grow and continue to serve various user Industries in the food and non-food sectors. Once again, I wish you all a Prosperous New Year 2024. Your hard work and dedication will be retrieving force behind success of Metal Packaging Industry. New Year wishes for achieving new heights.

With Warm Regards,

Sanjay Bhatia

Editorial

Dear Friends,

Welcome to the last edition of MCMA News of 2023 !!

A major news on Dec 12, 2023 was that the Supreme Court in a 5-0 unanimous ruling upheld the Centre's abrogation of Article 370 of the Constitution, by which the entire Constitution of India was made applicable to J&K, and all provisions of Article 370 were declared inoperative.

The Global Metal Packaging Market Size accounted for USD 119.3 Billion in 2022 and is anticipated to reach USD 170.5 Billion by 2032, with a CAGR of 3.8% from 2023 to 2032.

"With 7.7% real GDP growth in the first half of 2023-24, the overall growth for full fiscal would be around 7%; though there are chances that it may cross the 7% mark," said Saumya Kanti Ghosh, chief economist at State Bank of India. He had earlier forecast growth at 6.7%.

The Aerosol Cans Market size is expected to grow from 18.54 billion units in 2023 to 21.63 billion units by 2028, growing at a CAGR of 3.13%. Asia Pacific is the fastest-growing market for the Aerosol Cans market. The robust growth of the aerosol cans market in the APAC region can be attributed to multiple factors, including the rising disposable income levels in developing economies like China and India. Key drivers encompass industrialization, the expansion of the convenience food industry, increased

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FSSAI ENDORSES QR CODE FOR FOOD LABELS

The Food Safety and Standards Authority of India (FSSAI) has highlighted the adoption of QR codes by food business operators. The motto is to aid the visually impaired and ensure easy readability of nutritional information on the food package.

The FSSAI has proposed that food business operations incorporate provisions such as QR codes in food labels to facilitate easy access to nutritional information for the visually impaired. The agency is responsible for regulating food labelling standards. This means consumers can make more informed choices if they have dietary restrictions or allergies, and the traceability of the product is ensured.

FSSAI said, "QR codes should encompass comprehensive details about the product including but not limited to ingredients, nutritional information, allergens, manufacturing date, best-before, use-by-dates, allergen warning and content information for customer enquiry".

The emphasis of 'The Rights of Persons with Disabilities Act, 2016' lies in ensuring that individuals with disabilities have access to and are supported in maintaining good health. With this move, FSSAI extends help for people with visual impairments.

The advisory highlights that the inclusion of a QR code does not replace or revoke the requirement to provide mandatory information on the product label as prescribed by the regulations.

Interestingly enough, at the LMAI conference in Jaipur held on 20-22 July, Mr Sourabh Agarwal of Avery Dennison emphasised the utilisation of QR codes to address the concerns of sustainability. Also, QR codes in food label packaging benefit both consumers and manufacturers.

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manufacturing activities, elevated disposable incomes, heightened consumption levels, and a surge in retail sales. Furthermore, heightened spending on packaged foods and beauty care products has contributed to the escalating demand for aerosol cans within the region.

Another interesting area of use of metal containers is packaging of tea & coffee. On an average, each person is expected to consume 0.13L units of Ready-to-Drink (RTD) Coffee & Tea market in 2023. India's growing middle class and increasing urbanization are driving the demand for RTD coffee and tea in the country.

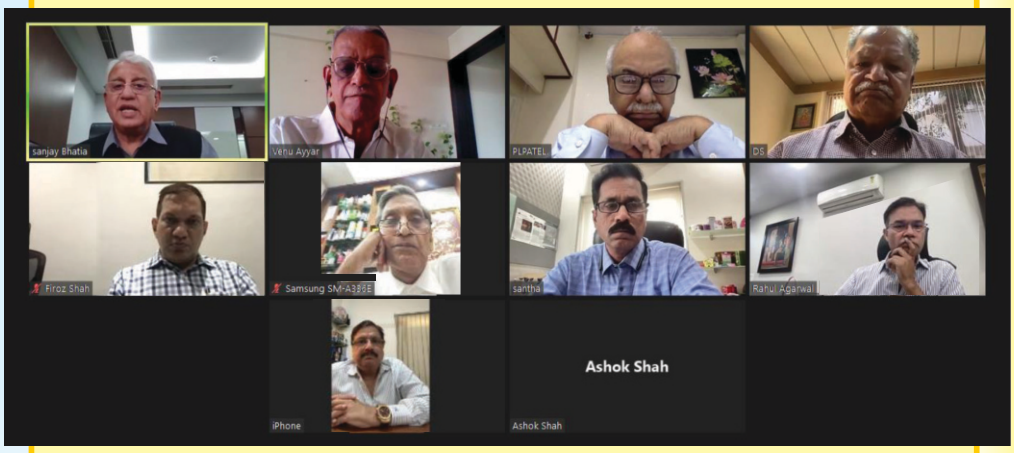
India exports coffee to more than 50 countries around the world. Italy, Germany, Belgium, and the Russian Federation are the largest importers of coffee from India, with an average total share of about 45%.

For a traditionally tea-loving country, the overall coffee market size in India was close to USD 1.6 billion in 2020. As per industry estimates, by 2027, the market size is projected to increase to USD 4.05 billion. This number clearly indicates a strong coffee industry that's brewing in the country.

There are many more such products like coffee that is preferred by the younger generation, who demand sustainable packaging solutions. Younger generation supports RTD, as they are always in a hurry and prefer to use recyclable and eco-friendly packaging to save the environment. This is an opportunity for all of us to get into producing more innovative metal packaging materials. Look forward to new ideas in the coming years.

I take this opportunity to wish all of you and your loved ones a very **HAPPY NEW YEAR 2024**!!

MCMA MANAGING COMMITTEE MEETING



Managing Committee Meeting was held on December 19, 2023 on a virtual mode. For this meeting, we had invited Mr Ajay Agarwal of A J Packaging; Mr Firoz Shah of Petrox; Mr Santhana Krishnan of Nikita Containers and Mr Rahul Agarwal of JJ Enterprises as special invitees.

CHANGES TO CORROSION PROTECTION COATINGS IN FOOD PACKAGING

It may be surprising to many people, but corrosion is a considerable issue in the food packaging industry. In addition to contributing to overall aesthetics and consumer appeal, food packaging must protect its contents from internal and external contamination. Properly manufactured and sealed food packaging ensures the freshness and flavor of its contents by preventing moisture, oxygen, and microbes from reaching the product. However, many foods that are stored in bulk metal cargo containers or sold in metal cans are mildly or strongly corrosive to metal substrates. "Food packaging manufacturers need to consider the effects that food contents will have on packaging materials," says Jonathan Mason, Sr. R&D, Dow Coating Materials. "Food packaging corrosion can lead to spoiled products, leached coating ingredients, inferior aesthetics, and packaging failure," he adds.

Specially designed coatings are therefore required to protect metal packaging surfaces from corrosion. In fact, coatings not only prevent corrosion from contact with food and beverages, they act as a barrier between the can and the food to minimize impact on he taste profile. The quality and type of coatings used in food packaging can minimize exposure to environmental factors, helping to reduce spoilage risks and maintain food safety during food processing, transport, and storage." While raw materials including paper and metal form the structure and shape of the packaging that contains and protects contents, barrier coatings in food packaging help ensure that food remains sterile and protected from the elements and from the packaging itself. These thin-film barrier coatings adhere to packaging and prevent interactions between food contents and the packaging," explains Mason.

"The metal can coating plays a critical role in food packaging and must maintain its functional integrity when subjected to numerous physical and chemical stressors," states Hitesh Soni, product manager for Specialty Epoxy Materials at Emerald Performance Materials. For example, the coating must adhere evenly and properly to the substrate and be flexible over a range of temperatures without exhibiting any cracking when applied to curved surfaces. The coating must also exhibit resistance to acids and salts that are used as preservatives and freezing point depression agents. "Failure of a coating to provide a proper barrier between the package and the food will ultimately compromise the protective film and potentially have a negative impact on food quality and safety," he adds.

Coatings used for metal food packaging that directly or indirectly contact food have the added compliance requirement with current food-contact standards, including standards for species that can be extracted and/or migrate into the food chain from coatings or other materials (e.g., adhesives, inks, plastic, paperboard, and corrugated substrates). Specifically, food-contact compliance regulations limit the allowable levels of coating ingredient migration into food contents. "While migration testing, analysis, and monitoring occur at the local level, the implications of these nuanced regulations for coating formulation, manufacturing, and performance are widespread," Mason observes.

Indeed, meeting these compliance requirements can be challenging, because they vary from country to country. Standards set by the U.S. Food and Drug Administration (FDA) may differ from the regulations set by U.K., European, and Chinese government agencies, with each authority permitting the use of slightly different coatings chemistries or setting different migration limits. "Given that food trade occurs on a global scale, food brands must adhere to food-contact compliance regulations across several countries to sustain global sales growth via exports of their products. As a result, food packaging coatings formulators and food packaging manufacturers must continuously work to remain aware of the changing regulatory landscape and meet increasingly restrictive regulations for food contact compliance without sacrificing performance," notes Mason.

For corrosion protection of metal cans used as food and beverage packaging, coatings based on epoxy phenolics and epoxy esters are the most common. Both of these resin technologies are used in 1K, 75% solvent borne systems (methyl ethyl ketone, alcohol, methyl cellusolve, and butyl carbitol) at room temperature in order to apply a thin, uniform film to the substrate, according to Soni.

High-molecular-weight, bisphenol A (BPA) - based epoxies are the most common due to their economical performance. However, the status of BPA as a potential endocrine disruptor is driving research efforts for the identification of alternative epoxy systems. In addition to these concerns about the potential migration of endocrine disruptors, there is also a focus on the reduction of the volatile organic compound (VOC) content of corrosion protection coatings used on the interiors of food and beverage cans, according to Soni. In line with global coatings trends across markets, coatings used in food packaging are continually shifting to waterborne formulations to address this issue. "To make this shift while maintaining performance, coatings formulators are looking for alternatives to the traditional, reliable coatings chemistries," says Soni.

A number of new developments address these challenges. In interior can applications, for instance, Soni points to lower - viscosity epoxies that require approximately 25% less VOCs than high-molecular-weight materials. "New families of epoxy resins are also being developed that may balance and that may address both the need for lower - VOC formulations and concerns about the migration of BPA, such as such as those based on isosorbide diglycidyl ether (ISDGE), which has the added benefit of manufactured from bio renewable raw materials," Soni adds.

Source: American Coatings Association

IMPORTANT MEETINGS

On October 3, 2023, a meeting was held with Mr. Pramod Kumar Tiwari - IAS, Director General of the Bureau of Indian Standards (BIS) under the Ministry of Consumer Affairs, Food and Public Distribution of the Government of India. This meeting took place at his office in Manak Bhawan, New Delhi.

Shri Sanjay Bhatia, former President of PHDCCI, Shri Rajiv Ranjan, a member of PHDCCI, Dr Ranjeet Mehta, Executive Director of PHDCCI, and Shri Suresh Chandra Joshi, the Joint Secretary of PHDCCI attended. The primary goal of this meeting was to address the crucial issues related to the packaging and toy industry. Mr. Pramod Kumar Tiwari shared valuable suggestions to tackle these matters and proposed involving the Ministry of Steel as well.

A meeting was held with Mr. Sanjiv - IRS, Joint Secretary (DPIIT) - Ministry of Commerce and Industry Government of India, at his office in Vanijya Bhawan, New Delhi, on December 14, 2023. Along with Shri Sanjay Bhatia, former President of PHDCCI; Dr. Ranjeet Mehta, Executive Director of PHDCCI, and Shri Suresh Chandra Joshi, Joint Secretary & Head Protocol of PHDCCI were present. The main focus of the meeting was to address the important issues concerning the packaging Industry. Mr. Sanjiv assured full support on the matter.

Dr Rajneesh – IAS, Additional Secretary and Divisional Commissioner, Ministry of Micro Small and Medium Enterprise (MSME), Government of India, held a meeting in his office at Nirman Bhawan, New Delhi, on December 14, 2023 with Shri Sanjay Bhatia, former President of PHDCCI; Dr Ranjeet Mehta, Executive Director of PHDCCI and Shri Suresh Chandra Joshi, Joint Secretary & Head Protocol of PHDCCI. The objective was to discuss some important issues concerning the industry of tin manufacturing raised by Shri Sanjay Bhatia. Dr Rajneesh provided some suggestions and assured to take up the matter with the concerned ministry and assured support to resolve the issue.