

THE CORRUGATED PACKAGING MACHINERY INDIA

BY ICPMA

(INDIAN PAPER CORRUGATED & PACKAGING MACHINERY MFGRS. ASSOCIATION)

Corru Pack Print India Arrives in Mumbai for Its 2nd Edition!



2ND EDITION

**CORRU PACK
PRINT INDIA**

**19-22 MARCH 2026
BEC, NESCO, MUMBAI**



PAP-TECH ENGINEERS & ASSOCIATES

Manufacturer of Paper, Packaging & Pulp Lab Testing Equipment.

Website-
www.paptechengineers.com
www.pap-techengineers.co.in

Call Now-

+91 9351649342
+91 9610476662
+91 9928334575

Email-

pkpaptech@gmail.com
ravi201496@gmail.com
shivani.paptech@gmail.com

Office Address-

C-506, Gurushikhar Apartment,
Post- Bilwa, Jaipur-302022

Follow us:



■ The Role of Artificial Intelligence in Revolutionizing the Packaging Industry

Artificial intelligence (AI) is revolutionizing the packaging industry, bringing transformative changes across the entire value chain—from design and production to logistics and sustainability. As competition intensifies and consumer expectations evolve, packaging companies are leveraging AI to enhance efficiency, reduce costs, improve quality, and meet growing environmental demands. In the realm of packaging design, AI is enabling data-driven creativity. Rather than relying solely on traditional design processes, companies are now using AI to analyze large datasets, including market trends, customer preferences, and historical performance metrics. This allows for the creation of packaging that is not only visually appealing but also strategically optimized to boost consumer engagement and sales. Moreover, personalization has taken a leap forward with AI, allowing brands to tailor packaging to individual consumer segments. This level of customization, once considered impractical at scale, is now feasible through machine learning models that can dynamically adjust designs based on real-time data.

AI is also significantly enhancing quality control in packaging production. Through computer vision and deep learning, machines can now detect defects—such as printing errors, structural flaws, or improper sealing—with far greater speed and accuracy than human inspectors. These systems operate around the clock, ensuring consistent quality while reducing the likelihood of faulty products reaching consumers. In addition, anomaly detection algorithms enable machines to identify issues even if they have not been explicitly programmed to recognize them. This predictive capability improves production reliability and helps manufacturers quickly address problems before they escalate. In packaging machinery and automation, AI-powered robotics and control systems are making production lines smarter and more adaptable. Robots equipped with AI can manage complex tasks like sorting, folding, and filling with precision, while adaptive systems adjust operations in real time based on variables such as material properties or environmental conditions. Predictive maintenance, another critical application, uses AI to forecast machine breakdowns by analyzing sensor data, allowing for timely interventions that minimize downtime and repair costs.

In the broader context of the supply chain, AI is optimizing how packaging materials and finished products are managed and delivered. Accurate demand forecasting—powered by AI algorithms—enables manufacturers to better align production with market needs, reducing both overstock and waste. In warehouses, AI systems streamline storage and retrieval processes, while route optimization technologies enhance the speed and efficiency of logistics. These capabilities are particularly important in an era where e-commerce is driving rapid changes in how products are packaged and shipped. Sustainability is another area where AI is making a meaningful impact. With increasing pressure to adopt eco-friendly practices, packaging companies are turning to AI to identify materials that balance performance with environmental responsibility. AI simulations and analysis tools help design packaging that uses less material, is easier to recycle, or is made from biodegradable alternatives.

AI supports corporate efforts to meet sustainability goals and comply with environmental regulations. Smart packaging is also becoming a reality, thanks to the integration of AI with Internet of Things (IoT) technologies. Embedded sensors can monitor conditions such as temperature, humidity, or tampering during transit, transmitting data to AI systems that ensure product integrity. This is especially valuable for sensitive goods like food, pharmaceuticals, and electronics. Additionally, AI can enable packaging to serve as a communication channel between brands and consumers. Through QR codes, augmented reality, or app integrations, consumers can interact with packaging to receive product information, tutorials, or even personalized recommendations. Such innovations not only enhance the customer experience but also offer valuable insights into consumer behavior. Despite its numerous advantages, the adoption of AI in packaging is not without challenges. High initial costs, data quality requirements, and integration with legacy systems can hinder implementation. Moreover, as AI automates more tasks, companies must invest in upskilling their workforce to manage and maintain these advanced technologies. Nonetheless, the benefits far outweigh the barriers, and the trajectory of AI in packaging is clearly upward. ■

CONTENTS

EDITORIAL - The Role of Artificial Intelligence in Revolutionizing the Packaging Industry 03

TABLE OF CONTENTS..... 04

ICPMA

JOINING MEMBERSHIP OF ICPMA..... 44

Join the movement, Join ICPMA (Indian Paper Corrugated & Packaging Machinery Manufacturers Association)..... 44-45

INDUSTRY NEWS

The Role of Artificial Intelligence in Revolutionizing the Packaging Industry 06

Smithers forecasts 5% surge in demand for retailready packaging 06

ITC to acquire Century Pulp & Paper from Aditya Birla 8-9

AF&PA releases February 2025 Packaging Papers monthly report..... 09

Fast assembly and efficient production process for reliable blanking 12

Billerud launches ConFlex® HeatSeal 12

Corrugated board packaging market is expected to generate a revenue of USD 420 billion by 2032..... 14-16

Lecta presents its innovative barrier base paper, Linerset FP 18

Packaging to power expansion in flexo print to 2029 19

Oji India Packaging opens large corrugated packaging plant at Sri City 19

BOBST MASTERFLEX HD+: the next chapter in flexo post-print excellence 20-21

Xaar offers complete solution for high quality corrugated printing 21

Flexo Printing Reel To Reel 22

The Role of Humidifiers in the Packaging Industry: Protecting Quality, Enhancing Efficiency 24

Runtech Systems launches a new EP Turbo Blower model, EP650 AMB 26

Power Adhesives launches biodegradable bulk adhesive 26

ESKA® Brown is a 100% recyclable kraft coloured board..... 27

Ink Pumps and Pressure Pumps in Corrugated Packaging: Powering Precision and Productivity 28-29

Arden Software to unveil first AI powered features at Hybrid Fusion Packaging Summit..... 29

Power Adhesives launches new bulk adhesive range 30

DS Smith launches TailorTemp® 31

Less set-up time with the DZL|plate..... 31

BOBST boosts efficiency with latest developments on EXPERTCUT 106 PER 32-33

Robotech reduces production costs with hot melt stitching..... 33

PHSH high-performance shredder for sheets and cores 34

BLUEBACKER ECO GRIP SC is latest generation of drum lagging for corrugated production 35

New CleanLine Extract360 fabric cleaning system from Voith 42

Corrugation Machine with Big Deckle (4 Metre): The Next Generation of Packaging Power 48

Karnataka's Rapidly Growing Corrugated Packaging Industry 49

What's New in Corrugating Roll Design? 50-51

Corru Pack Print India, 2024 Post Show Report 52-53

REPORT

Middle East Corrugated Packaging Market Forecasted Robust Growth 46-47

EXHIBITIONS

Corru Pack Print India, 19-22 March 2026, Mumbai..... 25

53rd FCBM Conference 2025 in Agra 43

PAMEX 27-30 Jan, 2026 Mumbai 54

BHARAT PRINT EXPO, 24-26 April 2025, Bengaluru..... 54

INDIA CORR EXPO, 11-13 September 2025 Noida 48

CORR VISION EXPO, 16-18 MAY 2025, PUNE..... 45

MOTIVATIONAL

The Power of a Positive Mindset: How Thoughts Shape Reality 48-49

SPIRITUALITY

The Power of Surrender: Letting Go to Move Forward 38-39

HEALTHCARE

Fitness Beyond the Scale: Redefining What Health Looks Like..... 36-37

THE CORRUGATED PACKAGING MACHINERY INDIA

EDITORIAL TEAM



Mr. Hitesh Nagpal



Mrs. Priyanka Mathur



Mr. Niket D. Shah

EDITORIAL OFFICE

ICPMA

INDIAN PAPER CORRUGATED & PACKAGING MACHINERY MFGRS. ASSOCIATION

B-6, Phase-II, Mayapuri, Industrial Area, New Delhi-110064

OWNER: Indian Paper Corrugated & Packaging Machinery Mfgs. Association

PUBLISHER: ICPMA

DESIGNER: Karmendra Singh Negi

Printed by: Royal Offset, Delhi.

Source of articles & pictures: The Packaging Portal.com, www.packman.co.in, paperekart.com, www.thehindubusinessline.com, https://zgp.ua/. The information in the content and advertisement published in the magazine are just for the reference of readers. The Corrugated Packaging Machinery holds no responsibility for any decision taken by readers on the basis of the information provided herein.

THE ROLLS EXPERT

Any Roll. Any Industry



MRL GROUP

MRL GROUP, The Rolls Expert, is the quality leader in rollers manufacturing Since 1994. Our sophisticated manufacturing facility is equipped with state of art equipments , high-tech R&D centre, provides high quality precision rolls and maintenance services for the packaging and other industries.

New Roller Manufacturing & Servicing: Rubber Rolls, Hard Chrome Rolls, PU Rolls, Anilox Rolls, Embossing and Engraving Rolls, Hardened Shafts, Grooved Rolls etc.

Capacity: 2000mm Diameter x 10500mm Length

Engineering Services:

- Fabrication of New Rolls
- Recoating of old Rolls
- Regrinding and Cambering
- Grooving and Drillings
- Repairing and Replacement of Worn journals
- Dynamic Balancing

MRL Branded rollers benefits much more to your industry compared to any other market alternative.

Rollers For Packaging Industry:

- Printing Rubber Roller
- Anilox Roller
- Grooved Feeder Roller
- Gum Roller (Engraving, Knurling)
- Docket Roller
- Belt MS and Chrome Rollers
- Belt Grooved Rubber Roller
- Drum for Stencil printing
- Pressure Roller with precision cambering
- HC plating of Flute Rollers

DOWNLOAD MRL GROUP APP FOR FREE



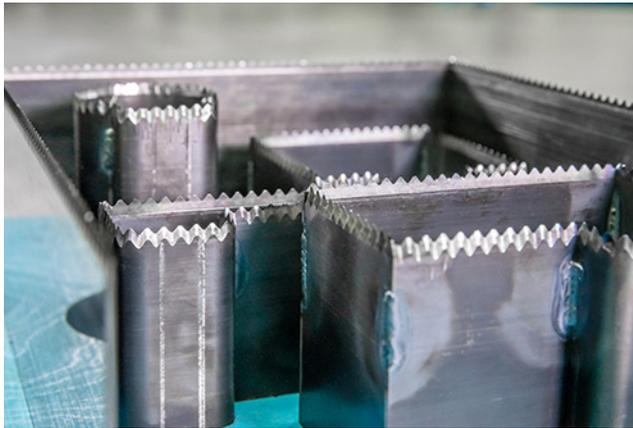
ANOTHER PLANT COMING SOON IN VADODARA GUJARAT

Major Asha Ram Tyagi Road, Modinagar 201204, (U.P), India

M : 09758118500, 09027129191, E : printingrolls@modinagarrolls.com, W : www.modinagarrolls.com

■ Cutting-dies for honeycomb board

Marbach not only offers tools for die-cutting paperboard and corrugated board but also special solutions for die-cutting particularly



thick materials such as honeycomb board. This material is becoming increasingly popular and is being used more and more in transport protection solutions.

“Die-cutting honeycomb board requires a particularly stable and robust tool,” explains Michael Kiesel, Head of Sales, Marbach. “Due to its honeycomb structure and material thickness, die-cutting honeycomb board is very demanding. A suitable tool must therefore have special knives, a suitable anvil and a special ejection technique.”

Furthermore, it is essential that the tool is individually adapted to the specific customer requirements and the material to be processed. Kiesel adds, “Only if all these factors are taken into account, the tool can perfectly penetrate the thick material and ensure optimal die-cutting results.” ■

■ Smithers forecasts 5% surge in demand for retail-ready packaging:

The highest growth for 2025-2029 will be in Africa, India, China, and other less mature markets in Asia. Consumption here will increase at over 8% year-on-year to the end of the decade.

In 2024, global use of corrugated and plastic shelf/retail-ready packaging (RRP) was 33.8 million metric tonnes, valued at \$54.6 bn, according to Smithers, the global market leader in packaging market research.

Its latest report, *The Future of Retail-Ready Packaging to 2029* forecasts demand will reach 42.73 million tonnes in 2029, with value rising to \$69.26 bn at constant 2023 prices. This represents a CAGR of 5%.

Overall, population growth and greater demand for flexible primary packaging is raising the need for RRP to effectively display and promote a host of products. Food items account for over three quarters of the total volume demand, with beverages contributing another 15% to the overall figure. Over the medium term to 2029, these market shares are predicted to remain mostly unchanged,

with a slight increase anticipated in the market share of non-food goods.

Over 75% of RRP used in 2024 was made from corrugated board. This share is forecast to increase to 80% by 2029. Die-cut containers are expected to experience above-average growth, whereas shrink-wrapped trays and plastic RRP will see growth significantly below the market average, resulting in a decline in their market share.

North America, Western Europe and the Asia-Pacific region accounted for almost three quarters of the volume demand for RRP in 2024. The highest growth for 2025-2029 will be in Africa, India, China, and other less mature markets in Asia. Consumption here will increase at over 8% year-on-year to the end of the decade. ■



STARCH KITCHEN - THE HEART OF CORRUGATION INDUSTRIES

The Advance Starch
Glue Preparing
Technology



INTEGRATED AUTOMATIC CORRUGATION GUM CIRCULATING SYSTEM

Advantages

- Improved Product Quality
- Reduce Consumption of Product
- Low lumps formation
- Stable Viscosity, Consistence Product
- Low Labor cost
- Low wastage in handling & transferring
- Low Maintenance
- Easy operation

Features

- Compact Design
- Total Controlling Panel with timer
- Easy Operation
- Sturdy SS square pipe frame mounted unit
- Level controller



GUMCORRU MACHINES

- 📍 2214, GIDC, V.U. Nagar, Anand-388121, Gujarat, India.
- ☎ +91 97244 64234, +91 98240 18853

- ✉ gumcorru@gmail.com | info@gumcorrux.com
- 🌐 www.gumcorrux.com

ITC to acquire Century Pulp & Paper from Aditya Birla



CPP is a well-established player in the Indian Paper industry with an installed capacity of 4.8 Lakh MT per annum.

ITC Limited has signed a Business Transfer Agreement to acquire the Pulp and Paper Undertaking of Aditya Birla Real Estate Limited ('ABREL'). Established in 1984 at Lalkuan (Nainital, Uttarakhand), CPP is a well-established player in the Indian Paper industry with an installed capacity of 4.8 Lakh MT per annum.

Terms of the deal have not been disclosed.

India is the fifth-largest producer of paper and paperboards in the world, with an estimated production of around 23 million MT per annum and an annual industry turnover of over Rs. 80,000 cr. India's per capita consumption at appx. 16 Kg. per annum is low as compared to the global average of 57 Kg., reflecting immense headroom for growth. India is one of the fastest growing markets in the world with demand for paper and paperboards growing at 6%-7% p.a., translating to incremental demand of over 1 million MT annually. End-user industries such as FMCG, Food Service / Quick Service Restaurants, Pharmaceuticals, e-Commerce, Education & Stationery and increasing demand for sustainable packaging solutions are expected to be the key drivers of growth going forward.

ITC's Paperboards & Specialty Papers Business is a reputable player in the industry offering a wide range of

products manufactured at its four world-class facilities with an annual throughput of over 1 million MT. The Business is an exemplar in sustainability with over 50% of its energy requirements met from renewable sources. The integrated nature of the business model is a key source of competitive advantage for the Business besides creating a significant economic multiplier. The key elements of the business model comprise access to sustainable and cost-competitive fibre chain, in-house pulp manufacturing capability, world-class product quality, state-of-the-art manufacturing facilities, strong sales and distribution network, increasing digitalisation across all nodes of operations along with robust forward linkages with the Company's Education & Stationery Products and Packaging & Printing Business.

CPP is a one-of-a-kind asset with a strong strategic fit with ITC's Paperboards & Specialty Papers Business. The acquisition will immediately add significant scale and economies to existing operations with potential for further capacity expansion, provide locational advantage for efficient customer servicing and proximity to key raw material sources, mitigate operational risks through multi-site operations and enhance resilience across industry cycles through portfolio diversification. The Business expects to drive structural improvement



Complete and Well Equipped World Class Machines



Speed 10500 per Hour
Count 6900
Mount Kailash Print Pack

Design Speed
12000
Boards Per Hour



MOUNT KAILASH PRINTPACK MACHINES

Manufacturers and Suppliers: Machines for Corrugated Box Making Industry

"MATRUKRUPA"
Plot No. 1 & 2, B Block, KVT Garden, Madhavaram, CHENNAI - 600 060 INDIA
Ph: 044 25530688 Mobile: +91 94455 66288 Email: sales@nagjan.com www.nagjan.com

SALES

SERVICE

SPARES



ONLINE PORTAL for SPARE PARTS: shop.nagjan.com

We Deliver not only Machines... We Deliver them with Our Expertise

in profitability of CPP through several value unlock interventions such as capacity debottlenecking, product quality upgrade, efficiency improvement leveraging TPM/ Digital initiatives, supply chain optimisation, overhead rationalisation, and procurement efficiencies.

Commenting on the acquisition, Mr. B Sumant, Executive Director, ITC Limited said, "The acquisition will strengthen the market standing of ITC's Paperboards and Specialty Papers Business and engender new opportunities in the domestic and international markets. The acquisition

aligns with the Company's strategy of driving the next horizon of growth in the Paperboards and Specialty Papers Business by expanding capacity at a new location considering that the existing facilities are already saturated. The strong linkages to afforestation and livelihood creation pursued by both the entities contribute meaningfully to national priorities. We are delighted to welcome CPP into the ITC fold and I am confident that together we will continue to set new benchmarks in customer satisfaction, operational excellence and sustainability. ■

AF&PA releases February 2025 Packaging Papers monthly report

The American Forest & Paper Association (AF&PA) has released the February 2025 Packaging Papers Monthly report.

Total packaging papers & specialty packaging shipments in February decreased 8% compared to February 2024. They were down 2% when compared to the same 2 months of 2024.

- The operating rate for unbleached packaging papers was 84.8%, down 3.2 points from February 2024 and up 0.6 points year-to-date.
- Shipments of the biggest subgrade in bleached packaging papers – food wrapping – were 22,500 short tons for the month of February, down 5.3% from the same month last year. ■

The Ultimate Platform for Corrugated Packaging & Printing Solutions!

Expand Your Business | Connect with Decision Makers |
Explore Cutting-Edge Innovations

2ND EDITION **CORRU PACK PRINT INDIA**

**19-20-21-22
MARCH 2026**

Bombay Exhibition Centre
NESCO, Goregaon
Mumbai, Maharashtra

Major Exhibiting Profiles



Why Exhibit?



Showcase your latest
innovations in corrugated
packaging & printing



Engage with
top industry leaders,
manufacturers & suppliers



Explore business
opportunities with global
buyers & decision-makers



Stay Ahead with
the latest technology
rends & solutions

JOINTLY ORGANISED BY



ICPMA
Indian Paper Corrugated & Packaging
Machinery Manufacturers Association

Futurex®
LET'S BUILD THE FUTURE TOGETHER
Futurex Trade Fair & Events Pvt. Ltd.

CONCURRENT EVENTS

**Bharat
BoilerTex**
Boiler Industry Technology Exhibition

**Bharat
PaperTex**
Paper, Kraft Paper, Corrugated Boxes & Related Cellulose
Product Production Technology Exhibition

FCIM
THE FEDERATION OF CORRUGATED
BOX MANUFACTURERS OF INDIA

OPA
OFFSET PRINTERS
ASSOCIATIONS

SUPPORTING ASSOCIATIONS



Indian Institute of Packaging
An autonomous body under the Ministry of Commerce & Industry, Govt of India



U. P. PAPER MERCHANTS ASSOCIATION

OFFICIAL MEDIA PARTNER

**THE CORRUGATED
PACKAGING MACHINERY
INDIA**

MEDIA PARTNERS

PaKtek
MAGAZINE ON FOOD, BEVERAGE & PHARMA
PACKAGING INDUSTRY

FOCUS
on Printing, Packaging & Signage

CPMirror

CORRUGMAN
A B- Monthly Magazine for White & Kraft Packaging Industries

CONTACT FOR MORE INFO: +91 82871 00769 | +91 74280 26409

www.corrupackprintindia.org



MANUFACTURING & REFURBISHMENT OF CORRUGATED ROLLS

Delivering Excellence since 1992

CORRUGATED ROLLS THAT LAST LOOOOOOONG !



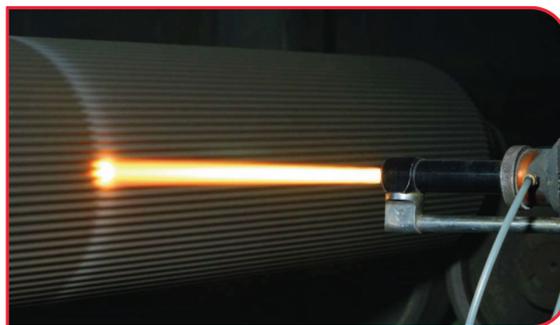
**TUNGSTEN CARBIDE COATED
FLUTE ROLLS**



**ADVANCED HARD CHROME COATED
GLUE & DOCTOR ROLL**



**WORLD CLASS FLUTE
GRINDING & COATING FACILITIES**



**ADVANCED INDUCTION
HARDENING FACILITY**



www.atstechno.in

☎ 99250 38931 | 992500 8680

✉ corrug@atstechno.in

📍 Plot No. 419-420, Road No.10,
Phase-II, GIDC Kathwada,
Ahmedabad – 382430 Gujarat, India

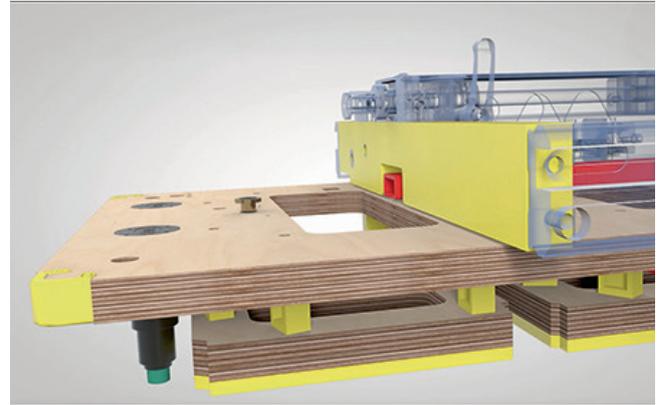
Fast assembly and efficient production process for reliable blanking

CITO's latest product development is the CITO FLAT TOP PRESSER 5.

It has been especially designed for the upper blanking tool and is perfectly suitable for open and closed frame die-cutters. It is available as BOARD version for tools with a presser plate and as a SPOT presser.

The blanking component holds the sheet securely in place during the blanking process and ensures smooth and trouble-free production, even at the highest machine speeds. For more efficiency and performance in conversion and production.

It also excels in every respect when it comes to assembly; the especially flattened edges and the completely pre-mounted screws allow for easy and correct fitting. In



addition, the toothed anti-rotation protection and threadlocker coating make it easy and safe to screw on the presser plate. ■

Billerud launches ConFlex® HeatSeal

Billerud has confirmed the launch of ConFlex® HeatSeal, a recyclable, heat-sealable paper designed to replace plastic in packaging applications with high demands for sealing performance and recyclability.



“At Billerud, we embed sustainability in everything we do and when developing new high performing packaging materials, we know we have a joint interest with converters and brand owners to replace plastics with fossil-free materials. While ConFlex HeatSeal has already been successfully introduced in the bedding segment by a major Swedish furniture brand, its potential extends far beyond into further applications in industrial and hygiene packaging,” comments Robert Torstensson, VP Business Area Paper, Billerud. “With ConFlex HeatSeal, we offer a commercially viable, heat-sealable paper that supports businesses to transition away from plastic. It delivers strong sealing performance and recyclability within existing paper recovery systems and works within slightly modified converting processes where Billerud provides transition support. It’s great to see how we live our purpose to make high performance packaging materials for a low carbon society through innovation,”

With a lower carbon footprint ConFlex offers a high-performance alternative for companies looking to replace plastic packaging while using their current machinery and maintaining efficiency. ■



**WE DEAL IN HIGH SPEED CORRUGATED
BOX MAKING AUTO PRODUCTION
LINE (2/3/5/7 PLY)**

**BK INDUSTRIES
CORRUGATING ROLLS**



**9810338871, 9971318452
arjunindustries04@gmail.com
www.arjunindustries.in**

**ONLY INDIAN COMPANY TO
HAVE 4 IN-HOUSE CNC
CORRUGRINDERS AND
TUNGSTEN COATING SETUP
NEW & REFLUTED
CORRUATED ROLLS**

**HIGH PERFORMANCE
PERFECT QUALITY
ECONOMICAL PRICE**

*TUNGSTEN CARBIDE
COATED FLUTE ROLLS*



*ADVANCED FLUTE GRINDING
FACILITIES*



*ADVANCED HARD CHROME
COATED GLUE & DOCTOR ROLLS*



*WORLD CLASS
COATING FACILITIES*



**9810338871, 9811663722 bkindustries14@gmail.com
www.bkinds.in**

■ Corrugated board packaging market is expected to generate a revenue of USD 420 billion by 2032



The future of the corrugated board packaging market looks promising, with continued demand from e-commerce, food, and pharmaceutical industries.

Corrugated board packaging market is expected to generate a revenue of USD 420 billion by 2032

Market Research Intellect announces the release of its comprehensive and authoritative report on the Corrugated Board Packaging Market. The market is witnessing substantial growth, driven by the increasing adoption of sustainable packaging solutions and the booming e-commerce sector. However, fluctuations in raw material prices and stringent environmental regulations pose challenges to market expansion.

The global corrugated board packaging market is projected to grow from approximately USD 250 billion in 2024 to nearly USD 420 billion by 2032, reflecting a compound annual growth rate (CAGR) of 6.0% during the forecast period.

The corrugated board packaging market is driven by

the rapid expansion of e-commerce, increasing demand for sustainable and recyclable packaging, and rising consumer preference for eco-friendly materials. Growth in industries such as food and beverages, electronics, and pharmaceuticals further fuels demand. Technological advancements in lightweight and durable packaging solutions enhance efficiency and cost-effectiveness. Additionally, stringent environmental regulations and corporate sustainability initiatives push manufacturers toward biodegradable and recyclable packaging alternatives, accelerating market expansion.

Market Growth and Size

The corrugated board packaging market is expanding rapidly, driven by the surge in online shopping, increased industrial applications, and growing awareness of sustainable packaging. The market was

valued at approximately USD 250 billion in 2024 and is projected to reach nearly USD 420 billion by 2032. A steady compound annual growth rate (CAGR) of around 6.0% highlights its increasing adoption. Businesses across sectors prefer corrugated packaging due to its lightweight and cost-effectiveness. This packaging type ensures product safety during transportation while reducing logistics costs. Furthermore, technological advancements, such as digital printing and enhanced structural designs, contribute to the growing appeal of corrugated board packaging solutions. The rise of customized packaging options also bolsters market expansion, catering to the branding needs of various companies.

E-Commerce as a Key Market Driver

The exponential growth of e-commerce platforms is one of the primary factors fueling the demand for corrugated board packaging. As consumers increasingly shift towards online shopping, businesses require sturdy, protective, and lightweight packaging materials to ensure product safety during transit. E-commerce giants like Amazon, Alibaba, and Flipkart heavily rely on corrugated boxes for packaging various products, from electronics to food items. Additionally, the demand for custom-printed and branded corrugated packaging is rising, allowing companies to enhance their brand identity. With global e-commerce sales continuing to surge, particularly in emerging economies, the need for high-quality corrugated packaging solutions will persist. Innovations such as easy-to-open designs and tamper-proof packaging further strengthen the market outlook.

Sustainability and Eco-Friendly Packaging Trends

Sustainability has become a crucial factor shaping the corrugated board packaging market. Consumers and businesses alike are prioritizing environmentally friendly packaging solutions to reduce carbon footprints and comply with regulatory guidelines. Corrugated packaging, made primarily from recycled paper and biodegradable materials, aligns with this trend. Governments across regions are imposing stringent packaging waste regulations, encouraging companies to adopt sustainable practices. Additionally, brands emphasizing corporate social responsibility (CSR)

initiatives prefer recyclable and compostable packaging solutions. Innovations in water-based inks, recyclable coatings, and reduced material wastage contribute to the increasing demand for eco-conscious corrugated board packaging. As industries transition toward circular economy principles, the adoption of sustainable packaging materials will accelerate.

Technological Advancements in Packaging Design

The integration of advanced packaging technologies is revolutionizing the corrugated board packaging industry. Digital printing technologies enable high-quality, customizable packaging solutions that cater to branding needs. Smart packaging innovations, such as RFID tags and QR codes, enhance traceability and consumer engagement. Structural improvements in corrugated box designs, including reinforced edges and lightweight durability, ensure optimal product protection while minimizing material usage. Automation in manufacturing processes has also improved production efficiency and cost-effectiveness. Additionally, the use of water-resistant coatings and anti-microbial treatments in corrugated packaging enhances its application in food and healthcare sectors. These technological advancements are expected to drive market growth by offering enhanced functionality and customization.

Growing Demand from the Food and Beverage Industry

The food and beverage sector is a significant consumer of corrugated board packaging, utilizing it for transporting perishable goods, beverages, and packaged foods. The shift toward sustainable food packaging solutions has encouraged the use of recyclable corrugated materials. Corrugated boxes with moisture-resistant coatings ensure the safety and longevity of food products. The increasing preference for takeaway and home delivery services has further propelled demand for sturdy, food-grade corrugated packaging. Additionally, advancements in packaging designs, such as ventilated fruit and vegetable boxes, improve product shelf life. As consumer preferences shift toward sustainable food packaging, the market for corrugated board solutions is set to witness substantial growth.

Regional Market Dynamics and Growth Potential

The corrugated board packaging market is expanding globally, with significant growth observed in Asia-Pacific, North America, and Europe. Asia-Pacific dominates the market due to rapid industrialization, urbanization, and the booming e-commerce sector in countries like China and India. North America and Europe are witnessing steady growth, driven by strong demand from the retail and food sectors, coupled with stringent environmental regulations promoting sustainable packaging. The Middle East and Africa are also emerging as potential markets due to increasing investments in logistics and trade. Regional dynamics, influenced by trade policies, manufacturing capacities, and technological advancements, shape market opportunities. With increased focus on recycling initiatives and sustainable packaging regulations, regional markets are adapting to evolving industry demands.

Competitive Landscape and Key Players

The corrugated board packaging industry is highly competitive, with major players focusing on innovation, sustainability, and strategic partnerships. Leading companies such as Smurfit Kappa, International Paper, DS Smith, and WestRock dominate the market, continuously investing in new packaging technologies. Mergers and acquisitions are common, allowing companies to expand their geographical presence and production capacities. Additionally, mid-sized and emerging packaging companies are innovating with eco-friendly materials and lightweight packaging solutions to gain market share. The increasing demand for customized and digitally printed corrugated boxes has intensified competition among manufacturers. The industry is expected to see continued investments in automation, material innovation, and sustainability initiatives.

Future Market Outlook and Emerging Trends

The future of the corrugated board packaging market looks promising, with continued demand from e-commerce, food, and pharmaceutical industries. The shift toward lightweight, high-strength packaging materials will drive innovation in design and manufacturing. Sustainable packaging trends will dominate, with an increasing focus on biodegradable

coatings and reusable packaging models. The rise of AI-driven packaging design and smart logistics solutions will further enhance the efficiency of corrugated packaging. As global regulations push for eco-friendly alternatives, manufacturers will invest in circular economy solutions. Emerging trends such as digital printing advancements, supply chain optimization, and new material developments will shape the market landscape over the next decade.

Geographic Dominance

The Asia-Pacific region dominates the corrugated board packaging market, driven by rapid industrialization, urbanization, and the booming e-commerce sector. Countries like China, India, and Japan lead the market due to their expanding retail industries, rising disposable incomes, and increasing demand for sustainable packaging solutions. North America and Europe also hold significant market shares, supported by strong environmental regulations promoting recyclable and biodegradable packaging. The United States remains a key contributor, with major retail and logistics companies relying on corrugated packaging for efficient supply chain management. Europe's focus on sustainability and circular economy initiatives fuels the adoption of eco-friendly corrugated materials. Meanwhile, the Middle East, Africa, and Latin America are emerging markets, with growing investments in infrastructure and logistics. As companies expand their global footprints, regional dynamics will continue shaping market trends, with Asia-Pacific expected to maintain its leadership due to its vast manufacturing and consumption base.

Corrugated Board Packaging Market Key Players Shaping the Future

Leading companies shaping the future of the corrugated board packaging market include Smurfit Kappa, International Paper, DS Smith, WestRock, Mondi Group, Packaging Corporation of America, Georgia-Pacific, Rengo Co. Ltd., Nine Dragons Paper, and Pratt Industries. These key players focus on innovation, sustainability, and strategic expansions to strengthen their market positions. Investments in advanced packaging technologies, eco-friendly materials, and automation drive their competitive edge. Mergers, acquisitions, and collaborations help expand production capacities and geographic reach, ensuring continued market leadership in the evolving packaging industry. ■

**INDIA'S LEADING
MANUFACTURER &
EXPORTER OF
PRINTING INKS**

SEVEN¹¹[®]

Printing Inks

WATERBOND[®]
WATER-BASED PRINTING INKS



Unicon & Unicon Super



Paper Bag



BOBST ST



Tissue Paper



Paper Cup



www.seven11industries.com
+91 81603 77126 / 98241 56025
info@seven11industries.com

Seven-11 Industries Private Limited
India's Leading Manufacturer & Exporter of Printing Inks
Morai Industrial Estate, Vapi, Gujarat - INDIA

Distributor Wanted
+91 93749 92158
+91 93778 60614

Lecta presents its innovative barrier base paper, Linerset FP



Linerset FP is a groundbreaking high-performance barrier base paper designed for flexible packaging solutions. Photo: Lecta

As part of its strategy to provide high-value, innovative, and environmentally responsible products, Lecta introduces Linerset FP, a groundbreaking high-performance barrier base paper designed for flexible packaging solutions.

This product is the ideal solution for converters and printers seeking to incorporate advanced barrier properties into their packaging, or using it as it is, offering a strong, flexible, translucent alternative for use in bags, pouches, and wrapping applications.

At the present time, when commitment to sustainability is a must, Linerset FP stands out as an innovative product that allows the replacement of non-recyclable multilayer packaging with fully recyclable alternatives. Tailored for use in flexographic printing processes,

Linerset FP not only meets but exceeds market demands for more sustainable packaging solutions.

This versatile material is suitable for a wide range of applications, including food packaging, industrial packaging, and more. Available in a variety of grammages (40, 45, 50, 56 and 78 g/m²), Linerset FP offers the flexibility to meet the diverse needs of customers across various industries.

The paper adheres to the highest regulatory standards, ensuring safety and reliability in a variety of packaging applications. It complies with food contact regulations, toy safety standards, and recyclability requirements, among others, reflecting Lecta's commitment to quality and security. ■

Packaging to power expansion in flexo print to 2029

The Global value of flexographic printing in 2024 was \$230.5 bn, and is forecast to increase at a 3.0% compound annual growth rate (CAGR) through to 2029, according to Smithers, the global authority on print and packaging markets.

Data from its newly published market report – The Future of Flexographic Printing Markets to 2029– show this will yield total value of \$267.2 billion in 2029 (at constant 2023 pricing).

Flexo output is growing across most applications – notably packaging. It accounts for the overwhelming volume of corrugated board printed. Growth in this segment is forecast to continue; driven by economic demand, particularly from e-commerce and consumer-facing boxes.

Flexible packaging, labels, and folding cartons will also see solid growth. Changes in print buying will make digital more competitive with flexo on shorter runs. Digital printing is well established in labels as a mainstream technology that is competitive with flexo; however, the widespread adoption and strong ongoing sales of hybrid presses mean that flexo volumes are

holding up and will continue to grow. In contrast, flexo printing of newspapers, bags and sacks, and envelopes will decline as demand in these end-uses falls.

Worldwide, output on flexo presses was 8.6 trillion A4 sheets in 2024. This will increase to 10.0 trillion in 2029.

The three largest regions for flexo printing are Asia, North America and Western Europe. Combined, these account for 81.0% of global volume and 83.1% of the value in 2024. Asia is forecast to experience strong growth at a 5.8% CAGR by volume for 2024-2029, with India the fastest growing national market. North America and Western Europe are mature regions for flexo print, and will grow more moderately – 2.3% CAGR and 1.7% CAGR, respectively – across the same period.

The Smithers report segments the flexo print market by end-use application, geographic region, and key national market; and includes data on installed base and future equipment sales by flexo press format, and consumables (plates and inks). Its market forecasting is contextualised by analysis of the leading commercial and technology developments, trends in packaging consumption, and increased competition from inkjet systems. ■

Oji India Packaging opens large corrugated packaging plant at Sri City

Oji India Packaging Pvt Ltd, a subsidiary of Japan's Oji Group, has recently opened its fifth manufacturing plant in Sri City, India.

The new facility, the largest of its kind in South Asia, will specialise in producing corrugated boxes and packaging accessories, offering sustainable and high-quality packaging solutions for South India.

The factory was launched in the presence of Muneo Takahashi, Consul-General of Japan in Chennai; Hiroyuki Isono, President & Group CEO of Oji Holdings Corporation; Ravindra Sannareddy, Founder Managing Director of Sri City; and Yoshiyuki Kurahashi, CEO of Oji India Packaging, among others.

Spanning 43,000 sqm, the automated plant has an annual production capacity of 100 million sqm of corrugated



packaging. Currently employing 130 people, Oji India plans to expand its workforce to 300 as operations scale up. The facility specialises in heavy-duty boxes and packaging solutions, catering to industries with a focus on protection, efficiency, and sustainability. ■

BOBST MASTERFLEX HD+: the next chapter in flexo post-print excellence



The corrugated packaging market has experienced considerable change in recent years with the pandemic and disrupted supply chains affecting the market and driving the rise in e-commerce. In addition, the consolidation of many of the major converters has changed the market dynamics, while the drive for increased sustainability continues to put pressure on the capabilities of production equipment. Reducing the weight of packaging (lightweighting) has long been a core demand, but logistics pricing now also takes size into account (rightsizing), meaning boxes must be optimized to avoid shipping excessive amounts of air.

To adapt to these challenges and explore growth potential while meeting strict deadlines and quality requirements, converters turn to leading equipment manufacturers for solutions. As a driving force in innovation, BOBST continues to lead the market with the introduction of the new groundbreaking MASTERFLEX-HD+ flexo press for corrugated post-print, designed to equip them with the optimal tool to address this complex market.

Setting the standard in its class, the Masterflex-HD has

been a leading choice in high-definition flexo printing for the world's largest packaging manufacturers for many years. At drupa 2024, Bobst unveiled the next-generation of this powerful, highly advanced flexo press, marking another chapter in corrugated post-print excellence.

The new Masterflex-HD+ offers excellent production speeds, more automation features, 100% quality control and connectivity capability, allowing converters to meet current market demands and emerging trends with highest definition graphics. This is the flexo alternative to offset printing when manufacturing high added-value corrugated packaging in micro-flute to double-walled board, with up to eight print colors.

"A fantastic tool for corrugated packaging producers, the new Masterflex-HD+ enables them to provide fault-free, top quality corrugated boxes to their brand owner customers. By pushing the boundaries of speed, quality, and efficiency, this highly automated, reliable and robust press ensures the longevity of flexo printing and its continued dominance in the corrugated space," commented Denis Jahn, Technology Sales Director, Bobst.

A host of automation and digitalization components drive the exceptional productivity level of the Masterflex-HD+. As the new reference machine in the 2,100 x 1,300mm format, this impressive post-print production line is capable of printing 15,000 corrugated sheets per hour, which is equivalent to covering an area of 53 million sqm each year. As such, the press is mainly targeted at major corrugated packaging producers with a global reach, but also medium-sized converters with a large regional presence.

Tackling corrugated board in thicknesses between 0.6 and 9 mm (.024 to .35 in) and heavy solid board up to 0.75 mm (.03 in), Masterflex-HD+ can handle sheet sizes from 600 x 520 mm (23.62 x 20.47 in) to 2,100 x 1,300 mm (82.67 x 51.18 in). Enhancing operational efficiency and storage flexibility, it features a brand-new STACKER that can stack piles up to 2m high while handling sheets individually to prevent scratches. Its real direct drive feeder with sheet-edge register utilises a high-speed belt infeed system that allows correction of the front-edge position to ensure that the first colour is printed in register and to eliminate problems with crushed or marked sheets.

Offering a substantial reduction in set-up times and waste, Masterflex-HD+ features Bobst's proven Start & Go automated register setting which can set up the job within just 10 sheets. This ultra-high precision system reads printed marks placed on the sheet, using them to automatically align each print unit in register during both start-up and throughout the production run. It does so by adjusting print length, skew, transverse and longitudinal register.

Handled via the intuitive operator interface, job changes are also highly automated with a motorised lifting and locking system helping to cut down the need for any manual intervention. The device handles up to three rollers per print unit and automatically changes the anilox in under three minutes. As well as saving time, the automatic inking and doctor blade wash-up system reduces ink and water consumption for better sustainability and lower costs. Meanwhile, job settings can be stored in the integrated MATIC system making it quick to set the parameters for repeat runs.

Finally, the press can be fitted with optional ACCUCHECK quality control system for 100% inspection of every sheet to ensure the output meets customers' quality requirements. Non-conforming sheets are rejected automatically, saving time, reducing waste, and preventing orders from being returned. And when it comes to connectivity, the integration with Bobst Connect provides remote access to production data and real-time troubleshooting, further ensuring that maximum uptime and productivity are achieved.

Jahn concluded, "With its advanced technology and seamless automation, the Masterflex HD+ empowers businesses to increase production capacity, maintain top-tier quality, and reduce waste. Whether producing premium high-graphic packaging or meeting tight deadlines, this solution ensures converters can take on more business while maintaining efficiency and profitability. ■

■ Xaar offers complete solution for high quality corrugated printing

Xaar plc is a company supplying industrial inkjet printheads and is based in Cambridge. Xaar has confirmed the launch of Xaar Aquinox, a new solution for digitally printing corrugated board that delivers flexo quality on coated and unprimed boards. Total packaging papers & specialty packaging shipments in February decreased 8% compared to February 2024. They were down 2% when compared to the same 2 months of 2024.

"Powered by ImagineX, the Xaar Aquinox, is packed full of Xaar's unrivalled technologies and is the most reliable printhead yet, with impressive print speeds that enable exceptional productivity combined," said the company. "High viscosity inks deliver vibrant prints on corrugated surfaces using up to 50% less ink than standard viscosity inks on both primed and unprimed media."from the same month last year. ■

Flexo Printing Reel to Reel: An Efficient Printing Solution for Continuous Production

Flexographic printing, often referred to as flexo printing, is a widely adopted method used for printing on various substrates, including plastic, foil, acetate film, brown paper, and other materials used in packaging. Among the several configurations in flexo printing, reel-to-reel printing stands out for its high-speed efficiency, especially in the packaging and label industries.

What is Reel to Reel Flexo Printing?

Reel-to-reel flexo printing is a process where both the input material (also called the substrate) and the output are handled in roll form. The substrate unwinds from a feed roll, passes through multiple printing stations, and then rewinds onto a take-up roll. This continuous motion is ideal for long-run, high-volume production.

Key Components of Reel to Reel Flexo Printing

1. Unwinder – Feeds the substrate into the press from a large roll.
2. Flexo Printing Stations – Each station typically applies a different color using flexible relief plates and quick-drying inks.
3. Dryers – Between stations, inks are rapidly dried using hot air, infrared, or UV curing.
4. Rewinder – Collects the printed substrate into a roll for further processing or shipment.

Advantages of Reel to Reel Flexo Printing

- High-Speed Production: Capable of printing at speeds



exceeding 500 meters per minute, making it ideal for large print runs.

- Cost-Effective: Flexo plates are relatively inexpensive and durable, reducing production costs over time.
- Versatility: Can print on a wide range of substrates including paper, film, and metallic foils.
- Consistent Quality: Advances in plate technology and closed-loop controls ensure high-quality, repeatable results.
- Inline Finishing: Allows integration of additional processes such as varnishing, die-cutting, and laminating within the same line.

Applications

Reel to reel flexo printing is commonly used in:

- Packaging: Food wrappers, pouches, and flexible packaging.
- Labels: Self-adhesive labels, shrink sleeves, and wraparound labels.
- Industrial Products: Tape, insulation wraps, and specialty films.

Trends and Innovations

Recent innovations in the flexo industry have focused on automation, digital integration, and sustainability. Key trends include:

- Hybrid Flexo-Digital Machines: Combining the efficiency of flexo with the flexibility of digital printing.
- Eco-Friendly Inks: Water-based and UV-LED inks are gaining popularity due to environmental regulations and consumer demand.
- AI and IoT Integration: Advanced monitoring systems are improving quality control and reducing waste.

Conclusion

Reel to reel flexo printing remains a cornerstone of high-volume packaging and label production. Its ability to deliver fast, cost-effective, and consistent results on various substrates makes it indispensable in today's competitive manufacturing landscape. As technology evolves, reel to reel flexo systems are expected to become even more efficient, sustainable, and integrated with digital workflows. ■

Kalka®

THE HEATING EXPERT'S



Leading Manufacturer of **CORRUGATION HEATER & BOX DRYING CONVEYOR**

- Oil Heating System
- Corrugation Tubular Heaters
- High Speed Corrugation Tubular Heaters
- Zone Heating System
- Temperature Controller Panel
- Automatic L.P.G. Heating System
- Electric/ Gas Heating System for 3/5 Ply Plant
- Electric/ Gas oil Heating System for 3/5 Ply Plant
- Smallest Box Drying Conveyor



(AN ISO 9001: 2008 CERTIFIED CO.)

MFRS : All Kinds of Industrial Heaters Since 1981

CONTACT US



Office Address

G-41, Sec.-2, Bawana Industrial
Area, Delhi-39, India

Phone No.:

+91 9311142683, +91 7838383733,
+91 9311142684

• Indianindustrialheaters@gmail.com • www.kalkaheater.com

KALKA ENGINEERING WORKS

The Role of Humidifiers in the Packaging Industry: Protecting Quality, Enhancing Efficiency

In the packaging industry, environmental control is a key factor in maintaining product integrity and ensuring smooth operation. One often-overlooked but crucial element in this equation is humidity control. Humidifiers play a vital role in managing indoor moisture levels, preventing material damage, minimizing static buildup, and ensuring the performance of sensitive machinery.

Why Humidity Control Matters in Packaging

Packaging operations often involve materials like paper, cardboard, plastic films, and adhesives, which are highly sensitive to fluctuations in ambient humidity. Too much or too little moisture in the air can cause significant problems, such as:

- Warping or curling of paper and board
- Static electricity buildup on plastic film
- Glue drying too quickly or unevenly
- Dust attraction and contamination
- Material shrinkage or brittleness

To combat these challenges, industrial humidifiers are installed to maintain optimal relative humidity (RH)—usually between 45% and 60%, depending on the material and process.



Applications of Humidifiers in Packaging Facilities

1. Corrugated Board and Paper Packaging

Paper and corrugated board absorb and release moisture rapidly. In dry environments, they can warp, delaminate, or crack, making it difficult to run them through die-cutters and folding machines.

Solution: Humidifiers maintain stable RH to ensure dimensional stability, reduce scrap rates, and improve machine performance.

2. Carton Sealing and Gluing Processes

Excessively dry air causes adhesives to cure too quickly, leading to poor bonding, open seams, and product rejection.

Solution: A controlled humidity environment allows glue to cure uniformly, increasing seal strength and packaging reliability.

3. Plastic Film and Flexible Packaging

Low humidity levels create static electricity in plastic materials, causing them to stick, misfeed, or attract dust—all of which can disrupt automated lines.

Solution: Humidifiers neutralize static by maintaining adequate moisture, ensuring smooth feeding and clean sealing.

4. Cleanroom & Pharmaceutical Packaging

In pharmaceutical and medical packaging, sterility, dust control, and material stability are critical. Any fluctuation in humidity can compromise the packaging process and product quality.

Solution: High-precision humidification systems are used in cleanrooms to maintain strict environmental conditions and GMP compliance.

Types of Humidifiers Used in the Packaging Industry

1. **Steam Humidifiers** – Ideal for precise control in cleanrooms and pharmaceutical settings.
2. **Ultrasonic Humidifiers** – Energy-efficient and ideal for localized humidity control near machines.
3. **High-Pressure Misting Systems** – Effective for large-volume areas with low operational costs.
4. **Evaporative Humidifiers** – Simple and cost-effective for general industrial use.

Benefits of Using Humidifiers in Packaging

- Reduces product waste caused by warped or brittle materials
- Improves machine efficiency and reduces downtime
- Enhances glue and adhesive performance
- Controls dust and static electricity
- Ensures consistent product quality and appearance
- Increases operator comfort and reduces health risks in dry environments

Conclusion

In the competitive world of packaging, small environmental changes can lead to big impacts on productivity and quality. Humidifiers are a smart, cost-effective investment that help packaging plants maintain optimal material performance, reduce defects, and support a more controlled production environment. As automation and precision become more critical, humidity control is no longer optional—it's essential. ■

MEPL

Pioneered to Introduce
Stitching Machine
made in India

Estd. 2010

Over 1500 M/C
Running in India

SEMI AUTO HIGH SPEED STITCHERS & GLUERS



DOUBLE JOINT BOX STITCHING MACHINE

- 4 servo controlled
- PLC & HMI
- Easy operations
- Quick size change over

SINGLE PEACE BOX STITCHING MACHINE

- Euro servo 4G technology
- Elimination of skilled worker
- Programable logic controller with HMI



LOW
COST



SEMI AUTO GLUER

- Roller Glue Applicator
- PLC controlled
- Pressing & squaring
- Quick change over for different box sizes



A member of ICPMA

SUDHINITA APARTMENTS,
FLAT NO 11 & 12, Near Shivaji Putla, Jalna, Maharashtra, 431203 (India)
Email : yashmitian@gmail.com
Mr. Ravinder K Puri : + 91 9405480101
Mr. Yash Puri : + 91 9765723830

Runtech Systems launches a new EP Turbo Blower model, EP650 AMB

Runtech Systems has launched a new turbo blower model for paper machine vacuum systems.

The new RunEco EP650 AMB Turbo Blower features active magnetic bearings. The design of EP Turbo Blowers is characterized by its streamlined efficiency, featuring impellers mounted directly onto the motor shaft. This design choice not only simplifies the system but also enhances its reliability, as it requires just



two bearings throughout the entire blower. Moreover, the compact design expedites the installation process, making it a swift and straightforward task. With active magnetic bearing technology, these turbo blowers not only boast increased energy efficiency but also demand less maintenance, further enhancing their appeal and reducing long-term operational costs.

“We have been investigating alternative bearing technologies to expand our range of offerings. Runtech has already implemented active magnetic bearings, in the RunEco EP1000 at a paper mill. Active magnetic bearing technology is a significant advancement toward more sustainable papermaking, offering remarkably low total cost of ownership. The compact size and material efficiency of EP Turbo Blower technology, coupled with reduced energy consumption throughout its lifespan, make it an unparalleled solution,” said Ville Lahdensuo, R&D Director at Runtech Systems.

“Runtech consistently enhances its product line to deliver efficiency, customer satisfaction, and ecological benefits. EP Series Turbo Blowers have been pivotal in driving energy efficiency in paper mills for two decades. Today, we have sold over 1,100 Turbo Blowers globally. Given the average energy saving of 45%, this translates to energy savings of 2.6 TWh and a reduction of 781,000 tons of CO₂ a year. We actively collaborate with our customers to deepen the understanding of their operational needs, driving both efficiency and cost-effectiveness. ■

Power Adhesives launches biodegradable bulk adhesive

Power Adhesives has launched Tecbond 110B-PR, a new biodegradable bulk adhesive designed for high-speed case sealing and carton closing.

Tecbond 110B-PR is a low-viscosity, high-speed packaging adhesive formulated to deliver exceptional performance in end-of-line (EOL) packaging operations. Its unique formulation enables it to run through narrow nozzles

at lower temperatures, reducing energy consumption while maintaining strong, reliable bonds on carton and board substrates. With a 10-second open time, it is ideal for fast-paced packaging lines, helping manufacturers increase efficiency without compromising on adhesive strength. ■



Best Choice for Box Making Equipments



SEMI AUTOMATIC GLUING MACHINE

For Inside & Outside pasting of Box



SEMI AUTOMATIC STITCHING MACHINE

Suitable for Single Stitching
Double Stitching En-Force Stitching



SEMI AUTO GLUE APPLICATOR FOR UNEVEN DIE CUT BOXES

Manufactured by :

VENUS INDUSTRIES

B-6, Phase-II, Mayapuri Industrial Area, New Delhi-110064

Phone : + 91-11-28111321 | 28114543 | 9312262807

Email : venusindustries1963@gmail.com | info@vikasboxstitchers.com

Website : www.vikasboxstitchers.com

ESKA® Brown is a 100% recyclable kraft coloured board



Antalis has confirmed the addition of Eska® Brown to its range of paperboards.

Made from 100% recycled content and free from PVC, Eska Brown offers a beautiful kraft finish that provides a unique, sustainable look for all your point-of-sale (POS) and display applications.

Available in 3mm thickness and measuring 2440mm x 1220mm, Eska Brown is perfect for a variety of indoor

applications, including POS signage, displays, hangers, and luxury packaging. It is also ideal for creating lever arch files, ring binders, and notebooks.

The Eska Brown range is compatible with UV inkjet, screen, and latex printing. It can be easily die-cut and finished to any shape, making it a versatile choice for creative projects.

New Eska Brown is an addition to Antalis' existing range of greyboards and comes with several certifications, including FSC®, REACH, and the EcoVadis Gold Medal. It is also food-safe and compliant with ISO 9001 and ISO 14001 standards.

Paul Neale, Product Manager, Antalis, comments, "We continue to extend our sustainable product portfolio with the launch of Eska Kraft, a coloured display board in large format sheet sizes to support customers to achieve that 'sustainable look' for their display applications. The solid kraft finish throughout, made from 100% recycled fibres, means there are no white edges left on display. Eska's eco-friendly production processes and zero waste initiatives add to the sustainable merits of this new display board." ■

Ink Pumps and Pressure Pumps in Corrugated Packaging: Powering Precision and Productivity



In the corrugated packaging industry, where speed, durability, and print clarity define success, reliable fluid handling is a critical component of the operation. Whether you're running high-speed flexo folder-glue, rotary die cutters, or inline printers, having the right ink pumps and pressure pumps ensures consistent ink application, smooth adhesive delivery, and minimal downtime.

These pumps are the unsung heroes of every well-performing corrugation plant, keeping machines running efficiently and maintaining the high print and box quality that customers demand.

Ink Pumps in Corrugated Box Plants

Flexographic printing is the backbone of corrugated box decoration—from basic one-color codes to complex multi-color graphics. Ink pumps play a crucial role by ensuring uninterrupted, clean, and controlled ink delivery from the reservoir to the anilox roller and printing plates.

Why They Matter:

- Deliver steady ink flow for consistent color density
- Enable continuous ink circulation to prevent drying or sedimentation
- Reduce manual ink handling, improving cleanliness and safety
- Support high-speed operation without sacrificing print quality

Common Pump Types Used:

- Diaphragm Pumps – Durable and ideal for water-based inks commonly used in corrugated printing

- Peristaltic Pumps – Precise control, easy to clean, and reduce ink waste
- Gear Pumps – Useful for consistent flow in long-run, high-speed printing

Applications:

- Flexo printing stations on inline folder-glue
- Rotary die cutters with integrated print sections
- Preprint lines where large rolls are printed before being converted

Pressure Pumps in Corrugated Processing

Beyond inks, pressure pumps are used to deliver adhesives, maintain pneumatic systems, and support other vital processes in corrugated converting lines.

Typical Applications:

- Starch glue systems on corrugators (single facers, double backers)
- Hotmelt or cold glue delivery in folder-glue for box sealing
- Vacuum assist and pneumatic controls in sheet feeding and stacking
- Spray or misting systems for steam showers or dust control

Benefits:

- Maintains precise adhesive pressure for uniform bonding
- Reduces glue waste and improves bonding strength
- Powers air-driven components like flap folders and stackers
- Supports automated functions without pressure drops or stalls

Key Benefits in Corrugated Packaging Plants

Benefit	Impact
• Consistent Ink Flow	Improves print clarity and color matching
• Less Downtime	Reliable pump operation reduces stoppages
• Controlled Glue Usage	Enhances bonding, reduces mess and cost
- Supports High-Speed Machines	Pumps match pace with modern automation
• Cleaner Operations	Closed ink circuits and glue lines reduce spillage

Maintenance Tips for Corrugated Plants

- Regularly inspect ink filters and hoses for clogs or leaks

- Calibrate ink and adhesive pumps to match line speed and viscosity
- Flush ink pumps with water or solvent after long runs to prevent clogging
- Use pressure sensors and flow meters for predictive maintenance alerts

Final Thoughts

In corrugated packaging, where rugged construction meets fine printing, ink pumps and pressure pumps ensure both worlds perform seamlessly. They support print quality, adhesive performance, and machine uptime—all of which directly impact production efficiency and customer satisfaction.

By choosing the right pump systems and maintaining them well, corrugated box manufacturers can stay competitive in a demanding, quality-conscious market. ■

Arden Software to unveil first AI powered features at Hybrid Fusion Packaging Summit

Arden Software will unveil the first-ever AI-powered features within its packaging design software, Impact, at the upcoming Hybrid Fusion Packaging Summit 2025.

Organised by Hybrid Software for its customers, resellers and partners, Arden Software is a partner sponsor of the three-day event. Arden will play a prominent role showcasing its cutting-edge CAD/CAM software and delivering a key speaking session on the latest advancements in packaging design technology.

At the heart of Arden Software’s showcase will be a first-look at its AI-powered features being developed within Impact, designed to transform packaging and tooling design workflow. These enhancements, which are expected to be released to the public later this year, are set to provide designers and die-makers with intelligent tools that offer significant time savings.

In addition to unveiling its AI-powered innovations, Arden Software will also be sharing the dynamics constraints tools within Impact, which is already transforming the packaging industry. Impact ‘Dynamic Constraints Edition’ first introduced in 2023, has seen Impact become one of the first packaging design CAD software to offer geometric constraint tools, which captures the designer’s intent as

they draw, and also enables quick and easy resizing.

Matt Hewitt, Business Development Director, Arden Software, said, “We are excited to preview the next evolution of Impact at Hybrid Fusion 2025. The AI-powered features we’re unveiling will give designers and die-makers powerful, intelligent tools to optimise their workflow, and increase productivity in ways we’ve never seen before. With our Dynamic Constraints Edition already transforming packaging design, this is just the beginning of what we believe will be a game-changing era for the industry.

Guido Van der Schueren, Chairman, Hybrid Software, added, “In today’s fast-evolving landscape, businesses must continuously assess their workflows, embrace digital transformation, and leverage innovative tools to remain competitive. We are excited to offer the Fusion platform for our customers, resellers, and partners to engage, share insights, and explore ways to streamline their operations across the packaging value chain.”

The Hybrid Fusion Packaging Summit takes place from April 22-25 at Barbizon Palace in Amsterdam, bringing together leading names in the packaging and printing sector, from across Hybrid’s global customer and partner base. ■

Power Adhesives launches new bulk adhesive range



Power Adhesives has launched its new bulk adhesive range, delivering high-performance bonding solutions for industrial applications.

The new bulk range includes pillows and prills formats tailored to industries requiring high-output adhesive solutions, including packaging, product assembly, foam bonding and sprayable applications.

Designed to improve efficiency, reduce waste and meet the growing demand for large-scale adhesive solutions, this latest development expands Power Adhesives' product offering beyond its established Tecbond shaped adhesives.

Brendan Colgan, Chief Executive Officer, Power Adhesives, said, "Our bulk adhesive range is a natural evolution of our product offering, driven by industry demand for scalable, high-performance bonding solutions. We have built a reputation for delivering adhesives that enhance efficiency and reliability, and this expansion ensures that

customers have even greater choice when selecting the right adhesive for their needs.

"By introducing bulk formats alongside our Tecbond range, we are giving manufacturers the ability to maximise productivity while reducing waste. Whether it's packaging, product assembly or large-area bonding, our bulk adhesives provide a solution that combines strength, efficiency, and sustainability."

With growing demand for sustainable and cost-effective adhesive solutions, Power Adhesives' bulk range provides customers with the flexibility to select the ideal adhesive for their specific application. The range includes sprayable adhesives for mattress assembly and foam converters, fast-setting adhesives for carton sealing and product assembly, and high-heat-resistant adhesives for demanding industrial applications. By offering adhesives in bulk, businesses can streamline their processes, reduce handling time, and ensure consistent bonding quality at scale. ■

DS Smith launches TailorTemp®

DS Smith has confirmed the launch of TailorTemp®, the latest innovation within temperature-controlled packaging for the pharmaceutical industry.

TailorTemp® packaging solution has been designed to support the sustainability targets of pharmaceutical and biotech businesses, meeting their need to store and transport delicate medicinal products across multiple territories within rigorously controlled temperature environments.

TailorTemp® is created from corrugated cardboard-based material that is recyclable. The dimensions, insulating thickness, and coolant quantity are determined using a computer-based parametric algorithm which has



been co-developed by DS Smith in partnership with an independent laboratory specialising in thermal transfers. Designers can then use the outcomes of the modelling tool to fast-track prototyping and validate solutions in real conditions.

DS Smith has been able to demonstrate that this packaging solution can stay cool for up to thirty-six hours. The DS Smith component of the TailorTemp® packaging solution, comprising an outer box and the insulant materials, is fully recyclable and 100% plastic-free, representing a sustainable alternative to Expanded Polystyrene (EPS) for the packaging needs of pharmaceutical and

biotech industries. ■

Less set-up time with the DZL|plate



With its special DZL|plate protection plate, Marbach has an innovation in its portfolio that has more than established itself.

The DZL|plate impresses with its ready-to-use application and lasting efficiency increase. Thanks to these features and the immediately visible results, it has inspired numerous users in a short time. This is particularly evident in the reduction of knife make-ready times –an advantage

that can be seen with every job.

The DZL|plate takes over the zone levelling for many months after being inserted into the die-cutter just once. This reduces the time required and also improves process stability. Marbach customers who use the DZL|plate report a reduction of over 30% in their knife make-ready times per job – an optimisation that is directly reflected in productivity.

These time savings and efficiency increases quickly pay off. The digital zone levelling DZL|plate pays for itself in the shortest possible time and offers a clear economic advantage. Many companies have therefore already equipped their entire machine park with the DZL|plate and have since benefited from greater efficiency in the production of their packaging.

The new coating of the DZL|plate now ensures an even longer service life. This makes the DZL|plate the ideal solution for companies that want to optimise their production processes sustainably and reduce their costs. ■

BOBST boosts efficiency with latest developments on EXPERTCUT 106 PER



BOBST customers can cut patching time by up to 15 minutes per job and reduce board consumption after the company added two new features to its EXPERTCUT 106 PER.

The upgrades to the die-cutter are designed to help converters save set up time and resources by optimising machine tooling and increasing sheet register capabilities. These include the new ACCUPLATEN machine platen and ZERO PATCHING plate, which minimise or compensate platen deformation, as well as POWER REGISTER Plus, which reduces sheet waste by introducing a new register mark registration system. The upgrades to the die-cutter are designed to help converters save set up time and resources by optimising machine tooling and increasing sheet register capabilities. These include the new ACCUPLATEN machine platen and ZERO PATCHING plate, which minimise or compensate platen deformation, as well as POWER REGISTER Plus, which reduces sheet waste by introducing a new register mark registration system.

Bobst already reduced setup time on its folding carton die-cutter range by 15 minutes with the SPEED CHANGE feature set. By adding the optional Energy Efficiency Pack and a new range of technical innovations, the Expertcut 106 PER sets new standards for production efficiency.

At drupa 2024, Bobst introduced the world to a first-to-market innovation in the die-cutting sector: Accuplatten.

“This redesigned machine platen is a game changer,” says Bodo Junge, Product Marketing Director responsible for the die-cutter range. “With Accuplatten, Bobst has succeeded in minimising the cutting plate’s deformation and reducing patching time by up to 80%. This means less operator intervention, increased tool lifespan, and up to 15 minutes extra uptime per job.”

Since Accuplatten is only available on new machines, a corresponding Zero Patching plate is being made available for previous-generation machines and for converters who are looking for a job-specific solution. The plate evens out platen deformation according to the pressure based on a machine-specific platen distortion, also reducing patching time between 50 and 80%. Both solutions reduce the number of sheets used for quality checks during the machine setup and improve the die-cutting and creasing quality of the final blanks for easier downstream processing. Simplified setups and a focus on quality are essential conditions to avoid unnecessary waste. Time and quality cardboard sheets are precious resources that each have a huge impact on the converter’s margins. A further development is therefore dedicated to the reduction of sheet waste. With Power Register Plus, the register’s recognition capacities have been adapted to include small reference marks at the side of each sheet. This saves up to 4mm of carton for the front register marks, reducing carton cost by up to 0.5%.

“It may not seem like much, but depending on the job layout, the size of the register marks, and grammage, this new system can save up to 1 ton of carton for 1 million sheets,” explains Junge. “Less waste also means less time and effort to remove it, which contributes to the process and workplace sustainability.”

Converters looking for cost-efficiency and sustainability can also opt for the Energy Efficiency Pack. This set of features includes energy-efficient air pumps and an Energy Recovery System, which transforms kinetic machine braking energy into electricity. The pack also contains a redesigned Bernoulli airflow system with increased performance and reduced energy and air consumption. These measures reduce energy consumption from 5 kWh down to 4 kWh per 1,000 sheets, adding up to 1 MWh for 1 million sheets. In addition, the Energy Monitoring indicators on the HMI can detect further potential energy-

saving opportunities, cutting down costs and supporting sustainability goals.

As customers have come to expect, Expertcut 106 is equipped with SPHERE, the Bobst HMI, and is fully compatible with current and future Bobst Connect functionalities. The connection of tools, machines, converters, and suppliers which will allow the seamless transmission of data through a cloud-based platform, orchestrating the entire production process. Next to the digital developments, the continuous improvement of machine tooling and capabilities remains an important part of the innovations to ensure zero-fault quality and maximum productivity. Such as the newly developed light-weight gripper bars. “This Expertcut 106 PER can be equipped new carbon fibre gripper bars, which allow us to reduce inertia and acceleration forces and push production speeds from 9,000 up to 9,500 sheets/hour,” concludes Junge. ■

Robatech reduces production costs with hot melt stitching

The all-electric Volta hot melt jetting head from Robatech has received an upgrade that makes it even more powerful. With the integrated stitching function, companies can now easily reduce their adhesive consumption by up to 60% – and successfully counteract rising production costs.

It is now even easier to divide glue beads into shorter beads or glue dots with the Volta application head. The application head control defines how much adhesive is to be saved. This process significantly reduces adhesive consumption without compromising the quality of the application. On the contrary: it even improves adhesion.

In addition to the savings potential in adhesive, Volta scores with 60% lower energy consumption compared to conventional pneumatic application heads. It operates entirely without compressed air, which reduces maintenance work and cuts costs. The jetting head is also robust and durable – now with a service life of up to 2 billion operating cycles. All of this helps to significantly reduce the carbon footprint of production operations.

“Volta is the answer to the growing challenges of rising production costs,” explains Rolf Gräser, Industry Manager Packaging. “With this solution, we offer our customers



not only cost efficiency, but also a sustainable and future-oriented alternative for adhesive application.”

The Volta application head can be easily integrated into existing production lines, regardless of the manufacturer of the existing application heads or adhesive application system. Integration takes place via a 24 VDC connection without a booster; an external control is no longer necessary, even for the stitching function. ■

PHSH high-performance shredder for sheets and cores

Shredded process waste from corrugated board processing can be easily transported and prepared for recycling. Shredding takes place either directly at the die-cutters and machines or by means of a high-performance shredder that shreds the output from several machines to a transportable size.

Edge trim can be easily shredded using edge trim fans. The processed material can be transported via conveyor belts or pneumatically to the baling or container presses for optimum recycling. Höcker Polytechnik offers suitable shredder solutions for all these applications or integrated disposal concepts, including sorting, for the entire production process.

Bulky materials, sheet goods, cardboard packaging or robust core tubes block valuable storage space and can only be fed into the company's internal disposal workflow with a great deal of effort. Shredders from Höcker Polytechnik also provide support here, recovering valuable storage space, increasing recycling revenues and continuing to keep the company's own waste disposal centre tidy.

The manually operated PHSH shredder from Höcker Polytechnik can shred up to 8,000 kg of material per hour into handy, easily transportable pieces. The shredded material is then fed to an existing disposal line either via conveyor belt or via an extraction hood and can be prepared for pressing. In order to cope with such large quantities of material in everyday working life, a shredder that is manually fed with material must also be designed

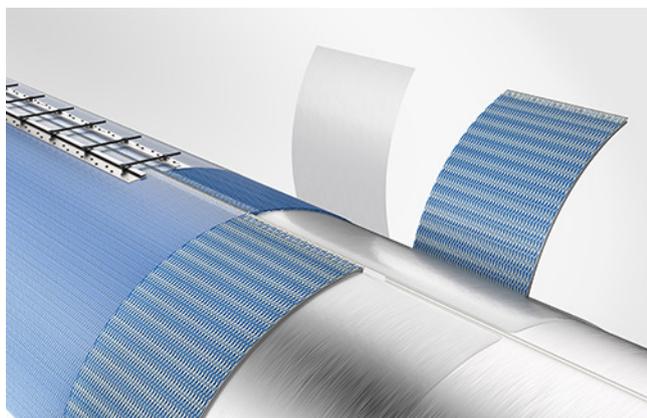


for optimum ergonomics when feeding the material. The operator places the cartons on the wide conveyor belt of the PHSH shredder, which then automatically transports the material to the three shredder shafts, where the two preceding shafts draw the cartons to the fast-running shredding shaft with cast iron teeth or a knife shaft with high-quality knives and shred them. Meanwhile, the next material can already be loaded – saving time and increasing throughput.

Cores with a maximum diameter of 150 mm and wall thicknesses of up to 20 mm can be shredded in the integrated core cutter. The core is inserted, automatically drawn in and shredded. Shredded in this way, cores can also be disposed of via baling presses or container presses. If no core cutter is required, the PHS shredder offers the full range of functions excluding the core shredder. The robust PHS and PHSH shredders have been used hundreds of times worldwide and are characterised by low wear and tear and a design designed for safe working, with protection against interference at the infeed. The shredders can be flexibly configured and are available with different cutting widths and feed belt lengths. Thanks to the robust welded construction, the components designed for durability and advantages such as space-saving and safe storage of the shredded material, higher recycling proceeds and reduced labour costs, the investment in such shredders often pays for itself within a few years.

In 2024, the PHS and PHSH shredders were technically revised, the range of functions was expanded and operation is now even more comfortable. The main functions can be conveniently set and controlled at any time using the touch panel. A further safety feature now prevents the side and maintenance doors from opening before the shafts have come to a complete stop. A modern PLC control system with an integrated OPC UA communication interface works in the background. The operating status of the shredder can thus be continuously transmitted to the company's internal server environment and important information such as utilisation rates or unplanned downtimes can be easily retrieved. These Höcker Polytechnik shredders are ready for Industry 4.0. ■

BLUEBACKER ECO GRIP SC is latest generation of drum lagging for corrugated production



With the BLUEBACKER ECO GRIP SC, GKD – Gebr. Kufferath AG presents a new generation of drum lagging for corrugated board production. This innovative product features an intelligent combination of mesh structure and full-surface polymer layer for optimum running properties when used with all GKD doublebacker belts.

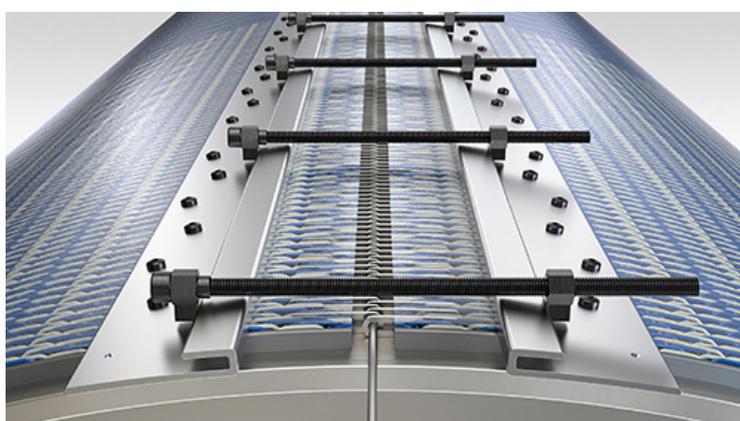
The Bluebacker Eco Grip SC was developed to act as a complete supplier for the double facer unit on corrugators and to eliminate the known disadvantages of drum laggings available on the market. At the heart of the innovation is the German Innovation Award-winning Bluebacker mesh.

Rubber, silicone and self-adhesive laggings with and without clipper are currently used in corrugated board production. What they have in common is that they either can damage the Bluebacker belts or the drums of the corrugators in the long term, or cause problems during installation and deinstallation. The Bluebacker Eco Grip SC combines the advantages of current drum laggings and reduces or avoids their disadvantages. The innovation from the company consists of an intelligent combination of mesh structure and full-surface polymer layer, which ensures optimum running properties in conjunction with all GKD doublebacker belts. No solvent-based adhesives or drill holes are required for installation. The innovative drum lagging reduces the slip between the drive roller and

corrugator belt and ensures reliable anti-twist protection thanks to the high pre-tensioning force on the roller shell – without any mechanical fixation. The drum lagging is no longer installed in fragments, but as a continuous element across the entire drum width.

Thanks to the Simple Clamping System (SCS), installing the drum lagging is quick, clean and environmentally friendly – without any drilling or solvents. Removal is also easy with own technicians and without special tools.

Another feature of the Eco Grip SC is its high degree of concentricity, which is guaranteed by the precise fit of the drum lagging. In addition, the full-surface polymer layer provides optimum corrosion protection for the roller shell during operation. The mark-free endless connection prevents the covering from tearing off. The resulting form-fit effect ensures structural harmonisation between the surface of the lagging and the belt.



Dominik Braun, Key Market Manager Corrugated & Pulp for Paper, GKD Group, says, “Following the success of the Bluebacker as a corrugator belt for the doublebacker unit, our new drum lagging is the logical next step. Thanks to its properties, the Eco Grip SC not only offers a durable and sustainable solution, but also demonstrates GKD’s innovative strength and confirms GKD as a solution and development partner. In my opinion, the new Eco Grip SC has set a new technological standard in the corrugated board industry.” ■

Fitness Beyond the Scale: Redefining What Health Looks Like

By Rhea Kapoor – Wellness Journalist & Certified Health Coach



For years, we've been conditioned to believe that health looks a certain way—a number on a scale, a dress size, or a perfectly sculpted Instagram body. But real health is more than aesthetics. It's not just about what you see in the mirror—it's about how you feel, how you function, and how you live. It's time we shift the narrative: fitness isn't a look—it's a lifestyle.

Why the Scale Doesn't Tell the Whole Story

Let's get one thing straight: the number on the scale is not a complete health indicator. It doesn't measure your strength, your stamina, your sleep quality, your mental health, or your hormone balance. It doesn't show your ability to play with your kids, run up a flight of stairs, or carry your own groceries with ease. "You can be fit and not thin, thin and not fit, and everything in between," says fitness coach and author Amanda Baird. "Health is multi-dimensional." Your weight fluctuates naturally due to factors like water retention, stress, inflammation, and hormones. Obsessing

over that number can lead to anxiety, disordered eating, and burnout—without actually improving your health.

What Real Fitness Looks Like

Fitness today is being redefined—and rightfully so. It's less about appearance and more about performance, energy, and quality of life. Here's what true fitness can look like:

- Having the energy to get through your day without crashing.
- Being able to move without pain—whether it's walking, lifting, dancing, or stretching.
- Having a strong immune system and better sleep patterns.
- Feeling mentally clear and emotionally balanced.
- Building muscle tone and endurance, regardless of your weight.
- Celebrating small wins like doing 10 push-ups, running your first mile, or trying a new workout class.

Mental and Emotional Health Matter Too

You can't separate physical health from mental well-being.





ROLLS PRIVATE LIMITED

TAKING ROLLER TECHNOLOGY TO THE NEXT LEVEL...

Complete Roller Solution for **Corrugated** Packaging Industry

RANGE OF ROLLERS



Gum Roller & Doctor Roller



Board Printer Roller
(Printer - Slotter)



Anilox Roller



Lead Edge Feeder Roller



Flute Laminator Roller



Thin Blade Rotary Roller



Sheet Pasting Roller (P.U.)



Flexo Printing Roller



Sheet Cutting Roller



Offset Printing Roller



Feeder Wheel



No Crush Wheel

KINETIC ROLLS PVT. LTD.

Office & Factory: F-85, Site-B, Surajpur Industrial Area, Greater Noida - 201306 (U.P.)

Phone: 0120-4957386 | Mobile: 9310045860, 8130738278, 7982254070, 9810045860

Mumbai Office: 1506, Prithvi Pride, Vinay Nagar, Mira Road (E), Distt. Thane-401107 | Mobile: 9711045860, 9326024464

E-mail: kineticrolls@yahoo.com | Website: www.kineticrolls.com

Stress, burnout, self-criticism—all of these impact your body deeply. In fact, chronic stress can cause inflammation, weight fluctuations, hormonal imbalances, and fatigue. That's why self-compassion and mindful movement matter. A person who walks daily, eats intuitively, and practices gratitude might be far healthier than someone who punishes themselves at the gym to chase a number. "Fitness is what you gain in confidence, energy, and peace—not what you lose in pounds," shares Rhea Kapoor, certified health coach.

How to Redefine Your Relationship With Fitness

1. Set Non-Scale Goals

Focus on goals like running 5K, mastering a yoga pose, or lifting heavier—not just losing weight.

2. Track How You Feel

Create a "feel journal" where you log energy levels, sleep, mood, and digestion—real wellness markers.

3. Celebrate Functional Wins

Can you carry heavy bags? Climb stairs without gasping? Play with your kids for hours? That's fitness.

4. Honor Your Body's Cycles

Your needs shift daily and monthly. Learn to listen, not force.

5. Move for Joy, Not Just Calories

Dance, hike, play, stretch. Movement should be a celebration—not punishment.

Final Thoughts: Redefine, Reclaim, Rejoice

True health doesn't look the same for everyone—and that's the beauty of it. The strongest version of you might not have six-pack abs. It might have stretch marks, soft curves, and unmatched stamina. It might look average on the outside, but feel phenomenal on the inside.

When we stop chasing perfection and start honoring progress, that's where the real transformation begins.

Health is not a size. It's a state of being. ■

■ The Power of Surrender: Letting Go to Move Forward

By Aanya Dev – Spiritual Writer & Mindfulness facilitator



The Power of Surrender

There is a quiet power that doesn't shout. It doesn't hustle, compete, or strive to control every outcome.

That power is surrender—and it may be the most courageous step a soul can take.

In a world obsessed with control, surrender is misunderstood. It's often seen as giving up or losing—but spiritually, surrender is the exact opposite. It's not defeat—it's trust. It's not passive—it's deeply active. It's the art of letting go with intention and allowing life to flow through you, not around you.

What Does It Mean to Surrender Spiritually?

To surrender is to release your grip on how you think things should be and open yourself to how they could be. It's acknowledging that while we can influence life, we are not in charge of every twist, turn, or outcome.

“Surrender is faith that the power of Love can accomplish anything—even when you cannot foresee the outcome.”

– Deepak Chopra

Surrender is not about giving up—it's about giving in to a

higher wisdom, a divine timing, a more soulful intelligence that is guiding your journey.

Letting Go: Why It's So Hard

We've been taught that success comes from control—of plans, people, and outcomes. So when things fall apart, our instinct is to grip tighter. But control is often fear in disguise. Fear of failure. Fear of loss. Fear of the unknown. But the unknown is also where miracles live.

Holding on to what no longer serves—an old story, a stale relationship, a forced ambition—can block us from the very peace we seek. Surrender is the unclenching. It's choosing flow over force.

Real-Life Reflection: Maya's Leap of Faith

Maya, a successful executive in her 40s, had built her life around achievement. But deep down, she felt disconnected. Her intuition kept nudging her: This isn't your path anymore. She resisted at first. How could she walk away from a stable, six-figure job?

One day, after a quiet meditation, she surrendered. She resigned, traveled alone, and let her next chapter unfold with no rigid plan. Within a year, Maya launched a wellness



Mr Ajit Singh Bhurjee (Chairman) being awarded Life Time Achievement Award from ICPMA.



Always Ahead Than The Extant...

Newly Installed
5 ply Automatic Board Plant
in Maharashtra.

Hi-Performance
Machine For
Productivity and
Profitability



Sun-Up (India) Machinery Co. Pvt. Ltd.

Factory : Plot no. A-354 T.T.C. Industrial Area, M.I.D.C.

Mahape, Navi Mumbai (Dist. Thane) INDIA

Tel. : + 91 9987733022 | 8655131315 | 7021450145



info@sun-upindia.com
sunupindiamachinery@gmail.com
dsbhurjee@gmail.com



Follow us:



www.sun-upindia.com

[youtube.com@dsbhurjee](https://youtube.com/dsbhurjee)

retreat center—something she had only ever dreamed of. Her surrender became her alignment.

**“When I stopped needing certainty,
Maya shared, “I found clarity.”**

Surrender is Strength, Not Weakness

It takes immense courage to say:

“I don’t have all the answers. I trust what’s unfolding.” Surrender isn’t about abandoning effort—it’s about balancing effort with ease. It’s about showing up, doing your part, then releasing attachment to results. That’s freedom.

How to Practice Spiritual Surrender Daily

1. Breathe and Release

Take a few moments daily to breathe deeply and mentally release whatever you’re gripping—be it a thought, worry, or plan.

2. Affirm with Trust

Say to yourself: “I release control and trust the process. What’s meant for me will come.”

3. Follow Your Intuition

Surrender doesn’t mean being passive—it means being guided. Listen to that quiet inner voice.

4. Let the Outcome Be Flexible

Have clear intentions, but stay open to better, unexpected outcomes. The universe often surprises us when we loosen the reins.

5. Reflect, Don’t React

When something doesn’t go your way, pause. Ask: “What is this moment trying to teach me?”

The Wisdom in Letting Go

Spiritual surrender is an invitation. It’s life whispering, “Trust me—I have something even better in store.”

When you release what no longer aligns, you make room for grace.

When you stop controlling the narrative, your true story unfolds.

When you surrender, you don’t lose power—you finally meet it. ■

**“Surrender to what is. Let go of what was.
Have faith in what will be.”**

– Sonia Ricotti

The Power of a Positive Mindset: How Thoughts Shape Reality



Running a business isn't just about managing numbers, strategy, or logistics—it's about mastering your mindset. For entrepreneurs and business owners, success begins not just in boardrooms or sales pipelines, but between your ears. Your thoughts are more than private whispers; they are the architects of your business reality.

Your Mindset Sets the Tone

As a leader, your energy influences the entire organization. If you walk in overwhelmed and reactive, your team absorbs that energy. But walk in with confidence, clarity, and optimism—even on hard days—and you shape a culture of resilience and innovation.

Positive thinking isn't naive. It's strategic. It helps you spot opportunities where others see obstacles and empowers you to take calculated risks without fear. When you believe things can work out—even when the path is unclear—you create the conditions for breakthrough moments.

Case Study: Sarah Lin, Founder of EcoGlow

In 2020, Sarah Lin, founder of sustainable beauty brand EcoGlow, watched half her retail partnerships vanish

overnight due to the pandemic. Instead of panicking, she reframed the crisis as an opportunity to rethink distribution. Lin leaned into e-commerce, ramped up social engagement, and launched a "Behind the Brand" campaign to tell her story. Not only did EcoGlow bounce back—it doubled its revenue within 18 months.

"It wasn't strategy that saved us—it was mindset. I had to believe we could pivot before we actually could," Sarah shared at a recent startup summit.

Neuroscience Backs It Up

Studies in neuroscience show that positive thinking actually reshapes neural pathways. It trains your brain to see patterns, potential, and solutions. Entrepreneurs who maintain a growth-oriented, positive mindset are more likely to overcome setbacks, persist through failure, and pivot faster when necessary.

That's not just motivation—it's mental agility.

"Optimism doesn't mean denying the problem. It means believing there's a solution you haven't found yet."

– Simon Sinek

High Speed Rotary Paper
Corrugated Sheet Cutting Machine



www.manishindustries.com



MANUFACTURERS OF CORRUGATED BOX MAKING MACHINERY.

D-5 & 6, Chinaibaug Industrial Estate,
Nr. Water Tank, Dudheshwar Road,
Ahmedabad - 380 004. INDIA

Ph. : +91 79 25622081/2/3
Fax : +91 79 25622083
Cell : 9879231212 / 99250 25825
Email : info@manishmachinery.com

Crisis vs. Opportunity: It's All in the Frame

During economic downturns or internal crises, your mindset becomes your greatest tool. Two leaders can face the same market dip—one sees the end, the other sees a new opportunity to innovate. Guess which one leads their team forward?

Reframing challenges as learning experiences or hidden opportunities doesn't make the obstacles go away—but it changes how you show up to face them.

Cultivating the Positive Mindset

So how do you develop and maintain a mindset that keeps you forward-focused, even under pressure?

- **Start with Intentional Mornings:** Begin each day by asking, "What's one opportunity I can create today?" Set a proactive tone before the emails start rolling in.
- **Control Your Inner Narrative:** When a deal falls through or a client walks away, resist the spiral. Pause. Ask yourself, "What's the lesson here? How

can I come back stronger?"

- **Surround Yourself With Positivity:** Your environment matters. Curate a network of advisors, team members, and peers who uplift and challenge you—not drain you.
- **Celebrate Progress, Not Just Results:** Recognize small wins. Momentum builds confidence.

Final Thought: You Are the Vision Carrier

Your business mirrors your mindset. If you think big, your company stretches. If you stay solution-oriented, your team feels empowered. If you carry hope in the face of uncertainty, others will follow.

Positive thinking isn't about blind optimism—it's about choosing belief over doubt, solutions over excuses, and forward momentum over fear. And for business leaders, that might be the most powerful strategy of all.

"Change your thoughts, and you change your world." – Norman Vincent Peale ■

New CleanLine Extract360 fabric cleaning system from Voith

Voith has launched a new, highly effective fabric cleaning system for the dryer section of paper machines the CleanLine Extract360. The innovative system is designed to overcome limitations of conventional dryer fabric cleaning, enabling excellent cleaning results, reliably removing wastewater, and extending fabric life by reducing cleaning pressure.

By keeping the fabric, the cleaning system itself and the entire machine environment cleaner, the technology makes a significant contribution to the runability of the system and reduces the risk of paper defects.

The increasing processing of recycled fibers in paper production leads to higher contamination of the fabrics, rolls and equipment in the dryer section, thereby adversely affecting machine efficiency and paper



quality. For optimum cleaning results and maximum machine performance, Voith's proven Extract cleaning concept is based on a combination of two principles: First, multidirectional cleaning removes contamination both on the surface and in the structure of the fabric. Second, the positioning of the cleaning head after the roll enables additional dirt removal on the non- paper side of the fabric.

"The newly developed Extract360 cleaning head builds on the market- proven principles of CleanLine Extract4D and provides even more ways to reduce the negative effects of contamination in the dryer section," explains Nick Lampart, Product Manager, Voith Paper.

The technology is already in use in several paper mills where operators have observed significant improvements in fabric cleaning and confirmed efficiency gains following the system's installation. CleanLine Extract360 is available as part of a complete cleaning system or as an upgrade to existing DuoCleaner or CleanLine Systems to achieve higher cleaning effects and better wastewater removal. With an upgrade, most of the original components can be retained. Voith's CleanLine portfolio includes cleaning solutions for the forming, press, dryer and coating sections of the paper machine. Continuous development of these systems is aimed at achieving the best cleaning performance combined with high ease of maintenance and machine availability. ■


ICCMA
 CONGRESS 2024

11-12-13 September 2025
 India Expo Mart, Greater Noida

India's most
 trusted event on
**CORRUGATED
 PACKAGING,
 FOLDING CARTON
 & PAPER INDUSTRY**

In Partnership with
ICCMA
 INDIAN CORRUGATED CASE
 MANUFACTURERS ASSOCIATION

For Exhibition & partnership enquiries:
 Shradha Malik | + 91 98107 37270 | shradha.malik@rxglobal.com

Built by
RX

www.indiacorrexpo.com | www.indiafoldingcarton.com | www.indiapaperexpo.com



A LANDMARK INDUSTRY EVENT OF 2025 IN AGRA



Showcase Your Innovation at the 53rd FCBM National Conference!

CALLING ALL MACHINE MANUFACTURERS & SUPPLIERS
Step into the spotlight at India's premier corrugation event!



DISPLAY YOUR MACHINES

to top corrugators & decision-makers.



NETWORK WITH LEADERS

of the industry & forge valuable connections.



DRIVE BUSINESS GROWTH

through exclusive collaborations.



Support Indian Businesses & Industries

For More Information Contact :

+91 - 8920707090/9911322359

1500+
CORRUGATORS
UNDER ONE ROOF



SECURE YOUR SPACE TODAY AND POSITION YOUR BRAND AS AN INDUSTRY LEADER.

Join the movement, Join ICPMA (Indian Paper Corrugated & Packaging Machinery Manufacturers Association).
Let's shape the future of corrugated packaging together...

Unite, Innovate, Grow: Why Your Business Belongs in ICPMA

Calling All Corrugated Packaging Machinery Manufacturers and Allied Industries — It's Time to Join Hands with ICPMA!

In a fast-evolving packaging landscape where innovation, sustainability, and collaboration dictate growth, staying connected isn't just a luxury — it's a necessity. That's where ICPMA – Indian Corrugated Packaging Machinery Association steps in as the central force uniting manufacturers, suppliers, and innovators of the corrugated packaging machinery sector.

And now, ICPMA is extending an open invitation to manufacturers and allied industries across India to join its vibrant, future-focused membership network. Whether you specialize in machinery, automation, raw materials, or technology support, ICPMA wants you on board.

What is ICPMA?

Established as a non-profit industry association, ICPMA brings together a collective of corrugated packaging machinery manufacturers and allied partners to share knowledge, advocate for industry-friendly policies, support R&D, and elevate India's packaging capabilities on the global stage.

Why Join ICPMA?

Stronger Together

The corrugated packaging industry is growing rapidly — but with growth comes the need for standards,

FOR JOINING MEMBERSHIP OF ICPMA

PLEASE CONTACT

Priyanka Mathur | Mob.: + 91 7428026409

Email : info.icpma@gmail.com

For Stall Bookings in Corru Pack Print India 19-22 March, 2026

PLEASE CONTACT

Priyanka Mathur | Mob.: + 91 7428026409

Email : info.icpma@gmail.com



ICPMA

Indian Paper Corrugated & Packaging Machinery Manufacturers Association

INDIAN PAPER CORRUGATED & PACKAGING MACHINERY MFGRS. ASSOCIATION

collaboration, and a united voice. ICPMA is the only dedicated platform that represents the core of India's paper corrugated packaging machinery sector.

Industry Influence

As an ICPMA member, you gain direct access to policy discussions, industry recommendations, and the ability to shape future regulatory frameworks that impact your business.

Technology and Innovation Hub

From machine automation to Industry 4.0 integration, ICPMA fosters an ecosystem of knowledge-sharing, encouraging members to stay ahead with emerging technologies and process innovations.

Networking Opportunities

Connect with manufacturers, exporters, suppliers, consultants, and global buyers at industry trade shows, exhibitions, and business forums curated or supported by ICPMA.

Training, Skill Building & Standards

ICPMA regularly promotes skill development, certification programs, workshops, and knowledge resources to raise quality benchmarks and productivity in the sector.

Global Connect

With growing global demand for Indian corrugated packaging machinery, ICPMA acts as a bridge between Indian manufacturers and international markets, offering market insights and export development support.

Who Can Join?

ICPMA membership is open to:

- Manufacturers of corrugated board & box machinery
- Manufacturers of printing, converting, and finishing equipment
- Automation and control system providers
- Ancillary product suppliers (e.g., adhesives, inks, tools, spares)
- Paper mill and kraft liner suppliers
- Industrial software & IoT firms catering to the packaging industry
- Consultants, traders, and academic institutions working in the field

A Voice that Travels Across the Industry

With a growing footprint and proactive leadership, ICPMA is transforming India's

corrugated machinery industry into a globally respected powerhouse. Through strategic partnerships, advocacy, and a spirit of innovation, ICPMA provides a common voice to common goals.

"In unity, there is strength. ICPMA offers not just a seat at the table, but a platform for transformation." – ICPMA G.C. Committee

How to Join?

Joining ICPMA is simple. Visit the official ICPMA website or reach out to their membership desk to request an application form. Choose from a variety of membership categories based on your business profile.

Email: info.icpma@gmail.com

Website: www.icpma.org

Phone: +91-7428026409




16 17 18 MAY 2025
 PIECC, Moshi, Pune

Join focused event on Corrugated Case Manufacturing, Converting & Package Printing solutions

Show Highlights:



175+
exhibitors



350+
Live Demos



9,000 sqm
Gross Area



1200+
Solutions on Display



12,000+
Visitors



550+
Represented Brands

Display machinery & solutions like

Corrugated Board Making Machines | Corrugated Box Making Equipment | Die Cutting Machines | Die Punching Machines | Paper Corrugating Machines | Sheet Cutting Machines | Lamination Machines | Sheet Pasting & Pressing Machines | Cutting & Creasing Machines | Kraft Paper | Inks & Adhesives | Ancillary Equipment | Testing Equipment and many more...

Platinum Partner



Corrugation Box Machinery Partner



Associate Partner



Corrugation Heating Partner



Leading Corrugated Body



REGISTER TO EXHIBIT



For space booking and sponsorships:
 Vaishali Arya
 +91-99113 35153
vaishali@futuremarketevents.com

Leading Association


Middle East Corrugated Packaging Market Forecasted Robust Growth

*by 2028, Led by Food Segment and Saudi Arabia's Increasing Market Share
January 27, 2024 20:31 ET | Source: Research and Markets*

The Middle East corrugated packaging market is poised for significant growth, driven by factors such as the burgeoning food and beverage sector, the rapid expansion of e-commerce, and a regional shift towards sustainable packaging solutions. Saudi Arabia, in particular, is emerging as a key player, leveraging its Vision 2030 initiatives to diversify its economy and bolster non-oil industries.

Key Highlights

- Corrugated products protect fragile, heavy, bulky, or high-value products during storage and transportation. Multi-layer corrugated packaging adds rigidity to packaged products, making them stronger than regular corrugated boards. The market is expanding to meet the demand for corrugated products in the construction and electronics industries.
- The market for corrugated packaging products is expanding in the Middle East, mainly owing to the growing awareness of the need to lessen the carbon impact of traditional packaging materials. To reduce the use of non-renewable resources by limiting trash output in the nation, the Qatari government launched several green economy programs under the National Vision 2030.
- Strict enforcement of laws banning single-use plastics in the United Arab Emirates, Saudi Arabia, and other countries has increased the need for environmentally friendly packaging solutions, especially paper. The demand for convenience foods is on the rise due to the busy lifestyle of people. As corrugated box packaging keeps moisture away from the products and withstands long shipping times, companies are increasingly adopting it to offer customers better outcomes, especially as a means of secondary or tertiary packaging.
- The reliable, durable, and easily transportable corrugated boxes have been around for over a few years. However, longevity comes with challenges. Corrugated cardboard is made from cellulose fibers, virgin or recycled from used corrugated cardboard or other materials. The corrugated

board industry is challenged with soaring raw material prices and bottlenecks in raw material supply. Severe shortages and unprecedented price increases push manufacturers to the brink of closure.

- The COVID-19 pandemic impacted the packaging industry negatively, resulting in lockdowns, corporations shifting their sourcing away from China, and reconsidering packaging materials. Despite a significant effect on the supply side of packaging, considerable growth in the end-user demand in specific applications significantly expanded the scope of the corrugated packaging industry.

1. Executive Summary

The Middle East corrugated packaging market was valued at approximately USD 6.42 billion in 2023 and is projected to reach USD 7.44 billion by 2028, growing at a CAGR of 2.58% cite turn search. This growth is underpinned by increasing demand in sectors such as food and beverage, e-commerce, and electronics, coupled with a regional emphasis on sustainable and recyclable packaging materials.

2. Market Overview

2.1 Definition and Scope

Corrugated packaging involves the use of corrugated fiberboard to create durable and lightweight packaging solutions. Its applications span various industries, including food and beverage, electronics, personal care, and more, offering protection and sustainability.

2.2 Market Size and Forecast

- **2023:** USD 6.42 billion.
- **2028:** USD 7.44 billion.
- **CAGR:** 2.58%.

The market's growth trajectory is influenced by factors such as urbanization, increased consumer spending, and a shift towards eco-friendly packaging solutions.

3. Key Market Drivers

3.1 Food and Beverage Industry Expansion

The food and beverage sector is a primary consumer

of corrugated packaging in the Middle East. Rapid urbanization, a growing expatriate population, and an increase in tourism have led to higher consumption of packaged foods. For instance, the UAE's online retail food sales surged from USD 2.557 billion in 2019 to USD 5.705 billion in 2022.

3.2 E-commerce Growth

The rise of e-commerce platforms has significantly impacted packaging demands. In Saudi Arabia, e-commerce sales have been growing at an average of 60% annually across various segments, including media products, apparel, and footwear cite turn search¹. This surge necessitates robust and adaptable packaging solutions to ensure product safety during transit.

3.3 Sustainability Initiatives

Environmental concerns and regulatory measures are influencing packaging choices. Countries like the UAE and Saudi Arabia are implementing policies to reduce single-use plastics, promoting the use of recyclable materials like corrugated cardboard.

4. Market Segmentation

4.1 By Application

- **Food and Beverage:** Dominates the market due to high consumption rates and stringent packaging regulations.
- **Electronics:** Growing demand for protective packaging solutions.
- **Personal Care and Household Goods:** Increased demand for sustainable and aesthetically pleasing packaging.

4.2 By Material Type

- **Recycled Corrugated Boxes:** Gaining popularity due to environmental benefits.
- **Virgin Corrugated Boxes:** Preferred for packaging sensitive products requiring higher strength.

5. Regional Insights

5.1 Saudi Arabia

Saudi Arabia holds a significant share of the Middle East corrugated packaging market, driven by its Vision 2030 initiative, which aims to diversify the economy and promote non-oil sectors. The country's investment in food manufacturing and e-commerce has led to increased demand for corrugated packaging solutions.

5.2 United Arab Emirates

The UAE's corrugated packaging market is experiencing rapid growth, fueled by urbanization, a thriving tourism sector, and a strong emphasis on sustainability. Government initiatives aimed at reducing plastic usage are promoting the adoption of paper-based packaging solutions.

6. Competitive Landscape

The Middle East corrugated packaging market features a mix of local and international players. Key companies include:

- Arabian Packaging Co. LLC
- Queenex Corrugated Carton Factory
- United Carton Industries Company (UCIC)
- Napco National
- Falcon Pack

These companies are focusing on innovation, sustainability, and expanding their production capacities to meet growing demand.

7. Challenges and Opportunities

7.1 Challenges

- **Raw Material Costs:** Fluctuations in raw material prices can impact production costs and profitability.
- **Supply Chain Disruptions:** Global events and logistical issues can affect the timely supply of materials and products.

7.2 Opportunities

- **Technological Advancements:** Adoption of technologies like fit-to-product (FtP) and box-on-demand is optimizing packaging efficiency and reducing waste.
- **Sustainable Packaging Solutions:** Growing environmental consciousness among consumers is driving demand for eco-friendly packaging options.

8. Future Outlook

The Middle East corrugated packaging market is set to continue its growth trajectory, driven by:

- Ongoing urbanization and population growth.
- Expansion of the food and beverage industry.
- Increased e-commerce activities.
- Government initiatives promoting sustainability.

Companies that invest in innovative, sustainable, and efficient packaging solutions are likely to gain a competitive edge in this evolving market. ■

Corrugation Machine with Big Deckle (4 Metre): The Next Generation of Packaging Power

In the corrugated packaging industry, machine width (deckle size) plays a vital role in determining production capacity and efficiency. While 3.5-metre deckle machines were once the standard in large-scale corrugation plants, the industry is now shifting toward the more advanced and efficient 4-metre deckle corrugation machines. These machines represent the latest technology, setting new benchmarks in productivity and versatility.

What is a Deckle in Corrugation?

The deckle refers to the maximum width of the paper roll that a corrugation machine can handle. A wider deckle allows for broader corrugated boards or multiple smaller sheets to be produced simultaneously, improving overall throughput.

Why 3.5 Metres is Now Considered Outdated

For many years, 3.5-metre corrugation machines were the workhorses of the industry. However, they come with certain limitations:

- **Lower Output Efficiency:** Reduced sheet width means fewer boxes per run.
- **Limited Flexibility:** Less optimal for very large-format boxes or multi-size simultaneous runs.
- **Higher Operating Costs Per Unit:** Narrower widths mean more runs, more waste, and more downtime for roll changes.

As demand for bulk packaging and custom-sized boxes continues to grow, manufacturers are seeking more scalable and advanced solutions.

The 4-Metre Deckle Corrugation Machine: A Technological Leap

The 4-metre big deckle machine represents the new era in corrugated board production. Built for high-capacity output, these machines are engineered to outperform and outlast older setups.

Key Advantages Over 3.5-Metre Machines

- **20% Increase in Width = Higher Output:** With a full 4000 mm deckle, operators can produce more board per run or multiple sizes side-by-side.
- **Reduced Waste:** Wider boards mean better material utilization and fewer offcuts.
- **Fewer Roll Changes:** Longer production runs with less downtime.



- **Future-Proof Technology:** Designed to integrate with modern automation, control systems, and inline finishing units.

Features of the Latest 4-Metre Machines

- Heavy-duty steel frame for high-speed, continuous operation
- Advanced heating systems (steam or electric)
- Precision glue application with automatic control
- Servo-driven slitter scorer and rotary cutter options
- Touchscreen HMI and PLC-based controls
- Energy-efficient motors and components

Applications for 4-Metre Machines

- Heavy-duty cartons for industrial goods
- Furniture and home appliance packaging
- Wide-format shipping containers
- Bulk box production with multi-size flexibility

Conclusion

The transition from 3.5-metre to 4-metre deckle corrugation machines marks a major upgrade in packaging production. With increased speed, greater flexibility, and improved efficiency, the 4-metre machines are fast becoming the industry standard for high-performance corrugation. For packaging plants looking to stay ahead of the curve, investing in this new generation of machinery is not just a smart move—it's a strategic one. ■

Karnataka's Rapidly Growing Corrugated Packaging Industry

Source: *The Hindu*



Warnataka, particularly its capital Bengaluru, is emerging as a significant hub in India's corrugated packaging industry, driven by rising industrial demand, favorable government policies, and a dynamic ecosystem of manufacturers and suppliers.

A Booming Sector

India's corrugated packaging market is currently valued at around ₹50,000 crore, with a projected annual growth rate of 10–12% over the next decade. Karnataka plays a crucial role in this upward trajectory. The increasing need for protective, cost-effective, and sustainable packaging—especially in e-commerce, FMCG, electronics, pharmaceuticals, and food industries—has driven rapid growth in the state.

Industrial Ecosystem in Karnataka

Karnataka's strong industrial base, home to tech parks, manufacturing hubs, and logistics networks, makes it ideal for packaging production and distribution. Bengaluru alone hosts a large number of corrugated box manufacturers who cater to domestic and export markets. The state is also home to notable players like:

- **Manjushree Technopack** – One of India's largest

rigid plastic packaging companies with facilities in Karnataka.

- **Karnataka Corrugated Box Manufacturers Association (KACBMA)** – Established in 1979, this body represents over 300 members and works to enhance industry standards, training, and advocacy efforts.

Focus on Sustainability and Innovation

With growing global and domestic awareness around eco-friendly packaging, Karnataka's industry players are increasingly investing in:

- Recyclable and biodegradable corrugated materials
- Water-based inks and coatings
- Sustainable supply chain practices

Government Support and Outlook

Karnataka's government has introduced initiatives to support MSMEs in packaging and manufacturing, offering:

- Financial incentives.
- Infrastructure support in industrial parks.
- Skill development programs.

With continued investment, increasing demand, and a commitment to sustainability and innovation, Karnataka is poised to become one of India's leading corrugated packaging hubs in the years to come. ■

What's New in Corrugating Roll Design?

1. High-Performance Flute Profiles

The latest generation of corrugating rolls, such as CorruPlus® and Narrow Flute Rolls, are designed for high-speed production lines without compromising board quality. These profiles reduce paper consumption while maintaining or even improving compression strength and rigidity.

Key Features:

- Reduced flute height with optimized pitch to deliver higher flat crush and edge crush resistance
- Minimal washboarding on top liners—critical for high-quality flexo post-print
- Ideal for microflute applications (F, N, G flutes) in retail-ready packaging or e-commerce

Why it matters: Lighter flute profiles enable thinner board combinations, reducing material use and shipping costs without compromising performance.

2. Enhanced Thermal Efficiency

Modern corrugating rolls are now engineered with improved thermal conductivity, ensuring even heat transfer across the flute profile. Some designs incorporate laser-structured surfaces that accelerate heat-up and reduce condensation, especially in high-humidity environments.

Benefits:

- Faster bonding of the liner and medium
- Reduced delamination and warp issues
- Better performance with low-grammage papers and recycled fibers

3. Customizable Tooth Geometry

Tooth geometry—the peaks and valleys of the fluted roll—is being refined using advanced CNC machining and digital modeling. Manufacturers now offer custom flute shapes to optimize performance for specific board combinations, machine speeds, or printing requirements.



Example: Corrugating rolls with steeper tooth angles provide improved compression strength, while rounded flute crests reduce damage to delicate liners.

4. Low-Pressure / Pressureless Corrugating Rolls

One of the most significant shifts in corrugating roll design is the move toward pressureless flute formation. This technology reduces the mechanical force needed to form the flute, relying more on precise heat and geometry.

Advantages:

- Less wear and tear on rolls and bearings
- Lower energy consumption
- Better performance with lightweight and recycled papers
- Consistent flute formation even at ultra-high speeds

Surface Technology and Coating Advancements

Corrugating rolls are no longer just about shape—they're about surface science. High-performance coatings are being applied to improve roll lifespan, reduce sticking, and improve heat transfer.

Leading Coating Technologies Include:

- Tungsten Carbide Coatings – Provide extreme durability and wear resistance

- Hard Chrome – Economical and commonly used for standard flute production
- Advanced Ceramic Coatings – Enhance performance under harsh operating conditions

What This Means for Operations:

- Longer roll life—some profiles lasting up to 3x longer
- Cleaner flute formation, reducing waste and scrap
- Lower maintenance and extended replacement cycles

Data-Driven Design and Predictive Modeling

Thanks to modern 3D simulation tools, corrugating roll manufacturers can now model flute formation digitally, simulating how paper fibers will behave under pressure and heat before any tooling is manufactured.

This leads to:

- Faster time-to-market for new flute profiles
- Custom rolls that are tailored to your paper grades and machine speeds
- Reduced trial-and-error on the production floor

Incorporating IoT sensors in newer rolls is also becoming a trend. These sensors monitor temperature, pressure, and wear patterns, providing valuable data for predictive maintenance and quality control.

Case in Point: CorruPlus® from BHS Corrugated

BHS Corrugated has emerged as a leader in the corrugating roll space with its CorruPlus® design. Engineered for high-speed lines and lightweight papers, CorruPlus® rolls offer:

- Reduced paper cracking and flute blowouts
- Enhanced bonding with minimal steam usage
- Flute geometry that supports post-print applications without liner deformation
- Reduced energy use due to optimized roll surface and flute contact area

Combined with their NICE Rolls® service program, users benefit from full lifecycle support, including wear analysis, regrinding, and quick changeovers.

The Sustainability Angle

Corrugated packaging is already one of the most

recycled materials on the planet, but newer roll designs push sustainability even further.

How?

- Allowing lighter board grades without performance loss
- Reducing steam and energy usage through better thermal transfer
- Minimizing scrap rates and waste during changeovers and starts
- Extending roll life = fewer replacements = lower carbon impact

These innovations help manufacturers meet sustainability targets without sacrificing speed or output—a crucial balance in today's environmentally conscious market.

Challenges and Considerations

While the benefits are clear, upgrading corrugating rolls comes with considerations:

- Upfront investment in new roll sets and compatible machine parts
- Training and calibration required for optimal performance
- Compatibility with existing flute profiles and customer requirements

However, most manufacturers see ROI within months, thanks to material savings, reduced downtime, and higher board quality.

Final Thoughts: A Small Change with Big Impact

The corrugating roll might seem like a humble piece of equipment, quietly doing its job behind the scenes. But as this article demonstrates, it is one of the most powerful levers a corrugated box plant can pull to improve performance, reduce costs, and stay competitive in a fast-evolving market.

From new flute geometries and pressureless forming to high-tech coatings and data-integrated tools, today's corrugating rolls are anything but old-fashioned.

If your plant is still running older 3.5-meter lines or standard flute profiles, now might be the time to explore what a next-gen 4.0-meter line and advanced roll design can do for your operation.

After all, sometimes the path to better packaging isn't a giant leap—it's a smarter roll. ■

JOINTLY ORGANISED BY



ICPMA
Indian Paper Corrugated & Packaging
Machinery Manufacturers Association

Futurex®
LET'S BUILD THE FUTURE TOGETHER
Futurex Trade Fair & Events Pvt Ltd

CORRU PACK PRINT INDIA

07-08-09
MARCH 2024

Yashobhoomi, India International
Convention and Expo Centre (IICC),
Dwarka, New Delhi



2024
POST SHOW
REPORT

The Premier International Exhibition
on Corrugation Industry.

Corru Pack Print India Expo lives up to its legacy, receives an overwhelming response



Corru Pack Print India Expo, an exhibition on the Corrugated packaging Machinery Industry in India and all the verticals of corrugation and allied industries, organized by Indian paper corrugated & packaging machinery mfgs. Association (ICPMA) and jointly organized by Futurex Trade Fair & Events, took place from 7-9 March at IICC (Yashobhumi), Dwarka, New Delhi. The vibrant realm of the Corru Pack Print India Expo illuminated the halls of IICC (Yashobhumi), Dwarka, New Delhi, during the three exhibition days. Bringing together stalwarts and innovators from across India and abroad, this event served as more than just a gathering; it was a catalyst for introductions, relationships, and global commerce. Exhibitors resonated with satisfaction, labeling it as a pivotal platform for amplifying sales and fostering networking endeavors, both old and new.

Echoes of contentment filled the air as exhibitors expressed their delight, deeming the expo a focused beacon within the corrugation industry, expressing satisfaction with the quality of interactions and the genuine interest from potential buyers. Substantial machinery sales, numerous orders, and lucrative deals sealed during the three-day extravaganza. Impressively, over 100 machines found buyers, and 100+ deals closed attesting to the expo's efficacy as a marketplace for industry transactions. "Congratulations to the organizers for orchestrating such a spectacular show," they lauded, as footfalls echoed the resonance of prosperity within the industry.

Amidst the whirlwind of activities, live demonstrations

mesmerized visitors, offering them a firsthand glimpse into the realm of machinery prowess. "A true testament to the burgeoning market trends," they marveled, recognizing the significance of this expo in shaping the trajectory of India's corrugated paper packaging sector.

Nestled in the heart of Delhi, the venue stood as a testament to modernity and convenience, offering exhibitors and visitors alike a seamless experience amidst top-notch infrastructure and amenities. With connectivity that rivaled its grandeur, the venue beckoned industry professionals with open arms, embodying the spirit of accessibility and progress.

The event concluded on a high note welcoming 120 exhibitors and 6800 visitors from Corrugated box Industry from India and abroad to connect face-to-face, build business relationships, network and learn from industry experts.

The Technical Seminar took place on 8th March 2024 converging corrugators from across the country, on the theme:

"Latest Technologies for Corrugated Industry in India" and "Corrugation is indispensable for Supply Chain & Logistics". With the Thought Leaders of Corrugation Industry, it successfully brought together industry experts and delegates to meet, connect and share insights on the latest technologies of the corrugated packaging industry.

The next edition of Corru Pack Print India Expo is scheduled to take place from 19-22 March 2026 at BIEC, NESCO, Mumbai. Find out more details about the event on corrupackprintindia.org ■

BHARAT PRINT EXPO 2025

**THE TOTAL
PRINT & PACKAGE
CONVERTING
EXHIBITION**

**24 25 26
APRIL 2025
BIEC, BENGALURU**



www.BharatPrintExpo.com

Supported By:



Organised By:



In Association With:



Co-Organised By:



Scan to Register



FUTURE IS ECO-TECH PAMEX

International Exhibition on Printing and Allied Machinery Industries

**27 28 29 30 JANUARY 2026
BOMBAY EXHIBITION CENTRE, MUMBAI, INDIA**



**THE FUTURE IS
ABOUT BALANCING
TECHNOLOGIES WITH
SUSTAINABILITY**



**Organised By:
ALL INDIA FEDERATION
OF MASTER PRINTERS**

**In Association With:
PRINT-PACKAGING.COM
PRIVATE LIMITED**



Print-Packaging.com Private Limited

**Mumbai : F-101, Tower No. 7, First Floor, International Infotech Park,
Vashi Railway Station, Vashi, Navi Mumbai, 400 705.
Tel : 91-22-27812093
Email : info@print-packaging.com**

Scan to Register



WWW.PAMEX.IN

Hybrid Heating System for High Speed Machines & Automatic Plants

Gas Fired Steam Generator



3 Pass Reverse Flame Technology



Cyclonic Steam Separator Assures Steam Dryness upto 90%



High Thermal Efficiency & Uniform Heat Transfer

Electric Thermic Oil Heating System / Gas Heating optional



Eliminates the need of a Boiler



100% Pollution free



Extremely compact, occupies minimum space



Push Button Start, No Operator Required



No Maintenance Required

Patent recieved from Government of India

Highest recognition for innovation and excellence Shri B.K. Doshi Award 2023 presented by FCBM More than 150 Installations

Infrared Burners with Safety Control Panel



Heavy duty Infra Red Gas Burners for maximum heating efficiency with Fully Automatic Ignition System



Special alloy high temperature wire mesh Burners help transmit uniform heat



Digital Cyclic Timers & Temperature Control for consistent heating and gas savings.



ELECTRO HEAT ENGINEERS

HOT-TEMP®

Inventors | Consultants | Manufacturers

(A Unit of Radiant Heating Systems Pvt. Ltd.)
 Plot No. 278, Sector - 8, IMT Manesar, Haryana - 122050
 Shivansh Jhingan - 9810014426 | Ashu Jhingan - 9818437434
 shivansh@electroheat.in | ashujhingan@yahoo.com

Kalbro Vacuum Pumps

Performing With Quality

Learn more about what Kalbro can do for you on www.kalbro.com

Product Line



Industrial Solution

We provide innovative & sustainable solutions For

- ✓ Print & Paper
- ✓ Packaging
- ✓ Electronic Manufacturing
- ✓ Woodworking
- ✓ Glass Manufacturing
- ✓ Vacuum Forming
- ✓ Wood Lamination
- ✓ Food Freeze Drying
- ✓ Vacuum Packaging

HIGH QUALITY, SUSTAINABLE SOLUTIONS

Services

- ✓ Customized central vacuum systems
- ✓ On site service and repair
- ✓ Exchange Offers for old pumps with new pumps
- ✓ Refurbished vacuum pumps



 **9953 028 326**

Plot No. 5A, Western Industrial Estate, Sector 50,
NIT-2, Faridabad, Haryana - 121001
www.kalbro.com , sales@kalbro.com

KALBRO
PUMPS
Performing With Quality