



R.N.I. No. MAHENG/2012/45652

PLASTISCOPE

The Official Journal of the Organization of Plastics Processors of India

Volume No. 13

• Issue No. 08

• Mumbai

• February 2025

A WIDE RANGE OF HOUSEWARE PRODUCTS IN INDIA

*Choose from the 3000 exquisite household
products from the world of Cello*



GLASSWARE



VACCUUM STEEL BOTTLES



LUNCH PACKS



KIDZBEE



COOKWARE



COPPERWARE



STORAGE



APPLIANCES



HOT POTS



VACCUUM STEEL FLASK



CLEANING AIDS



INSULATED BOTTLES



DINNERWARE

All Cello Products are made from BPA free food grade plastic.

For Corporate Enquiries:

(WEST) # Maharashtra / Mumbai Manish 9699624460, Samir 98336 05023

Gujarat Vimal 8905579701, (NORTH) Nancy 7906472310, Sandeep 8920995472,

Vivek 9911625261, Vipin 9780086965, (SOUTH) P. Sunil 9972206432, (EAST) Surajit 9007477833

Email: cello.sales@celloworld.com | Shop online at www.celloworld.com

Scan to order



[celloworldofficial](#)

[cello_world](#)

[celloworldofficial](#)

[celloworldindia](#)

[amazon.in](#)

[Flipkart](#)

Download the Cello
mobile app from

[Google Play](#) [App Store](#)



SHEAR CONTROL. SHEER BRILLIANCE.

DISCOVER A NEW WORLD OF COMPOUNDING
INNOVATION AT STEERWORLD.COM

STEER's advanced Twin Screw Extruder platforms come with patented task-oriented special elements that provide better control over shear, kneading and stirring.

They deliver superior quality, process efficiency and open up a world of new possibilities with their ability to handle shear-sensitive and other difficult to manage materials.

STEER's OMEGA 1.71 Do/Di high volume, high torque, intelligent processor is perfect for shear-sensitive and low bulk density materials.



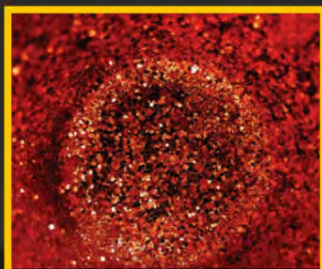
COLORS



AUTOMOTIVE LIGHTWEIGHTING



HIGHLY FILLED MASTERBATCHES



EFFECT PIGMENTS



BIO MATERIALS



NATURAL FIBERS

STEER's MEGA SPECIAL 1.55 DO/DI co-rotating twin-screw extruder is perfect for colours, legacy engineering thermoplastics, blends and high volume manufacturing.

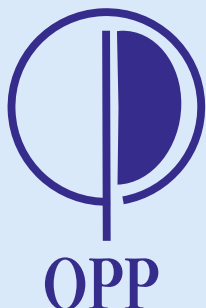
About STEER



For more information, contact sunil.dutt@steerworld.com or call +91 99001 01518

FROM THE PRESIDENT'S DESK

Mr. Pradeep Rathod



CONTENTS

| | |
|---|----|
| From the President's Desk | 3 |
| News From India | 26 |
| Plastic Products and New Technologies | 39 |
| Plastic Raw Materials | 50 |
| Plastic Machinery | 53 |
| Circular Economy/ Bio-plastics/ Recycling | 57 |

Dear Members,

Greetings from Organization of Plastics Processors of India!

I refer to my message in January 2025 issue of Monthly Digital Plastiscope. In this issue I had given my expectations from the Union Budget 2025-2026.

The Finance Minister introduced the Budget 2025-26 in the Parliament on 1st February 2025. It is observed that most of the expectations mentioned in January 2025 issue were part of the Union Budget 2025-26 presented by the Finance Minister.

Key amendments include:

- Reliefs in Personal Taxation
- International Tax – SEP related, FII Taxability, etc.
- Transfer Pricing
- Rationalisation of TDS/TCS rates
- IFSC related amendments
- Clarity on certain provisions including that of Trusts
- Changes to Custom duty rates

Additionally, the budget focuses on infrastructure development, healthcare, education, green initiatives, and the digital economy.

With respect to the Plastic Industry only the following 2 changes in Customs Duty have been done:-

| CTH | Description of goods | Rate | |
|------|---|------|-----|
| | | From | To |
| 3920 | Other, plates, sheets, films, foil and strip, of plastics, non-cellular and not reinforced, laminated, supported or similarly combined with other materials | 25% | 20% |
| 3921 | Other plates, sheet, film, foil and strip of plastics | 25% | 20% |

As you are aware Event - "Pearls Of Wisdom From Startup Founders" is scheduled on Friday 7th March 2025 at Jio World Convention Centre, BKC, Mumbai.

The Speakers at this event and their topics of the presentations encompass all facets of a successful Business Venture.

I appeal to all of you to register for the event scheduled on Friday 7th March 2025. This is a unique event and you should not miss the same.

With Best Wishes,

Pradeep Rathod
President, OPP

Printed, Published and Edited by:

DEEPAK LAWALE on behalf of **ORGANIZATION OF PLASTICS PROCESSORS OF INDIA**, Printed at **DESIGN WORLD CREATIONS**, Unit No. 204, A-Wing, Suashish IT Park, Off. Dattapada Rd, Borivali East, Mumbai - 400 066 and Published from ORGANIZATION OF PLASTICS PROCESSORS OF INDIA, 404/405, Golden Chambers, New Link Road, Andheri (West), Mumbai 400 053.

Editor: **DEEPAK LAWALE**



OPP

Organization Of
Plastics Processors Of India

Event -

"Pearls Of Wisdom From Startup Founders"

Friday 7th March 2025
Jio World Convention
Centre, BKC, Mumbai
9:30 am to 5:30 pm



STARTUP
INDIA
STAND UP INDIA

STARTUP INDIA

Startup India is a flagship initiative of the Government of India, intended to catalyse startup culture and build a strong and inclusive ecosystem for innovation and entrepreneurship in India.

Organization of Plastics Processors of India has organized an event - "Pearls Of Wisdom From Startup Founders" on Friday 7th March 2025 at Suite 204 A+B, Jio World Convention Centre, BKC, Mumbai from 9:30 am to 5:30 pm.

Hanmantrao Gaikwad

Founder, Chairman & Managing Director,
BVG India Limited

Jeenendra Bhandari

Chairman of JIIF, at JITO FY 24-26

Dr. Vivek Tandon

Founder, Revalyu

Keynote Speaker

Identifying the next Soonicorn

Chemical and Mechanical recycling of PET
Plastic: India the global leader

Jitesh Dadlani

Founder, Ishitva Robotic Systems

Building an Innovation driven venture for Plastic Sector in India

Amit Tandon

CEO, POLYCYCL

Chemical Recycling: Paving the Path for a Circular Economy in India

Vishnu Korde

Founder, DeCloud Labs

From Automation to Autonomy: The Rise of Intelligent Systems

Teja Edara

Co-Founder and CEO, BPR Hub

The Future of Compliance in Manufacturing: Leveraging Technology to Turn Compliance into a Competitive Advantage

Anshumaan Bansal

Founder, YogaAmie

Balancing Tradition and Technology: How AI Can Amplify Your Business Strengths

TranZact

Digitizing SME Manufacturing: A Mission Critical for India's Economic Ascent

Param Chheda

Director, Hekaté Industries Pvt. Ltd

The Startup Blueprint: From Idea to Execution!

Sachin Rane

CEO, Team24 Foods and Beverages Pvt. Ltd.

Edge Over the Competition: Identifying Gaps for Market Domination

Startup Founders will make presentations on the following:-

- * Reasons for choosing specific activity by the Startup
- * Challenges faced
- * Successful navigation of the challenges faced by the Startups
- * Advice to new entrepreneurs
- * How India should brand itself as a Global Leader in Startups and take the Center Global Stage
- * How we can work together in India to create successful Global Companies
- * Understanding the competitive landscape
- * Strategic Workforce Planning and Talent Management
- * Strategic Approach to Change Management

Designed By Polymerupdate.com

Target Audience:

- * Gen Next Aspiring to Establish Startups
- * Established Companies Contemplating diversification
- * Faculty and Students of "Startup Cells" of Management / Business Schools
- * Aspiring Management Executives
- * Venture Capitalists
- * Investors

Participation Fees:

Fees per participant – Rs. 5,500/- + GST @18%

(Registration Fees includes Tea / Coffee, Lunch and Full Day Attendance)

Registration will be on first come first serve basis. Please fill up the Application attached herewith and mail to:-

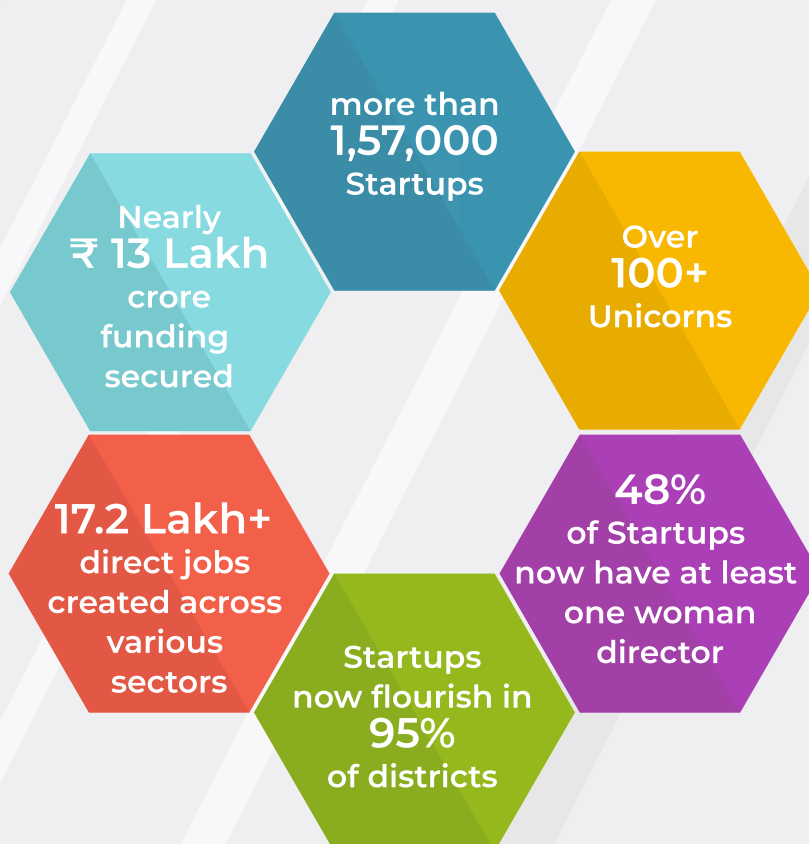
Deepak Lawale,
Secretary General

ORGANIZATION OF PLASTICS PROCESSORS OF INDIA

404/405, Golden Chambers, New Link Road, Andheri (West), Mumbai – 400053. INDIA

MOB: - +91 9322591715, Tel.: +91-22-66923131/32

Email: secretarygeneral@oppindia.org;



Designed By Polymerupdate.com



OPP

Organization Of
Plastics Processors Of India

Delighted to inform you that OPPI is organizing a Business Delegation to Qatar from 20th to 24th April 2025.

OPPI has done a comprehensive study of the various Gulf Countries to ascertain the most favorable destination country to establish Plastic Processing Factories.

It has been observed that the following parameters make Qatar the most favorable country for establishing Plastic Processing units beyond the shores of India:-

Qatar is located in the heart of the Gulf, at the intersection of three continents

| | |
|------------------------|---|
| Population | 3 million |
| GDP(PPP) per capita | -USD97,000 among the world's richest |
| Internet penetration | 99%of total population among the world's highest |
| Natural gas production | 170 billion m3 among the world's largest LNG exporters |
| Healthcare system | 77.4 doctors per 10,000 population among the world's best |
| Credit rating | Aa2 (Moody's) QAR pegged to USD at a rate of 3.64 |

• **QatarEnergy** has the mandate for the supply /distribution of the products produced by its subsidiaries including QAPCO.

• **Qatar Free Zones (QFZ)** can support with the provision of infrastructure facilities and regulatory framework for establishment of the companies and businesses in Qatar Free Zone.

• **Cost of land and also the lease for the same.** QFZ starting lease rate for industrial land in Um Al Houl Free Zone site is Qatari Riyals10/sqm/-year. Lease duration 20-25 years.

• **Tariff of Power Supply.** QR 0.13/ kwh or ~3.6 US cents/kwh as per Qatar General Electricity and Water Corporation (Kahramaa) tariff rates for industrial consumers. Investors will enter into electricity and water supply / SPA agreement directly with Kahramaa. QFZ provides 11 KV / 50 Hz power supply connection at the battery limits of the allocated plot.

• **Minimum and maximum plot size.** Typical min. size: 10,000 sqm. approx., maximum plot area will depend upon project requirement and availability of developed land.

- **Availability of water and tariff for the same.**

Desalinated water (potable water quality) is supplied by Kahramaa. Water connection tie in point will be at battery limits of the plot. End user will enter in direct agreement with Kahramaa.

Kahramaa's current tariff for water is QR 5.4/ m³ or ~1.5\$/ m³.

- **Availability of storm water drainage system.**

Each plot has access / connection to potable water, foul domestic sewerage, fire water, storm water upon completion.

- **Availability of skilled manpower.**

Qatar has invested in the knowledge economy's four pillars to attract the best companies and brightest talent in the world.

Qatar has attracted companies like Google, Microsoft and Thales.

Knowledge-based economy is built on four pillars: human capital; digital infrastructure; an enabling regulatory environment; and a critical mass of existing innovation hubs and clusters. Qatar has created an economy that is capable of growing the industries of tomorrow.

- **Nearness to sea port with all infrastructure.**

Strategically Located: Qatar sits in the heart of the Gulf with access to GCC and the wider Middle East, and over 60% of the world's population within eight hours fly-time. Qatar Free Zones connect the investors to key global markets and supply chains through Qatar's award-winning air and seaports, which are both on the doorstep of Free Zones.

- **Availability of education, healthcare, residential houses.**

Ranked the safest country in the world with extremely low crime rates, coupled with world-class schools and universities, cultural attractions, great recreational facilities, and a global cuisine by leading restaurateurs from around the world.

- **Corporate Taxation Structure**

Qatar State tax obligations including withholding tax does not apply to free zone entities and there are no corporate tax filing requirements in the QFZ. QFZ entities currently enjoy a 20-year corporate income tax benefit, which may be extended subject to the approval of the Council of Ministers.

With respect to custom duties, as per QFZ Law, QFZ entities are exempted from custom duties when importing into the QFZ and exporting outside Qatar. However, goods and products exported from the QFZ to the local market within Qatar will be subject to applicable custom duties.

I write to cordially invite you to join the delegation. May I request you to confirm your participation through the attached registration form. For registration and further information, kindly contact the undersigned.

To defray part of the secretarial expenses, we are obliged to charge a "Delegate Fee (Per Person)" of INR 28,000 + 18% GST. This "Delegate Fee" is meant for meeting a part of the organizational costs only. All travel related expenses- Airfare/ Personal/ Local Travel-related, and others have to be borne by the delegates themselves.

DEEPAK LAWALE, SECRETARY GENERAL ORGANIZATION OF PLASTICS PROCESSORS OF INDIA



404/5, Golden Chambers, New Link Road, Andheri (W),
Mumbai - 400 053 INDIA



MOB:- +91 9322591715
Tel.: +91-22-66923131/32



secretarygeneral@oppindia.org
www.oppindia.org

Designed By Polymerupdate.com



Organization Of
Plastics Processors Of India

STUDY MISSION TO CIPET AND SHIBAURA MACHINE INDIA PVT. LTD., CHENNAI - FRIDAY 11TH APRIL 2025

VISIT TO CIPET, CHENNAI

All Plastic Companies have to recruit persons with background in Plastics Engineering and Technology at different levels. Central Institute of Petrochemicals Technology – CIPET has state of the art laboratories. The centre is an ISO 9001: 2015 certified institution for its Academic and Technology Support Services and the Plastics Testing Centre is accredited by NABL as per ISO/IEC 17025:2005 for Quality Control and Testing of raw materials and products of plastics.

CIPET conducts Post Graduation Programmes in CAD/CAM; Under Graduate Degree Programme; Post Graduate Diploma Programmes; Diploma in Plastics Mould Technology etc.



VISIT TO SHIBAURA MACHINE PVT. LTD., CHEMBARAMBAKKAM, CHENNAI

In the post lunch session the delegation will visit plant of Shibaura Machine India Pvt. Ltd.

Shibaura Machine India Pvt. Ltd. (abbreviated as SMI), is among the leading high-end plastic injection moulding and auxiliary equipment manufacturers in India. SMI is a wholly owned company of Shibaura Machine Company of Japan.

- Learn best practices in manufacturing and automation.
- To gain first-hand exposure to various innovative and good practices that augment the quality and adapt technology.

To defray part of the administrative expenses, the participation fees will be Rs. 4600+GST @18%.

The registration will be confirmed on the receipt of the participation fees and the duly completed application.



Registration will be on first come first serve basis. Please fill up the Application attached herewith and mail to:-

Deepak Lawale, Secretary General – ORGANIZATION OF PLASTICS PROCESSORS OF INDIA

📍 404/405, Golden Chambers, New Link Road, Andheri (West), Mumbai – 400053. INDIA

✉️ secretarygeneral@oppindia.org ☎️ +91 9322591715, Tel.: +91-22-66923131/32



Redefining the Future

FUELLING A POLYMER REVOLUTION

OPaL is fuelling the next revolution in Petrochemicals. Through in-depth insight, latest technology and robust infrastructure, OPaL is playing a key role in the growth of polymer industry and addressing its increasing global demand across a wide range of consumer goods from packaged foods to automobiles.



HDPE Dedicated
(340kTPA)



HDPE / LLDPE
Swing (720kTPA)



Polypropylene
(340 kTPA)



Benzene
(150 kTPA)



Butadiene
(115 kTPA)



PyGas
(165 kTPA)



CBFS
(70 kTPA)

ONGC Petro additions Limited

Reg. Off.: 4th Floor, 35, Nutan Bharat Co-operative Housing Society Limited, R. C. Dutt Road, Alkapuri, Vadodara - 390007, Gujarat, India.

www.opalindia.in

**FUTURE
NEXT**
We are future ready to
make it possible.



KL 3200

Patented Two Platen Injection Moulding Machine

NEW LAUNCH



350 to 8000 Ton

THIS IS THE LARGEST MACHINE
MADE IN INDIA

AN INDUSTRY MARVEL DESIGNED TO PERFORM

With feature-rich and future-ready technology, Windsor has recently launched 3200 ton Injection Moulding Machines with patented two platen technology.

- Higher reliability
- Patented jaw clamping system
- Generous specifications with multiple benefits
- Lubrication free short tie bars



WINDSOR MACHINES LIMITED

Corp. Off.: Plot No. 5402 - 5403, Phase-IV, GIDC Vatva, Ahmedabad - 382 445. Gujarat, (INDIA).

Phone: +91 79 2584 1591/2/3, 3500 2700 | info@windsormachines.com | www.windsormachines.com

INJECTION MOULDING MACHINES | PIPE EXTRUSION LINES | BLOWN FILM EXTRUSION LINES

UNISON



Plastic Granules for Every Application

Certified Quality, Global Presence

The Shakti Plastic Industries Group is pioneers and leading recyclers of plastic waste in India, Actively manufacturing and exporting recycled granules of rPP, rHIPS, rLDPE, rHDPE, etc.



Explore our range of PCR granules

| rPP (Recycled Polypropylene) | rHD (Recycled High-Density Polyethylene) | rLD (Recycled Low-Density Polyethylene) | rPS (Recycled Polystyrene) | rPA (Recycled Polyamide) | rPC (Recycled Polycarbonate) | rABS (Recycled Acrylonitrile Butadiene Styrene) |
|--|--|--|--|---|--|--|
|  |  |  |  |  |  |  |

Recycling is the key to Sustainability

Our Product/Services includes

- Recycled Plastic Granules (PCR)
- Recycled Sustainable Products
- Post-consumer Waste Management
- Extended Producers Responsibility (EPR)
- Industrial Waste Management
- Import & Export of Plastic Scrap and Granules

Our Plant Locations



Palghar,
Maharashtra, India



Indore,
Madhya Pradesh, India



Vadodara,
Gujarat, India



Dubai,
UAE

Contact us:

Email: info@shaktiplasticinds.com

Tel: +91 022 4967 1500 / 01 /02



- Polypropylene (PP)
- High Density Polyethylene (HDPE)
- Liner Low Density Polyethylene (LLDPE)
- Linear Alkyl Benzene (LAB)
- Purified Terephthalic Acid (PTA)
- Mono Ethylene Glycol (MEG)
- 1,3-Butadiene ● Butyl Acrylate



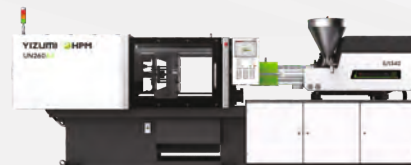
 [instagram.com/ioc_bd/](https://www.instagram.com/ioc_bd/)



D1 Series Two-platen Injection Molding Machine



SKIII Series General-purpose Injection Molding Machine



A6 Series Advanced and Intelligent Injection Molding Machine



P-S3 Series Thin-wall Injection Molding Machine



YR Series YIZUMI Robot for Injection Molding Machine

140+Years of Experience

160+Patents

200+Honors

Yizumi Advanced Processing Technology Pvt. Ltd.

Address: Plot No.1062-1063, GIDC-II, Sanand, Ahmedabad, Gujarat – 382170.

Contact No. : +91-90999 06175

Email address: info.ind@yizumi.com

Website: www.yizumi.com

A world without plastic is entirely possible.
Only, a little inconvenient.



The truth is, replacing this truly versatile material is easier said than done. Be it stainless steel, glass, natural fiber cloth, ceramics or even tree-free paper, what most people do not realise is that the carbon footprint of materials other than plastic is way higher, especially when taken at scale. What we should concentrate on instead is its judicious use through the principle of **reduce, reuse and recycle**.

To know more, follow fnpindia.com



Fight Pollution Not Plastics - A Reliance initiative, supporting Indian Centre for Plastics in the Environment (ICPE) to eradicate plastic pollution and creating awareness about responsible use of plastics.

Collective Sustainability. Shared Success.

In today's ever-changing business environment, sustainability isn't just a buzzword; it's the very foundation of our future progress.

At **Reliance Polymers**, we are deeply committed to shaping a sustainable tomorrow for our industry, both in terms of polymer manufacturing as well as its innumerable applications. Partner with us as we lead the way towards ensuring lasting success through **sustainable practices and products**.



www.reliancepolymers.in



Reliance
POLYMERS



**RoHS, Heavy
Metal Free and
REACH
Compliant**

PVC Colour Masterbatch

**KEY APPLICATION: PVC WINDOWS,
DOORS, ROOFING**

- Excellent weatherability.
- Easy to disperse.

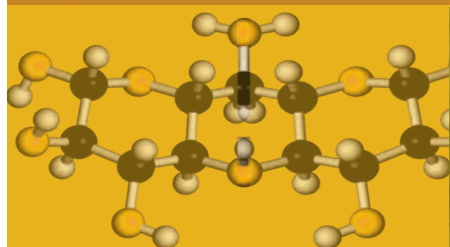
📞 +91 77158 17733

✉️ marcom@welset.com

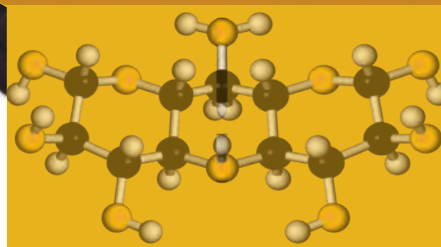
🌐 www.welset.com



KLJ GROUP
SINCE 1967



*Trust built on
performance*



Total Solution in Plasticizers & Polymer Compounds

PLASTICIZERS

PHTHALATES | ADIPATES | TRIMELLITATES | CITRATES | STEARATES | SEBACATES |
DIBENZOATES | TERE PHTHALATES | MALEATES | POLYMERIC |
BIO PLASTICIZERS | ESBO

CHLORINATED PARAFFIN (CP)

vLCCP | LCCP | MCCP | SCCP

POLYMER COMPOUNDS

POLYPROPYLENE | ENGINEERING POLYMER | PVC | XLPE-SIOPLAS | XLPE-PEROXIDE |
SEMI CONDUCTIVE | EPR/XLPO | ZHFR | PO | HDPE | TPR | TPE | EVA |
MASTERBATCH - PVC, PE, UNIVERSAL & FUNCTIONAL (UV, AT, AR, FR)

BENZ PRODUCTS

BENZYL ALCOHOL | BENZALDEHYDE | BENZYL CHLORIDE | DI BENZYL ETHER |
BENZYL BENZOATE | BENZYL ACETATE

CHLOR ALKALI

CAUSTIC SODA PRILLS | CALCIUM CHLORIDE | CHLORINATED PARAFFINS
| HYDROCHLORIC ACID | SODIUM HYPOCHLORITE

ACID & ACID ANHYDRIDES

PHTHALIC ANHYDRIDE | MALEIC ANHYDRIDE | BENZOIC ACID

PETROCHEMICALS & POLYMER DISTRIBUTION | REAL ESTATE DEVELOPMENT

Corporate Office:

KLJ House, 8A, Shivaji Marg, Najafgarh Road, New Delhi-110 015, India
Tel.: +91 11 41427427/28/29, Email: delhi@kljindia.com



Branch Offices:

Mumbai | Chennai | Kolkata | Ahmedabad (India)
Singapore | Dubai



Plants:

Silvassa | Bharuch | Agra (India)
Thailand | Qatar

www.kljindia.com



40+
YEARS OF
BUILDING
TRUST

Kasta®
PIPES
SMART PIPING SOLUTIONS

THE BACKBONE OF RELIABLE PLUMBING -KASTA UPVC PIPES

► APPLICATIONS

- Kitchens, sinks and laboratories
- Water connection for bathrooms
- Potable cold water supply
- Industrial process lines
- Used for salt water
- Swimming pools
- Sugar, paper and distillery industry
- Coal washing & ash handling
- Ring lines/ Down take lines





Organization Of
Plastics Processors Of India

The 37th International Exhibition on Plastics and Rubber Industries

CHINAPLAS 2025 - April 15-18, 2025
at Shenzhen World Exhibition
and Convention Center
(Bao'an), PR China.



Coming up next is CHINAPLAS 2025 - The 37th International Exhibition on Plastics and Rubber Industries - to be held at Shenzhen World Exhibition and Convention Center (Bao'an), PR China from 15th to 18th April 2025.

The delegates will be taken for a visit to YIZUMI plant at Foshan, China.

Organization of Plastic Processors of India has tied up with Tibro Tours Pvt. Ltd. for CHINAPLAS 2025 packages. All Companies booking Tibro Packages CHINAPLAS 2025 through Organization of Plastic Processors of India will be eligible for discount.

Please find attached herewith Tibro's Standard Launched packages based on hotel options. Kindly write to us to secure your travel arrangements on confirmed basis.

Deepak Lawale, Secretary General,
Organization of Plastics Processors of India

404/5, Golden Chambers, New Link Road,
Andheri (West), Mumbai 400053 INDIA
+91 9322 591 715 | +91-22-66923131/32
secretarygeneral@oppindia.org | www.oppindia.org



Organization Of
Plastics Processors Of India

ORGANIZATION OF PLASTICS PROCESSORS OF INDIA

37
YEARS OF
SERVICES TO
PLASTICS
INDUSTRY

SERVICES OFFERED BY OPPI



Deepak Lawale, Secretary General
ORGANIZATION OF PLASTICS PROCESSORS OF INDIA,
404/5, Golden Chambers, New Link Road, Andheri (West), Mumbai – 400053.

Tel: +91-22-66923131 / 66923132 | Fax: +91-22-26736736 | Email: secretarygeneral@oppiindia.org | Website:- www.oppiindia.org



OPP

Organization Of Plastics Processors Of India

ADVERTISEMENT IN DIGITAL **PLASTISCOPE IN WEB EDITION AND FLIP BOOK FORMAT**

Reach your targeted customers with
Advertisement in Digital Issues of Plastiscope.

Digital Plastiscope is read by 1,50,000 readers
consisting of Directors/Owners, Production
Managers, Maintenance Managers/ Engineers,
Sales & Marketing Managers, Materials Managers,
etc. of Companies connected with Plastics.

THE TARIFF +

The tariff for
Full Page - 18.5 cm. X 23.5 cm.
multi-coloured Advertisement
on the inside pages of monthly
Digital Plastiscope is only
Rs. 5000/- + GST @5%.

**For Booking Advertisement
Please Contact**

Deepak Lawale, Secretary General
**ORGANIZATION OF PLASTICS
PROCESSORS OF INDIA**

404/405, Golden Chambers, New Link Road,
Andheri (West), Mumbai - 400053.

MOB:- +91 9322591715,

Tel.: +91-22-66923131/32

Email: secretarygeneral@oppindia.org

A D V E R T I S E M E N T



RACE™

RECYCLING AND COMPOUNDING EXPO

**PLASTICS RECYCLING
WORLD EXPO**
INDIA
plasticsrecyclingexpoindia.com

**COMPOUNDING
WORLD EXPO**
INDIA
compoundingexpoindia.com

**SPACES ARE SELLING FAST!
BOOK YOURS NOW!**

**14 MAY
2025**

10AM – 6PM

**15 MAY
2025**

10AM – 5PM



HALL 4, BEC, NESCO, MUMBAI, INDIA

FREE VISITOR REGISTRATION

WE ARE PROUD TO FEATURE THESE ESTEEMED INDUSTRY LEADERS AS EXHIBITORS



CONTACT US

+91-22-6177 2000 | sales@polymerupdate.com

Brought to you by **POLYMERUPDATE** | **AMI** | Industry Alliance Partner | **CPMA** | Association Partners | **SPC** | **PMMAI** | **INDIAN PLASTICS INSTITUTE** | **IPCC** | Sustainability & Knowledge Partner | **PROJECT MUMBAI** | Media Partner | **mid east information**



OPP

Organization Of
Plastics Processors Of India



HanoiPlas

The 13th Hanoi Int'l
Plastics and Rubber
Industry Exhibition
4th to 7th JUNE 2025

Hanoi International Center for
Exhibition (I.C.E) Hanoi, Vietnam

EXHIBIT PROFILE

Plastic & Rubber Machinery, Chemical & Raw Materials, Machinery Auxiliary Industry, Heat & Control Equipment, Mould, Hydraulic & Pneumatic, Recycling, Dosing equipment, Mixers, Silo systems, Software

POST SHOW REPORT 2024

Exhibitors
220

Exhibitors
From
13 Countries

Visitors
7,832

Space
9000 sqm

PARTICIPATION FEES

Standard Booth:

USD 310 / sqm (Min. 9 sqm) = USD2790

Standard Equipped : Wall Partitions, Carpet, Company Fascia, 3 Folding Chairs, Three 50W Long Arm LED Light, 1 Reception Table, 1 Round table, 1 Dustbin, 1 Single Phase 5 amp/220v Plug.

Raw Space:

USD 280 / sqm (Min. 18 sqm)

Corner fee: 10% surcharge 5% VAT will be applicable on invoice

Form is attached. Kindly email the scanned copy of duly filled Space Application Form to secretarygeneral@oppindia.org

GET IN TOUCH Deepak Lawale, Secretary General, ORGANIZATION OF PLASTICS PROCESSORS OF INDIA



MOB:- +91 9322591715
Tel.: +91-22-66923131/32



secretarygeneral@oppindia.org
www.oppindia.org



404/5, Golden Chambers, New Link Road,
Andheri (W), Mumbai - 400 053 INDIA

Designed By Polymerupdate.com

SUPPORTED BY



PLASTINDIA 2026

FEB 5-10

BHARAT MANDAPAM, NEW DELHI, INDIA

12TH INTERNATIONAL PLASTICS
EXHIBITION, CONFERENCE & CONVENTION

Bharat Next



Organised by



PLASTINDIA FOUNDATION
ISO 9001:2015 certified

BOOK YOUR SPACE In the largest INTERNATIONAL PLASTICS EXHIBITION

LIMITED SPACE AVAILABLE

Register Online at www.plastindia.org

WHAT AWAITS

EXHIBITION AREA (SQ. MTS.)

5,40,000

STALLS

6,00,000+

EXHIBITORS

2,000+

PARTICIPATING COUNTRIES

80+

PLATINUM SPONSORS



GOLD SPONSORS



FOUNDER MEMBERS



plastindia.org

PIF_PLASTINDIA plastindia-foundation

plastindia-foundation PlastIndiaFoundation



Scan here
to Register



Scan here for
Whatsapp Chatbot

For Booking Enquiry, Call: +91-7045644609

E-mail: info@plastindia.org

Website: www.plastindia.org



PM Modi Says US and India Target \$500 Billion Bilateral Trade by 2030

Prime Minister Narendra Modi said that the United States and India have set a target of doubling their bilateral trade to \$500 billion by 2030 and will work on concluding a mutually beneficial trade agreement very soon.

Prime Minister made the comment at a press conference after a meeting with President Donald Trump in Washington. Modi said the U.S. and India would work together on artificial intelligence and semiconductors and focus on establishing strong supply chains for strategic minerals.

"We have set ourselves the target of more than doubling our bilateral trade to attain \$500 billion by 2030. Our teams will work on concluding very soon, a mutually beneficial trade agreement," Shri Modi said.

A Trump administration official told reporters earlier that U.S. and Indian officials were also moving forward with talks on a bilateral trade deal and they hoped to have a deal in place this year.

Trump told the news conference India had announced a reduction of tariffs on U.S. goods and said he and Modi would begin talks on disparities on trade with the goal of signing an agreement. He said the United States was entitled to a level playing field and the U.S. trade deficit with India could be made up with

the sale of oil and gas. Trump said he had discussed India's high tariffs during his first term, but was unable to extract any concessions. He said that under the new reciprocal tariffs system he announced, the U.S. would simply charge the same tariff rates that India charged.

"It's very hard to sell into India because they have trade barriers, very strong tariffs," he said.

"We are, right now, a reciprocal nation... We're going to have whatever India charges, we're charging them. Whatever another country charges, we're charging them. So it's called reciprocal, which I think is a very fair way."

(Source: The Economic Times / 14.02.2025)

India to Introduce New Policies for Toys, Footwear Manufacturing: Piyush Goyal

Union Minister of Commerce and Industry, Shri Piyush Goyal, announced that the government will soon introduce new policies to further promote the manufacturing of toys and footwear in India. The aim is to make the country a global leader in these sectors.

Speaking at the Invest Karnataka 2025 - Global Investors Meet in Bengalur, Shri Goyal highlighted the success of the government's focused efforts in the toys industry.



He said, "Our import of toys has reduced to 50 per cent. Our exports are now 3.5 times what it was 5 years ago, and we will soon come out with policies to further promote manufacturing in toys, in footwear, so that we can become a global champion in these sectors." He noted that the upcoming policies will further boost the growth of toys and footwear manufacturing in India.

The Minister also emphasized the government's broader efforts to promote high-tech manufacturing in the country. He mentioned that nearly Rs. 2 lakh crore has been allocated under the Production-Linked Incentive (PLI) scheme, along with Rs. 74,000 crore for the Semicon Mission. These initiatives aim to strengthen industries such as electric mobility, auto components, semiconductors and textiles, which generate significant employment opportunities.

Shri Goyal also highlighted Karnataka's crucial role in India's economic growth and the importance of collaboration between the central and state governments to achieve development goals.

He shared, "We have a large focus on global capability centers which are being set up across the country and Karnataka, particularly Bengaluru, has a large number of global capability centers and many more coming in the years to come. He reiterated Prime Minister Narendra Modi's vision of Viksit Bharat 2047, which focuses on making India a developed nation by 2047.

The Minister also spoke about how government initiatives, including the PLI scheme, are supporting startups, MSMEs and the manufacturing sector. These efforts are expected to drive economic growth and help India become a global manufacturing hub.

The Invest Karnataka 2025 event brought together key industry leaders, investors, and policymakers to discuss investment opportunities and strategies to boost economic development in the state and across the country.

(Source: The Economic Times / 13.02.2025)

Cosmo Specialty Chemicals Achieves ISO 9001:2015 Certification

Cosmo Specialty Chemicals, a 100% subsidiary of Cosmo First and a one-stop solution for a range of adhesives, master batches and coating chemicals, has successfully achieved ISO 9001 : 2015 certification for its quality management system.

The certification, issued in December 2024, recognizes the company's commitment to maintaining high-quality standards in the design, development, manufacturing, and delivery of adhesives, coatings, and masterbatch products at its MIDC Area facility in Waluj, Aurangabad.

The ISO 9001:2015 certification demonstrates Cosmo Specialty Chemicals' dedication towards consistent delivery of high-quality products, and customer satisfaction through efficient quality management with a culture of continuous improvement of operational processes while meeting regulatory requirements and international standards.

"This certification is testimony to our ongoing commitment to quality management and customer satisfaction", said Raj Sharma, Business head at Cosmo Specialty Chemicals. "It validates our systematic approach to ensuring product quality and reinforces our position as a trusted manufacturer in the chemical industry."

The certification is valid until 17 December 2027, subject to the successful completion of annual surveillance assessments.

India's IIT-Madras Launches Zero-Waste Bio Plastics Initiative



The new generation of bio plastics is produced using organic byproducts. Credit: Sophon Nawit via Shutterstock.

The development focuses on creating sustainable and viable alternatives to conventional plastics.

The Indian Institute of Technology-Madras (IIT-M) has launched a new initiative aimed at developing zero-waste bio plastics, the Hindu has reported.

The new centre is supported by the Department of Chemicals and Petrochemicals under the Ministry of Chemicals and Fertilizers, Government of India.

The development focuses on developing sustainable alternatives to conventional plastics by creating cost-effective and scalable alternatives that are not only biodegradable but also micro plastic-free.

This ensures that the materials decompose fully while leaving no harmful particles behind in the environment.

According to IIT-M Department of Chemical Engineering professor M. Ethayaraja, traditionally, bio plastics were made from food sources such as starches derived from corn or potatoes. However, this raised concerns regarding food security.

To address this issue, a new generation of bio plastics has been developed.

These are produced using organic byproducts such as bagasse and rice straw, providing a more sustainable alternative.

Ethayaraja was quoted by the news agency as saying: "We're working on third - generation bio plastics because they don't compromise on food security and can have a much lower environmental impact.

"These bio plastics can be made from waste materials such as agricultural residues or algae, and they're biodegradable at a molecular level, which is crucial for reducing the environmental footprint of packaging."

Despite the potential of bio plastics, challenges in cost and scalability remain, with well - known bio plastics such as polylactic acid being expensive to produce and alternatives such as polyhydroxyalkanoates not yet commercially viable.

The IIT-M team is hopeful that its ongoing research will reduce production costs, making bio plastics more commercially accessible.

One of the centre's primary objectives is to develop sustainable food packaging solutions.

Additionally, the centre is investigating bio plastics for medical textiles, including protein-based materials from agricultural waste for use in medical implants that the body can absorb, avoiding the need for surgical removal.

BPCL to Invest ₹5,500 Crore in New Polypropylene Unit in Kochi

Bharat Petroleum Corporation Ltd (BPCL) is setting up a new ₹5,500-crore polypropylene unit in Kochi, marking its second petrochemical project in the city. The plant is expected to be commissioned by October 2027, according to Sanjay Khanna, Director (Refineries), BPCL.

"The job is in progress. This will be the second petrochemical unit in Kochi, and we plan to have it operational by 2027," Khanna said on the sidelines of the Invest Kerala Global Summit.

The unit will have an annual production capacity of 400,000 tonnes of polypropylene, a key raw material used in packaging, homeware, personal care products, and industrial applications. While similar projects globally operate at 65% capacity, BPCL aims for an 80-90% operational efficiency.

Compressed Biogas Plant and POL Terminal

BPCL is also set to commission a Compressed Biogas Plant (CBP) in Kochi by next quarter. The plant will process 150 tonnes of municipal waste per day, producing six tonnes of compressed biogas, with 40-50 tonnes of solid waste converted into fertilizer.

Regarding potential expansion of CBP to other locations, Khanna said BPCL will assess its success in Kochi before making further decisions. "The Kerala government was quite supportive in providing land and segregated waste. Once the first plant is established, we will explore future expansion," he added.

Additionally, BPCL has signed an MoU with Kinfra to develop a POL terminal with a pipeline receipt facility and additional parking for LPG tankers at Kinfra Industrial & Textile Park in Palakkad. The ₹880-crore project is set to begin in April 2024 and is expected to be completed by September 2028.

The investments highlight BPCL's growing focus on petrochemicals, sustainable energy, and infrastructure development in Kerala.

(Source: New on Projects / 22.02.2025)

Coca-Cola Foundation Commits \$15 Million to Plastic Waste Management

The United Nations Development Programme (UNDP) has announced a three-year, \$15 million grant from The Coca-Cola Foundation in support of plastic waste management initiatives in Asia.



Launched in India, the multi - country program will help improve plastic waste management, promote recycling, reduce plastic leakage into the environment, foster country-based solutions, and facilitate regional collaboration. By adopting and disseminating best practices across the region, the initiative aims to inspire policy changes and community-level actions to reduce and help to eliminate disposable plastic and improve the livelihoods of waste workers. The program will be expanded to include Bangladesh, Bhutan, Cambodia, Maldives, Nepal, Philippines, Sri Lanka, and Vietnam.

“Across Asia, countries are combating the [waste] problem by embracing the circular economy. Through our Zero Waste and Plastics initiatives, we are helping those craft policies, attract investments, and reduce the consumption of single-use plastics,” said UNDP deputy regional director for Asia and the Pacific Christophe Bahuët. “With this initiative, we are also empowering communities to scale up solutions that will effectively reduce plastic pollution and safeguard our planet.”

MP Strengthens Position in Petrochemicals and Natural Gas Sector

The state of Madhya Pradesh is at the fore-front of India's energy revolution, making strategic advancements in petrochemicals and sustainable energy.

The state is witnessing significant developments in its petrochemical and natural gas sectors, with major projects aimed at expanding production, harnessing coal bed methane (CBM), and investing in clean energy solutions.

Expanding Natural Gas and Petrochemical Capabilities

One of the key advancements is the commercialization of gas production in the Vindhyan Basin by the Oil and Natural Gas Corporation (ONGC). This marks India's ninth-producing basin, boasting reserves exceeding 62,044 cubic meters per day. Additionally, Bharat Petroleum Corporation Limited (BPCL) is making a massive Rs. 49,000 crore investment in a petrochemical complex at Bina Refinery. The facility is set to produce 1,200 kilotons per annum (KTPA) of ethylene and propylene, alongside 2,200 kilotons of various petrochemical products, boosting the state's industrial growth.

Advancing Coal Bed Methane (CBM) Extraction

Madhya Pradesh also plays a crucial role in coal bed methane (CBM) extraction, given that it holds 9 per cent of India's coal reserves. The state has 7.7 trillion cubic feet (TCF) of prognosticated CBM resources, with 3.64 TCF in established reserves. The Sohagpur CBM Blocks, spanning 995 sq km, currently produce 0.64 million standard cubic meters per day (mscmd) of gas from over 300 operational wells.

(Source: The Economic Times / 19.02.2025)

Re Sustainability, Aarti Circularity to Invest ₹100 Cr in Plastic Recycling Plant

Private equity firm KKR-backed Re Sustainability and Recycling has formed a joint venture with Aarti Circularity, a wholly - owned subsidiary of Aarti Industries to set up plastic recycling facility in Hyderabad at an outlay of ₹100 crore.

Re Sustainability and Recycling will own 51 per cent stake and the remaining will rest with Aarti Industries. The plant for the new recycling company, which will have a resource recovery capacity of about 500 tonnes per day by 2030, is expected to be commissioned in 15-18 months.

Through chemical processing the plant will segregate, extract and recycle resources from diverse waste streams, including plastics, to produce advanced circular materials that can be used as raw materials, fuel or recycled polymer feedstock.

Plastic product manufacturers are mandated by the government across the world to use recycled polymers to promote recycling, which has pushed up the demand for recycled polymers.

The company is eyeing to set up a similar recycling facility in Maharashtra and Gujarat given the local municipal bodies' focus on waste segregation.

Masood Mallick, Managing Director & CEO, Re Sustainability said the joint venture company is targeting to achieve a turnover of ₹5,000 crore in the next five years given the growing use of plastic and steady rise in demand for recycled polymers.

The company will require 200 tonnes of municipal waste to extract 100 tonnes of advanced circular materials. Re Sustainability and Recycling currently collects 9 million tonnes of waste per annum and recycles 9 lakh tonnes of plastic waste across its plants in Delhi, Lucknow, Hyderabad, Chennai and Chhattisgarh.

OPaL Wins Global Safety Summit (GSS) Safety Award Setting New Standards in HSE Excellence



OPaL has been honoured with the Global Safety Summit (GSS) Safety Award 2024 in the Large Enterprises category. This prestigious recognition was conferred by World Safety Forum and United Nations Global Compact Network in the 12th Global Safety Summit held at New Delhi on 23.12.2024. This significant achievement of OPaL has also been

published in Forbes India Magazine and is a testimony of OPaL's diligent and continued efforts towards HSE excellence.

The GSS Award is considered one of the most credible and esteemed awards worldwide, presented after a comprehensive evaluation process, including pre-assessments, reviews by a global jury, Process safety management, Safety initiatives, IT applications & virtual interactions with industry experts. Significance of this award can be understood from the fact that this year's International GSS award 2024 was organized at the House of Lords, UK Parliament, London.

This is for the 1st time that OPaL has competed in the category of Safety Award at National level and emerged as the winner, reflecting the company's unwavering commitment to HSE excellence. The recognition reflects OPaL's dedication to continuously enhancing workplace safety standards, promoting a culture of safety, and implementing cutting-edge technologies to safeguard employees and operations.

Shri Gurinder Singh, Managing Director said, "We are immensely proud to receive the prestigious GSS Safety Award 2024. This recognition is a testament to the relentless efforts of our team in fostering a culture of safety and ensuring the highest standards of HSE practices. At OPaL, safety is not just a priority, but a core value that guides our operations every day. This achievement reaffirms our commitment to continuously enhance workplace safety and to protect the well-being of our employees and the community we serve."

"Receiving this award is indeed a testimony to our continued efforts toward HSE excellence, and I congratulate Team OPaL for getting this prestigious accolade. This award reflects our dedication to ensuring a safe and secure working environment through constant vigilance, training, and technological advancements. We are committed to upholding these standards and setting new benchmarks in safety performance," said Shri Arup Jhampri, Chief Operating Officer of OPaL.

The World Safety Forum, a charter body under the consortium of 193 countries, recognizes organizations that demonstrate leadership in implementing effective safety management systems. OPaL's victory in the Large Enterprises category reflects its steadfast approach to making safety an integral part of its operations, ensuring the well-being of its workforce, and contributing to the overall safety culture in the industry.

About OPaL: ONGC Petro additions Limited (OPaL) is a subsidiary company of Oil and Natural Gas Corporation Limited (ONGC), the largest E & P company in India. OPaL is also co-promoted by GAIL (India) Limited and Gujarat State Petroleum Corporation Limited (GSPC). For more details please visit <https://www.opalindia.in/>

(Source: ONGC Petro additions Limited)

Rajoo Engineers Lays Foundation Stone for India's First - of - its -Kind Manufacturing Park



Rajoo Engineers announced the initiation of its ambitious business expansion project with a Bhumi Pujan ceremony held on 05 February 2025. This significant event marks the commencement of a groundbreaking development on an 80-acre non-agricultural land, setting the foundation for India's first-of-its-kind manufacturing park dedicated to advanced manufacturing ecosystems.

The newly acquired land will house a comprehensive ecosystem where all verticals of Rajoo Engineers' operations will be seamlessly integrated under one roof.

The project will be executed in stages, starting with the development of core infrastructure, including essential facilities and key operational hubs. This will be followed by the integration of advanced technology units, R&D centers, and sustainability-driven operations. The final stage will focus on consolidating all verticals to maximize efficiency, conserve resources and ensure seamless collaboration with 100% green energy.

With substantial investments dedicated to state-of-the-art infrastructure, this manufacturing park is designed to embody sustainability at its core. The project will

incorporate lean manufacturing principles to minimize waste, optimize resource utilization, and promote environmentally responsible practices. Smart machines leveraging advanced technologies like IoT will further enhance efficiency, predictive maintenance and resource optimization.

(Source: Business Standard / 06.02.2025)

All Plastic Carry Bags, Multilayered Packaging in India Must Carry Thickness, Maker Details in Barcode from July 1

Every producer, importer or brand owner of plastic carry bags and multilayered packaging in India will have to provide all of its details, including thickness and name of manufacturer, in a barcode or quick response code printed on the packaging from July 1.

The new rules in this regard, notified by the environment ministry this week, will help in ensuring strict monitoring of the banned carry bags of less than 120 microns of thickness under the apex Plastic Waste Management Rules, 2016.

The apex rules provide for the statutory framework for environmentally sound plastic waste management in the country. The ministry had in 2021 notified the amended rules, prohibiting the use of identified single-use plastic items, which have low utility and high littering potential, with effect from July 1, 2022.

The amended rules also prohibited the manufacture, import, stocking, distribution, sale and use of plastic carry bags having less than 120 microns of thickness with effect from Dec 31, 2022.

The new rules on providing information in a barcode have provision for action for contravention under section 15 of the Environment (Protection) Act, 1986. Under the law, any failure or contravention be punishable with imprisonment for a term which may extend to five years or with a fine which may extend to one lakh rupees or with both.

In case the failure continues, the law provides for an additional fine which may extend to Rs 5,000 for every day after the conviction for the first such contravention.

(Source: The Times of India / 24.01.2025)

India, UK Looking to Resume Talks on Proposed Trade Agreement: Commerce Ministry

Synopsis

India and the UK are set to resume FTA talks in early February. India - EU negotiations will continue in March, focusing on trade, investment and GIs. The India-EAEU FTA terms are being finalized, while India-ASEAN discussions will progress in Indonesia. Bilateral trades have increased significantly in recent years.



India and the UK are exploring convenient dates to resume the talks for the proposed free trade agreement, according to the commerce ministry. The talks for the proposed FTA began in January 2022. The 14th round of talks stalled as the two nations stepped into their general election cycles.

The bilateral trade between India and the UK increased to USD 21.34 billion in 2023-24 from USD 20.36 billion in 2022-23. Regarding a similar agreement with the European Union (EU), the ministry said that the tenth round of talks is scheduled from March 10-14 in Brussels. The two sides are negotiating a free trade agreement, an investment protection agreement and an agreement on geographical indications (Gis).

In the ninth round, both sides discussed trade issues covering goods, services, investment and government procurement along with necessary rules such as rules of origin, SPS (sanitary and phytosanitary) and technical barriers to trade. In June 2022, India and the 27 - nation EU bloc resumed the negotiations after a gap of over eight years. It was stalled in 2013 due to differences over several issues.

The total trade has surpassed USD 200 billion in 2023. India exported USD 75.18 billion in goods and USD 31.13 billion in services to the EU, while the EU

exported USD 63.44 billion in goods and USD 31.35 billion in services to India. Further on the India-Eurasian Economic Union (EAEU) free trade agreement, it said that the two sides are currently in the process of finalizing terms of references for the pact.

The five members of the Eurasian Economic Union (EEU) are Armenia, Belarus, Kazakhstan, Kyrgyzstan and Russia. In such agreements, two or more trading partners either eliminate or significantly reduce customs duties on the maximum number of goods traded between them. These agreements provide greater market access to Indian goods and services.

Russia is the top trading partner of India in the bloc. India's exports to Russia stood at USD 4.26 billion in 2023-24, while imports were USD 61.43 billion due to an increase in crude oil imports.

On the progress in talks for review of free trade agreement in goods between India and ASEAN, Additional Secretary in the ministry Rajesh Agarwal said that the next round of meeting is scheduled from February 10 onwards in Indonesia. There is progress in the negotiations, but there are some issues in goods.

RBI Introduces Measures to Boost Cross-Border Transactions in Indian Rupee

To encourage greater use of Indian Rupee (INR) for trade transactions, in July 2022, an additional arrangement in the form of Special Rupee Vostro Account (SRVA) was introduced.



The Reserve Bank of India (RBI) announced liberalized norms to encourage use of Indian Rupee and local / national currencies to settle cross border transactions. The decision comes at a time when the domestic currency is sliding and touched an all-time low of 86.70 per US dollar.

The Reserve Bank has already signed Memorandum of Understanding (MoU) with the central banks of the United Arab Emirates, Indonesia and Maldives to encourage cross - border transactions in local currencies, including Indian Rupee.

FSSAI Sets July 1 as Annual Enforcement Date for Labelling Amendments

The Food Safety and Standards Authority of India (FSSAI) has announced that amendments to the Food Safety and Standards (Labelling and Display) Regulations, 2020, will be enforced annually starting July 1.

The timeline provides a minimum implementation period of 180 days from the date of notification for any changes under these regulations or other related Food Safety and Standards (FSS) regulations.

This decision addresses operational challenges faced by Food Business Operators (FBOs) and aims to facilitate smoother compliance with labelling requirements. Key challenges include the cost and logistical adjustments needed to implement new regulations and the complications arising from pre-printed packaging materials.

By aligning enforcement dates with the start of the financial year, FSSAI aims to offer FBOs a more predictable framework for compliance. This measure also allows extended use of existing packaging materials, reducing operational disruptions and minimizing waste.

The revised enforcement schedule is expected to enhance transparency for consumers, ensuring food labels consistently reflect accurate and updated information.

(Source: Health World - ET/16.01.2025)

7 Solar Projects in Himachal to Generate 72 MW Power by December: CM

Himachal Pradesh Chief Minister Sukhvinder Singh Sukhu on Wednesday said seven projects in the state will harness 72 MW of solar power by this December.



“Himachal Pradesh Power Corporation Limited has commenced construction of two projects in Una district, one with a 12 MW capacity at Gondpur Bulla and another with an 11 MW capacity at Lamlahri Uparli,” he said, adding that three

projects in Solan district are underway, including a 13 MW project at Saned in Nalagarh, an 8 MW project at Bara Barot, and a 13 MW project at Dabhota Majra.

The tender for a 9 MW Dabhota One project will soon be awarded, with construction beginning shortly. Furthermore, the tender process for a 6 MW solar project at Tihra Khas in Una district has also been initiated and is expected to be awarded this month, he said. The Chief Minister emphasized the state government's commitment to expanding solar energy production.

“Surveys are currently being conducted for eight additional projects with a combined capacity of 325 MW. Once the detailed project reports (DPRs) are completed, construction on these solar power projects will commence,” he said.

Sukhu further stated that the present government is striving to make Himachal Pradesh the first 'Green Energy' state in the country by the year 2026, ensuring environmental preservation and sustainability.

“Harnessing green energy will not only aid in environmental protection but also reduce carbon emissions. Renewable energy sources are inexhaustible, ensuring energy availability for future generations. This initiative plays a crucial role in mitigating the adverse effects of climate change,” he said.

The Chief Minister said that a 32 MW solar power project at Pekhubela in Una district was dedicated to the public on 15 April, 2024.

This project has generated 48 million units of electricity, yielding revenue of Rs. 14 crore till 31st January 2025, he said, adding that additionally, a 5 MW solar power project at Bhanjal in Una district commenced operations on 30 November, 2024.

Furthermore, the construction of a 10 MW solar power project at Aghlaur is expected to be completed this month, he added.

He said that the state government is also focusing on green hydrogen energy. "Construction of one MW green hydrogen project has been commenced in Nalagarh of Solan district in collaboration with Oil India Limited, with whom a Memorandum of Understanding (MoU) has been signed," said the Chief Minister.

(Source: MSN / 13.02.2025)

January Smartphone Exports Top Full-Year Total of FY21, Shows Data

Minister for Electronics and Information Technology Ashwini Vaishnaw recently posted on X that smartphone exports for 2024-25 are likely to reach ₹2.25 trillion.



Smartphone exports in January crossed \$3 billion (₹25,000 crore) this year — the highest ever in a single month — according to industry estimates.

To put it in perspective, the \$3.14 billion exported in January 2025 matches the total smartphone exports for 2020-21 (FY21). By comparison, January 2025 exports were 140 per cent higher than those in January 2024, when India recorded \$1.31 billion in smartphone exports.

Minister for Electronics and Information Technology Ashwini Vaishnaw recently posted on X that smartphone exports for 2024-25 are likely to reach ₹2.25 trillion. Exports in 2023-24 (FY24) stood at \$15.6 billion.

Of the total exports in January, nearly 70 per cent came from Apple via iPhone shipments. Foxconn alone accounted for 33 per cent of total exports,

equivalent to \$960 million. Tata Electronics, which acquired Wistron, followed closely with over \$800 million, while Pegatron (where Tata has taken a majority controlling stake) recorded its highest-ever monthly exports, crossing \$500 million. In January, all three Apple vendors exceeded their previous single-month export records.

Other contributors to exports included South Korean giant Samsung and merchandise exports from India.

The trajectory of smartphone exports from India has been steadily rising since the launch of the production-linked incentive (PLI) scheme. In the first year of the scheme — FY21 — exports remained low as Apple vendors were unable to start operations in India due to Covid - 19. Apple's three vendors began producing iPhones primarily for export.

This milestone marks a major success for the smartphone PLI scheme, introduced four years ago to enhance competitiveness by addressing India's cost disadvantages. The PLI scheme has led global value chains like Apple to shift supply chains to India, with their vendors setting up some of the country's largest factories. Export numbers have surged ever since.

After reaching \$3.1 billion in FY21, smartphone exports nearly doubled to \$5.8 billion in 2021-22. In 2022-23, exports rose to \$11.1 billion, and in FY24, they climbed further to \$15.6 billion.

A decade ago, in 2014 - 15, smartphone exports ranked 167th among India's exports by the Harmonized System (HS) Code. By December 2024, they had surged to the second-largest spot.

(Source: Business Standard / 13.02.2025)

Caps and Closures Market amidst Sustainability and Growth, Shares Vagish Dixit, Chief Engagement Officer, ALPLA Global; Managing Director, ALPLA India Pvt. Ltd.

Caps and closures play a vital role in packaging, spanning varied industries. As sustainability reshapes design priorities, challenges such as regulatory pressures and light weighting innovations take a centre stage. Here are key trends, market forecasts and strategies for success of the caps and closures businesses.

My advice to those in this business...

Focus on innovation from end-to-end. From design to delivery - every element needs to be re-evaluated for the future. Those who can come on top with strong design capability which can be tested in modelling and simulation and then rolled out with further tweaks even with AI based modelling, will help in optimal weights (that will be 20 - 50% lower than current ones) and good infusion of PCR.

The global demand for plastic caps is estimated between USD 60 - 70 billion in 2023 and is likely to grow to over USD 100 billion in the next 10 years. Dollar value will grow by 50%, but volume will grow between 70 - 75%. The gap is reflected in the light weighting of caps, which means cheaper caps for the same functions. As for the Indian market, it is estimated to be at USD 5 billion now and will grow significantly in the next 10 years. So, it is obvious that even with the headwinds of PCR usage and pushback to plastics on account of sustainability concerns, the business of caps and closures is likely to grow quite healthily.

India's Total Trade to Reach USD 1.8 Trillion by 2033, Growing at 6.4% CAGR: Report



India's total trade to reach USD 1.8 trillion by 2033, growing at 6.4% CAGR: Report

India's total trade is expected to grow at a compound annual growth rate (CAGR) of 6.4 per cent through 2033, reaching USD 1.8 trillion annually, according to a BCG report.

A major factor fueling this surge is India's growing appeal as a production hub for companies looking to diversify supply chains beyond China.

The government's substantial incentives for manufacturing, a vast low - cost workforce, and rapidly improving infrastructure are further strengthening India's position. As a result, the country is becoming a preferred destination for foreign investment and trade collaborations.

India's trade growth will be geographically diverse. Trade with the United States is projected to more than double over the next decade, reaching USD 116 billion by 2033.

This increase reflects deepening political and economic ties between the two largest democracies, particularly in defence and technology sectors.

Additionally, trade with the European Union, ASEAN, and Africa is expected to expand by approximately 80 per cent. Notably, India's trade with Japan and Mercosur nations is projected to nearly double, while its trade with Australia and South Korea is set to more than triple.

A significant surge is also expected in trade with Russia, driven by increased imports of discounted Russian hydrocarbons.

Europe's trade with India, Turkey, and Africa is expected to accelerate, reinforcing India's role in the global supply chain. The information technology, pharmaceutical, and manufacturing sectors will be key contributors to India's trade expansion with the EU.

India is also becoming increasingly cautious of Chinese investments in sensitive sectors. These economic tensions are further intensified by the ongoing border disputes between the two nations, leading India to seek greater trade partnerships elsewhere.

While India's trade growth with the West remains strong, China's trade with Western economies is expected to slow down. In response, China is strengthening its economic ties with India, Russia, ASEAN, Africa and Mercosur nations.

However, China's massive trade surpluses, driven by excess capacity in various industries, could face pushback not only from the US and EU but also from India and other trade partners.

(Source: The Economic Times / 09.02.2025)

Trump Tariffs could Increase Coca-Cola's Plastic Bottle Usage Says Chief

Coca-Cola Chief Executive James Quincey has alluded to a potential increase in plastic bottle usage in the USA. His comments, made in a call with investors, follow President Donald Trump's 25% import tax on all steel and aluminium entering the United States. Such a tax could lead to the price of canned food and drinks increasing in the country, with Coca-Cola potentially facing more expensive aluminium cans.



Late last year, Coca-Cola announced that it would be scaling down its sustainability target of using 50% recycled materials in its packaging by 2030. This goalpost has now been moved to using between 35% and 40% by 2035. For multiple years, the company has received negative press from various environmental groups regarding its plastic pollution.

"If one package suffers some increase in input costs, we continue to have other packaging offerings that will allow us to compete in the affordability space," said Quincey. "For example, if aluminium cans become more expensive, we can put more emphasis on PET [plastic] bottles."

Quincey went on to remark that packaging is only a relatively small component of the company's costs, a statement designed to reassure others of the limited impact the tariffs will have on the business.

This potential change in packaging preference goes against Coca-Cola's recent efforts, as the company has been selling more products in its aluminium containers. This has been at the forefront of the company's marketing and sustainability strategies.

While aluminium packaging is more expensive, it is also more recyclable compared to plastic bottles over time.

(Source: Interplas Insights/17.02.2025)

CPCB Mandates EPR for Plastic on SIMP

Recently CPCB has mandated EPR for plastic registration for Micro & Small Producers, Sellers, Manufacturers and Importers, i.e. SIMP category.

The respective circular is notified by CPCB in SIMP guideline, published on 4th December, 2024.

According to CPCB, EPR for plastic registration is implacable on following entities falling under SIMP Category-

- Seller of plastic raw materials including – resins, pellets, or other intermediate plastics used in plastic packaging
- Small and Micro Importer of resins, pellets or other intermediate materials used in plastic packaging
- Small and micro importer or resins, pellets or other intermediate plastic packaging material meant for commercial use
- Producer, Manufacturer of plastic packaging and similar intermediate materials used in plastic packaging

Furthermore, SIMP guidelines published on 4th December 2024, mandates the submission of application online with necessary detail and application fee.

The application will be processed by Pollution Control Committee (PCC) or State Pollution Control Board (SPCB) at online EPR for plastic portal of CPCB.

Key EPR for Plastic Obligations as Per SIMP Guidelines

- Every Micro & Small Producer, Seller, Manufacturer & Importer of raw material must fulfil EPR obligations and process plastic waste via PWPs.

- Fulfilment of EPR Obligations like yearly recycling target must be met by adhering with CPCB's Plastic Waste Management Regulations.
- Entities falling under SIMP category must file their Annual EPR Returns on CPCB's online EPR plastic portal. The filing details are to be shared according to section - wise instructions for following categories:-

1. Micro & Small Producer Category

2. Seller Category

3. Manufacturer & Importers of raw materials Category

Documents Needed for SIMPs to Submit EPR Application

- PAN, GST, CIN of the Company
- PAN of Authorized person
- Supportive documents for Micro & Small Category – Uddyam Certificate of Producer, (if there's any)
- Original supportive documents, to use as proof of DIC or DCSSI registration
- Cover Letter

SIMP Application Fee to Get EPR for Plastic Registration

- Application fee for Manufacturers & Importers of plastic raw material, and Seller - Rs. 10 per ton of production capacity.
- Application fee for Micro & Small Producer – Rs. 5 INR per ton of production capacity.

Conclusion: The applicability of CPCB's EPR for plastic packaging on SIMP, i.e. Micro & Small Producers, Sellers, Manufacturers and Importer is a sustainable move to fight plastic pollution in the country. That's because, one such initiative will lead India to reduce plastic carbon footprint and embrace eco-conscious plastic neutral future.

(Source: Arkca Corporate Solutions)

CPCB Released Instruction Sheet for PWPS

1. As per the guidance manual prepared by CPCB, Plastic Waste Processors (PWPs) shall upload a valid GST e-Invoice for the sale of product for the purpose of EPR certificate generation on the EPR portal for plastic packaging.
2. A valid GST E-Invoice for sale of product shall contain the details of Buyer GST no., Seller GST No., IRN No., date of sale, HSN code, invoice amount, Invoice no. and a QR code. Only signed copies of GST e-Invoices shall be uploaded on the portal.
3. The GST e-Invoices shall be validated with the available GST Network information and only valid GST e-Invoices shall be uploaded on the EPR portal. GST e-Invoice shall not be uploaded in case any mismatch of information is observed.
4. The GST e-Invoice shall also be validated with the relevant information provided on the EPR portal.
5. It should be ensured that all parameters of the GST e-Invoices (including QR code) shall be clearly visible/readable.
6. In view of the above, please check the GST e-Invoice thoroughly prior to uploading it on the EPR portal.

(Source: Instruction Sheet for PWPS)

Americhem Expands Research and Development Capabilities with New Laboratory Facility in Silvassa, India

Americhem, Inc. has announced the opening of a new research and development center in Silvassa, India. This new facility, located at Olive Industrial Park, will enhance Americhem's ability to provide faster and more localized service to customers throughout India and Southeast Asia. The 4000-sf center will offer specialized testing services for masterbatch color development, particularly for melt spinning and textile manufacturing customers. Additionally, it will provide field and technical services to support customer-specific requirements.

The new laboratory aims to help Americhem expand into new markets and areas of business by offering enhanced capabilities for custom color matching and faster response times. This will attract new customers and industries that prioritize speed and efficiency in their supply chain.

S. Mani, Managing Director for India and Southeast Asia, emphasized the company's long-term commitment to the region. "This investment demonstrates Americhem's dedication to fostering innovation, expanding capabilities, and supporting customers as they grow alongside these dynamic markets," said Mani.

Toshan Simaiya, Americhem's Operations Director for India, highlighted the benefits of the new center, noting that it will allow the company to be closer to customers, provide nimble support, faster color development, and enable real-time communication and approvals. The center will be led by Sandeep Bhamare, Head of R&D – Fibers for Americhem's India, who will ensure smooth collaboration between Americhem's Pune site and the new facility. Krunal Bodne, Head of Sales and Marketing Textiles/Fibers, emphasized the benefits for customers, stating that they are welcome to the lab to get the match done on the same day, enabling speed to market.

The research and development center began operations in late 2024 and is strategically situated just 5 km from Bhilad Highway NH-48, with future access to the Mumbai-Delhi Expressway.

(Source: Yahoofinance/28.01.2025)

Tetra Pak becomes First in India's Food & Beverage Industry to Introduce Packaging with Certified Recycled Polymers

Tetra Pak announced that it has introduced packaging materials integrated with certified recycled polymers in India, becoming the first company in the food and beverage packaging industry in the country to do so.

The rules will come into effect on April 1, 2025, and aim to reduce plastic waste and promote the use of recycled content in packaging, the Swedish multinational packaging firm said in a press release on Monday.

This new offering features carton packages that incorporate 5% certified recycled polymers, in line with the Ministry of Environment, Forests &



Climate Change's mandate under the Plastic Waste Management (Amendment) Rules 2022.

The packaging material used by Tetra Pak is certified by ISCC PLUS (International Sustainability & Carbon Certification), a globally recognised sustainability certification system, informed the multinational company. This certification ensures that the recycled polymers used in their packaging meet high standards of environmental responsibility.

"We are proud to be the first carton packaging producer to bring packaging material with 5% certified recycled polymers to India. This recycled content is sourced locally, and the packaging material is produced at our ISCC PLUS-certified factory in Chakan, Pune," said Cassio Simões, Managing Director of Tetra Pak South Asia.

Simões also commended the Indian government for its early adoption of this regulation, calling it an opportunity for the food and beverage industry to work together in transitioning to more circular solutions.

The recycled polymers used in Tetra Pak packaging are sourced using chemical recycling technology, which allows the plastics to be made from a mix of recycled and non-recycled materials.

This process tracks the mass of recycled content throughout the supply chain, ensuring compliance with global food contact regulations. The chemically recycled plastics are equivalent in quality to virgin polymers, making them suitable for use in food and beverage packaging.

Tetra Pak's initiative aligns with global efforts to increase recycling rates and make recycling more economically viable. By incorporating recycled content, the company helps create a market for recycled materials, encouraging expanded recycling infrastructure.

"The transition to mainstream adoption of materials like plant-based and recycled polymers is still a work in progress. Our ultimate goal is to ensure that all our packaging is made from renewable or recycled polymers, eliminating reliance on fossil feedstock," added Simões.

(Source: The Economic Times/24.02.2025)

PLASTIC PRODUCTS AND NEW TECHNOLOGIES



Addon FilmTech Shows Innovative Shrink Films at Labelexpo India 2024

Addon FilmTech, one of the leading manufacturers of PET and COPET shrink film in India, promotes its range of shrink films at Labelexpo India 2024.



Products featured at the company's stand include PET shrink labels that offer full body coverage with 360 - degree design. The label can be used to communicate critical and mandatory information to the consumer. The shrink film's tamper-evident seal ensures protection from adulteration and adhesive-free application on the bottles / containers enabling recycling of the rigid bottles/containers.

The company shows its range of PET, CPET, PETG, RPET and Copolyester shrink sleeve films which can be recyclable and contain Post-Consumer Recycled (PCR) waste content, a replacement for PVC shrink film. Applications of the films include labeling food, beverage, pharmaceutical, cosmetic, homecare, and dairy products.

Addon's HSP grade film is suitable for applications where sleeves are applied to bottles, containers, or jars and then passed through shrink tunnels. This is particularly suitable for the beverage industry or similar sectors where labels are applied at the final stage of the packaging line.

WF is Addon's specialized grade of PET shrink film, engineered for universal compatibility with all types of bottles, jars, and containers, whether filled or empty and made of materials such as HDPE, PP, PET, glass, and metal. It is suitable for use in all types of shrink tunnels, including steam, hot-air and electric.

CSP is the company's crystallizer friendly grade film which when printed with washable inks that can be removed during the washing process of PET bottle recycling, eliminates the need to sort labels from the bottles, as it can easily pass through the crystallizer without causing agglomeration.

RSF grade film contains a minimum of 30 percent Post - Consumer Recycled (PCR) content which enables brands to build a long-term value for their consumer products and helps them reach their regulatory targets.

(Source: Labelexpo India 2024)

Biffa Launches New Range of Bins Containing 80% Recycled Plastic

The containers are made from old wheelie bins that have come to the end of their life



Biffa is breathing new life into its old commercial bins – by recycling them into brand new ones, as part of ongoing ambitions to reduce waste and enable a circular economy.

Biffa has already re-introduced almost 1,500 recycled bins and is aiming for all its new commercial bins to be made from its own bins which are no longer usable, creating a fully closed loop solution.

Already renowned for recycling billions of plastic bottles every year, Biffa is now applying the same circular solution to the very containers the waste goes in.

The recycled bins contain 80% recycled HDPE and are as robust and reliable as the virgin plastic originals. Recycling produces fewer carbon emissions than disposing of items and then using virgin material to make new goods from scratch.

Biffa's business customers across the UK can use the bins for a variety of waste streams, including residual, dry mixed recycling, food and glass.

The containers come in all shapes and sizes and are manufactured by Contenur UK, a leading manufacturer of container systems for mechanized commercial waste collection, at its factory in Liverpool.

The recycling process sees the old containers shredded into flakes before being turned into pellets which are then melted and injected into special bin-shaped moulds.

To pass strict quality and safety standards, the recycled bins are tested in the same way as the old ones, including being dropped and exposed to heat and cold. Customers can also be reassured that the bins remain the famous Biffa red, just an eco-friendlier version.

StarLITE® - R STILL: Sidel's New High Production Speed 100% rPET Lightweight Bottle Base for still Products

StarLITE® - R STILL is a new bottle base that employs Sidel's patented technology to ensure 100% recycled PET (rPET) integration, lightweighting and high - speed production for water, juices, milk and edible oil from 0.25L up to 2.5L.



"Mainstream food and beverage manufacturers are seeking designs that range from simple, lightweight options to more aesthetic shapes with optimized weights, yet all compatible with high - speed production," comments Mikael Derrien, Manager Packaging Innovations at Sidel.

"They aim to reduce production costs through lightweighting, lower blowing pressures, and reduced energy consumption, while also striving to minimize their carbon footprint in response to regulatory pressures and consumer demand."

"Today there are bottle bases on the market suitable for lightweight designs and high production speeds, however, they're designed for virgin PET bottles. Sidel's StarLITE®-R STILL is the only solution on the market specifically developed to address recycled PET that achieves the high performance necessary in this competitive market space."

Balancing production speed, material type, and bottle weight presents a complex challenge for manufacturers in maintaining high performance, but the StarLITE®-R STILL overcomes these with precise bottle base shaping and efficient material distribution.

Its innovative design can also be seamlessly retrofitted onto existing production lines ensuring versatility and the solution requires a low blowing pressure, further enhancing its sustainability credentials.

High performance with patented design and technology

The StarLITE®-R STILL bottle base features Sidel's patented technology which includes smooth material stretching and precise distribution; optimized venting for easy shaping; and an efficient base cooling circuit ideal for rPET which is likely to be processed at higher temperatures.

The new design ensures the base does not deform or break, crucial for maintaining the bottle's integrity during production, conveying, storage, transportation and use.

The mould base's rounded-edge design makes it easier to shape during blow moulding, which increases the bottle base resistance to defects such as bursts during the blowing process. This feature is particularly important for lightweight bottles, which are more prone to such issues due to the use of thinner material.

With a high base clearance, the structural design prevents deformation, ensuring functionality and stability even in high-temperature conditions.

The bottle base also performs reliably during high-speed production, thanks to an efficient cooling. This cooling process prevents deformation and defects, maintaining consistent quality at rapid manufacturing speeds.

The bottle production process can use up to 20% less blowing pressure due to improved mould venting of the StarLITE®-R STILL mould base. The carefully designed grooves and venting holes in the mould ensure that air escapes efficiently, allowing the bottle base to take its desired shape perfectly, even at lower pressures. This reduces energy consumption and production costs while maintaining quality.

Improved sustainability and costs for still drinks and edible oils

By switching from virgin PET to 100% rPET thanks to StarLITE®-R STILL, manufacturers can benefit from a reduction in 2,400 tonnes of CO₂ equivalent each year.

This bottle base can also be blown at lower pressure, only requiring 16 bars - a reduction of up to 20% on standard air blowing operations, translating to a further saving of 51 tonnes of CO₂ equivalent and to 205,000 € saved, each year.

The bottle base is also compatible with a wide range of weights, including very lightweight bottles as low as 7g for 500ml format.

Versatility with StarLITE® - R STILL

Sidel's latest StarLITE® - R bottle base provides manufacturers with increased versatility as it is compatible with round, square - round and rectangular shaped bottles as well as suitable for single or multi-serve sizes from 0.25L up to 2.5L. It can also be used with transparent or white PET.

This new bottle base is easy to integrate onto existing manufacturing lines and is qualified for high production speeds across various bottle formats.

It supports single-serve production rates of up to 2,700 bottles per hour per machine and multi-serve rates of up to 2,400 bottles per hour per machine. The StarLITE®-R STILL can also be used with virgin PET as well as rPET and be produced utilising Sidel's EvoBLOW, Universal, and Series 2 blow moulders.

Expanding StarLITE® - R range

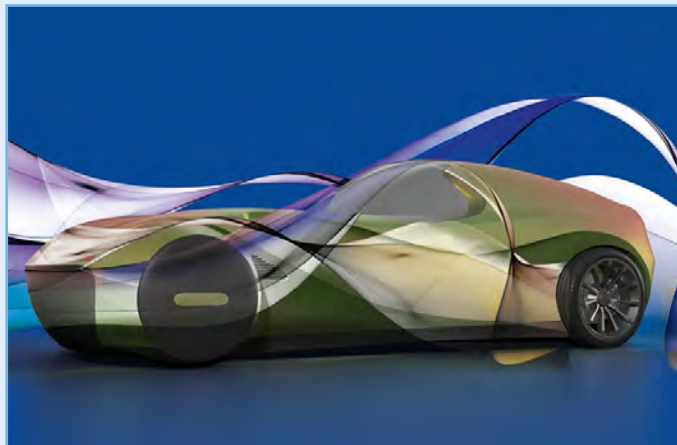
The streamlined bottle base is the latest addition to Sidel's signature StarLITE®-R range, joining the ranks of innovative designs like the StarLITE®-R for carbonated soft drinks (CSD), StarLITE®-R Nitro and StarLITE® - R Premium.

The original StarLITE®-R for CSD, was Sidel's first solution dedicated to rPET, offering enhanced protection against deformation, improved stability, and increased resistance to bursting. Meanwhile in 2024 Sidel released the StarLITE®-R Nitro, a unique, high - resistance bottle base specifically engineered for still nitrogen - dosed products in 100% rPET bottles and the StarLITE®-R Premium, a sleek, high-performance bottle base for distinctive, 100 % rPET bottles.

(Source: Sidel/30.01.2025)

BASF publishes 'Color Report for Automotive OEM Coatings'

According to the newly published BASF "Color Report for Automotive OEM Coatings", the global automotive color landscape continued to evolve in 2024.



The "Color Report for Automotive OEM Coatings" by BASF Coatings sees shifting hues in global automotive Colors. Image source: BASF.

According to the report, white remains the top choice among consumers. But warm shades such as yellow and beige are increasingly appealing and green has risen in popularity across all regions. Achromatic colors like black and gray are also gaining traction.

EMEA: Beige has almost doubled its market share

In the EMEA region, the share of achromatic colors rose from 72% in 2021 to almost 80% in 2024, underlining the appeal of neutral tones. Here too, white remains the most popular color, closely followed by grey. It is particularly notably that beige is gaining in popularity and has almost doubled its market share.

The color distribution in America shows a striking trend towards shades of grey, which now accounts for almost 20% of the overall market. Black has dropped by 2 percentage points compared to 2023, while the number of white cars has even fallen by 5 percentage points. According to the report, achromatic colors also remained the first choice for 83% of consumers in the Asia-Pacific region, with black increasing in popularity by 2 percentage points. In contrast, white has seen a decline of over 2 points. At the same time,

chromatic colors, especially yellow, are on the rise, with softer tones such as pastel and greige yellow leading the way.

(Source: European Coatings / 15.01.2025)

KP Launches 100% Tray2Tray® Market-First Pilot in the UK in Partnership with Tesco and Hilton Foods



Klöckner Pentaplast (kp), a global leader in rigid and flexible packaging and specialty film solutions, is launching an exciting UK market-first venture with Tesco and Hilton Foods to pilot the first-ever 100% recycled PET (rPET) food trays made from recovered tray material through its kp Tray2Tray® initiative.

Marking a significant leap forward in the journey towards full circularity in food packaging, the pilot will see Tesco's Finest minced beef product packed in the 100% rPET kp Tray2Tray® and sealed with kp FlexiLid®, a high-performance barrier film containing 30% recycled PCR content.

"While this is a pilot, it's clearly a massive step forward for the packaging circular economy," said Rebecca Harris, Global Account Director at kp. "We launched our kp Tray2Tray® initiative because valuable food-safe tray material enters the recycling loop, but all too often the rPET material is downcycled to other product applications. Until something changes and demand is boosted, the required collection, sorting and recycling at scale will not be sufficient. So, what we're doing here has real significance.

"The pilot is a dream match. At kp, we're innovative designers of food packaging solutions driven by our ambitious Investing in Better sustainability strategy;

Hilton Foods, focused on its Sustainable Protein Plan, creates and produces high quality packaged food, and Tesco has built sustainability into its purpose, strategy and business plans. kp made a splash when we launched our first trays with 100% kp Tray2Tray® rPET from trays in the UK, and this real-world trial is the perfect opportunity to show what our experienced technical team has accomplished.”

The kp Tray2Tray® initiative was developed to create a stronger circular economy in food packaging trays. With an estimated one million tonnes of PET trays produced annually in the EU, only 5% are currently recycled back into food-grade trays. kp's solution has the potential to significantly increase this percentage by creating a dedicated supply stream of recycled PET from trays, ensuring these materials are reused efficiently.

In addition to pioneering the first 100% rPET tray derived solely from trays, kp's production site in Pravia, Spain recently became the very first food company to have obtained the brand-new closed loop module within the RecyClass Traceability Certification. This certification ensures the safety, quality and origin of the rPET used in the trays.

About Klöckner Pentaplast:

Focused on delivering its vision: The Sustainable Protection of Everyday Needs, kp is a global leader in rigid and flexible packaging and specialty film solutions, serving the pharmaceutical, medical device, food, beverage and card markets, amongst others. With a broad and innovative portfolio of packaging and product films and services, kp plays an integral role in the customer value chain by safeguarding product integrity, assuring safety and consumer health, improving sustainability, and protecting brand reputation. kp's “Investing in Better” sustainability strategy solidifies its commitment to achieving ten clear targets for long-term improvement by increasing the recycling and recyclability of products, cutting carbon emissions and continuous improvement in employee engagement, safety, and diversity, equity and inclusion. For four consecutive years, kp has held a gold rating from EcoVadis, the leading platform for environmental, social and ethical performance ratings. This ranks kp in the top 1% of companies rated in the manufacturing of plastics products sector. Founded in 1965, kp has 30 plants in 18

countries and employs some 5,500 people committed to serving customers worldwide in over 60 locations. kp is proud to be celebrating its 60th anniversary in 2025.

AIMPLAS Unveils Demonstrator for Plastic Products' Digital Passport

AIMPLAS has developed a digital totem that simulates the digital passport for plastic products. This is particularly relevant regarding the European Union, where passports will be mandatory for marketing products. The Plastic Technology Centre believes companies should start implementing this solution ahead of 2025 when adoption is expected to become a requirement.



Consumers will receive essential information regarding traceability, materials, recycling, and the carbon footprint of purchased products. Additionally, the tool will demonstrate that plastic products comply with the necessary European regulations.

Designed as an interactive screen featuring code and label readers, the totem allows users to visually and intuitively discover the information presented in the passports. Data regarding the product's life cycle (from its origin and manufacturing process through to its material components and recycling options at the end of its life) and its carbon footprint will be made available. AIMPLAS hopes to raise awareness about “the importance of having verified and accessible information that promotes more responsible and circular consumption.”

Introducing the digital passport

Offering users an easier, more transparent, and secure access point for key information on products, digital passports aim to improve the shopping experience, promote sustainability, and improve consumer confidence regarding product authenticity and quality.

The digital passport will provide consumers with the full picture regarding a given product including:

- Product characteristics (materials, manufacturing date, etc).
- Usage instructions.
- Warranties.
- Recycling recommendations.
- Allowing consumers to have access to this information will allow them to make more informed decisions regarding their purchases.

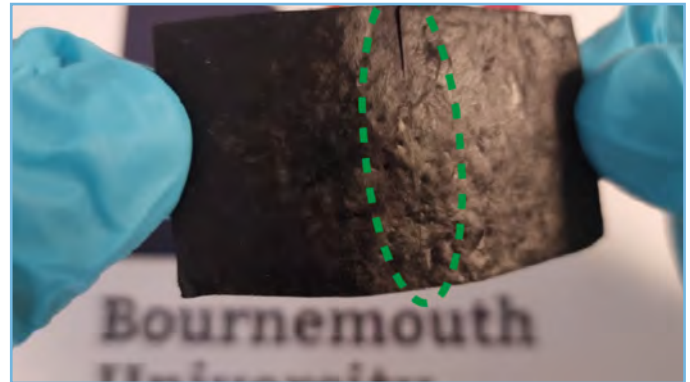
Products identified by the European Commission for the Sustainable Products Ecodesign Regulation (encompassing the digital passport):

- Textiles and footwear
- Furniture
- Tyres
- Bed mattresses
- Detergents
- Paints and varnishes
- Lubricants
- Cosmetics
- Toys
- Fishing gear
- Absorbent hygiene products
- Iron and steel
- Basic chemicals
- Non-ferrous metal products other than aluminium
- Plastic and polymers
- Pulp and paper
- Glass

The Valencian Institute of Business Competitiveness and Innovation (IVACE+i) with funding from the Generalitat Valenciana for the development of independent R&D activities by technology centres, helped make this development possible.

(Source: Interplas Insights/ 14.02.2025)

Self - Healing Plastic Breakthrough could Revolutionize Packaging



The plastic begins to heal itself in a matter of minutes

A breakthrough in the development of self - healing packaging could revolutionise the packaging industry by allowing products to fix themselves after cracking or even breaking into pieces.

"We are following the same process as mother nature - when you cut your finger, the blood will initially solidify to cover the crack until the skin tissue seals it, and that is what we are doing with our plastics," said Amor Abdelkader, associate professor in advanced materials at Bournemouth University, who led the study.

"Most of the things in our everyday lives have plastic in them and this has the potential to extend the life of a whole range of products and reduce waste, from re-useable drink bottles to mobile phones to plastic pipes and so much more."

The reformulated plastic was manufactured with nanosheets of a material called MXene – appearing to the naked eye as a powder – which is used industrially as a reinforcement agent for plastics.

Specially treated with a glue-like agent, the Mxene sits dormant within the plastic until it is exposed to moisture in the atmosphere by a breakage: it then activates, bonding the broken sections back together.

Chirag Ratwani, chief scientist of the project and PhD student at Bournemouth University, added: "Using MXene with our healing agent means that we get the benefits of stronger plastic, which is harder to break, but if it does break, it will fix itself. The process takes just a few minutes, and we managed to restore the plastic to 96% of its original strength."

The process would theoretically be suitable for a wide variety of plastic polymer types, Abdelkader told Printweek, with the team now searching for commercial partners to help move the concept from the laboratory to the store.

The process would not be suitable for food-safe packaging, but Abdelkader's team has done prior research into biopolymers that would be suitable for contact with food.

(Source: Printweek/02.01.2025)

BAOSU Pioneers PVC-O Pipe Innovation with Eco-Friendly and High-Performance Solutions

Hebei Construction Investment BAOSU Pipe Industry Co., Ltd. (BAOSU), founded by industry experts, is a leading plastic pipe enterprise in China, ranking among the top ten plastic pipe enterprises (2016). With extensive experience in PVC-O and PVC-U pipe production, BAOSU drafted the national standard for PVC-O pipes in China and holds patents in India, Brazil and China.



PVC-O pipe produced by BAOSU's equipment offers numerous advantages:-

- High strength and water hammer resistance: Enhanced pipeline safety.
- Lightweight and easy installation: Flexible connections for convenient construction.

- High economic benefits: Lower transportation, installation and operational costs.
- Water quality protection: No use of garbage raw materials, no water contamination and healthier drinking water.
- Long service life up to 100 years; significant social benefits.
- More eco-friendly and low-carbon: Compared to PE piping, energy consumption is reduced by 21.5% and carbon emissions by 20%.

(Source: POLYMERS Communique)

ALPLA and Partners to Realize Thin-walled rPET Cups for Dairy Products

Together with machine manufacturer ENGEL, mold maker Brink, label maker iPB Printing and joint venture partner INTOPACK, ALPLA is realizing thin-walled cups made from recycled PET material for dairy products for the first time. The innovative solution meets all the requirements of the PPWR and is set to go into series production from the 4th quarter of 2025.



Credits: ALPLA

Current Materials do Not Comply to PPWR Direction

Dairy products such as yogurt, cheese spreads, pudding, cream and curd cheese are to be packaged in a more environmentally friendly way in the EU in the future. The PPWR (Packaging and Packaging Waste Regulation) sets the direction. From 2030, plastic food packaging must contain a minimum percentage of recycled material – otherwise penalties may be imposed.

The problem: cups for dairy products are made of PP (polypropylene) or PS (polystyrene) – and for both there is no approved recycling material from the

mechanical recycling process for contact with food. Small quantities are only available through chemical recycling, which is far more costly and energy-intensive. Too little for widespread use.

“With rePETec, we create stable packaging with thin walls made of rPET, can recycle it after use and access the existing and established PET recycling stream. None of this has been feasible so far. With this solution, manufacturers of dairy products meet all legal requirements and at the same time strengthen the regional circular economy,” explains Thomas Maibohm, head of Sales and Product Management Thin-wall Packaging at ALPLA.

Following the successful test phase, ALPLA and INTOPACK are planning to start series production from the 4th quarter of 2025 – initially with the two standard formats of 180 and 300 milliliters. Others are to follow successively. Depending on the customer's requirements, the filling volume can be from 100 to 500 milliliters.

0.32 mm Thin Walls with in-mold Labeling

0.32 millimeters thin walls and integrated in-mold labeling (IML) minimize weight and material consumption. The higher specific weight of rPET is more than compensated by significantly better barrier properties. This increases the shelf life compared to conventional PP cups. “This opens up new opportunities for dairy products and can prevent food waste,” says Thomas Maibohm.

The high - quality rPET is contributed by system provider ALPLA from its own recycling plants in Europe ALPLAinject meets ALPLArecycling.

“Quality and availability are guaranteed in the long term,” says Thomas Maibohm, emphasizing the benefits. After use, the PET yogurt pots can be included in the already established PET bottle cycle. The PP label is first removed from the packaging during mechanical recycling. “The cups enrich the 'bottle-to-bottle' cycle. In the future, a bottle can become a cup and then back into a bottle and so on. This saves resources, avoids waste and is financially unbeatable,” Thomas Maibohm is convinced.

rePETec: Thin-walled PET at a Glance

- Fully recyclable packaging meets all PPWR requirements
- Customer - specific filling volume: 100 to 500 milliliters

- Standard formats: 180 and 300 milliliters
- Ultra-thin wall thickness: 0.32 millimeters
- Better barrier properties than PP or PS alternatives
- PCR content freely selectable – up to 100 percent
- Food approval

Process Cooling

Process cooling system accounts for the bulk of your energy costs. Maximizing process cooling efficiency can reduce energy costs.

There have been many advancements in plastics processing technology over the years, but one aspect has seemingly remained surprisingly the same — the cooling systems. What most people do not realize is there are new technologies today that can reduce their industrial cooling system operating costs by over 40%. However, determining what type of cooling system will be best for your plant can be tricky because there are many options from which to choose.

Coca-Cola Installs InnoPET Blomax at its Knetzgau Plant

New benchmark in energy savings thanks to the Double Gate heating concept (DoGa)



InnoPET Blomax Serie Vphoto – KHS

With the help of latest-generation KHS stretch blow molding technology, the bottler is taking the amount of energy saved in its PET bottle manufacturing operations up to the next level. Coca-Cola has replaced not one but two older machines with the InnoPET Blomax whose performance even exceeds expectations. This has been largely achieved by KHS' optional and pioneering Double Gate (DoGa) heating concept.

The district of Knetzgau in Lower Franconia is home to a good 6,400 people. Not far from the idyllic center of this little town on the River Main stands one of the biggest Coca-Cola factories in Germany. Here, Coca-Cola Europacific Partners (CCEP) employs around 500 personnel, producing its popular classics Coca-Cola, Coca-Cola Light, Coca-Cola Zero, Fanta, Mezzo Mix, Sprite and various others on a site measuring 200,000 square meters.

The group has made it its aim to create a more sustainable future and has adopted a holistic approach to this end. Saving energy, water and materials is beneficial to the environment and at the same time cuts costs. The production plant in Bavaria has now taken a further step in this direction by investing in the resource-conserving InnoPET Blomax from KHS.

Near infrared and Double Gate considerably reduce energy consumption

The latest generation of KHS' proven stretch blow molding machinery is not only distinguished by its high performance but also scores in direct market comparison with various measures designed to save energy. Two in particular stand out here: firstly, the heater used to heat the PET preforms operates with what's known as near infrared radiation (NIR) that in itself is far more efficient than many of the infrared heaters otherwise installed. Secondly, the InnoPET Blomax conveys the preforms without primary reflectors in two lanes on both sides of the lamps, enabling their energy to be applied much more effectively for heating. In addition to its specific energy savings, the Double Gate is also more compact than standard preform heaters.

In Knetzgau, project manager Ralph Sauter spent a long time deliberating over the investment in advance, drawing up a comparison of various systems on the market. Not one but two old stretch blow molders manufactured in 1998 were to be replaced that were no longer expected to satisfy the company's requirements regarding energy efficiency and the general availability of spare parts. A decision was ultimately made in KHS' favor. "In view of the targets we've set ourselves, saving energy plays a big role for us. With its new Double Gate technology and the savings this makes, the KHS system was of great interest to us," says Sauter. Now that the machine has been up and running for a few weeks since its successful acceptance, he reckons on saving up to

560,000 kWh per year. This is an impressive figure in the face of constantly rising energy prices. "All suppliers have understood the importance of this issue," states Sauter, but "compared to other systems on the market, the KHS setup generates far greater savings."

Design engineering challenges mastered

"We're impressed by the functionality and performance of our new machine," he adds. "The Blomax processes 20,000 2.0-liter containers and 30,000 1.5-liter containers an hour – and as it's so flexible, it can be perfectly integrated into our line."

The project manager also points out that the production site is not without its particularities. The biggest challenge was to convert the existing bottle air conveyor so that it served not two but just one machine. As the conveyor's position was fixed, the new system had to be aligned in the bottle shop with centimeter accuracy. This is confirmed by Marc Harald Eysel, sales manager for PET Technology at KHS. "This was an exciting task for us." He's keen to stress, however, that adjustments like these in the interests of the customer are a matter of course for KHS. "We don't just want to convince our clients with the system performance alone." While requirements in Knetzgau have initially been met by the new investment, KHS is generally seeing a fast-growing demand for energy-cutting technologies such as the Double Gate. "Even in comparison with modern stretch blow molding systems installed up to about the end of the last decade, our machinery saves a maximum of 30% in energy," Eysel concludes.

Henkel Introduces New Light Cure Adhesives for the Assembly of Flexible Medical Devices



The medical device industry is facing increasing regulatory scrutiny regarding the use of PVC materials containing Di (2-ethylhexyl) Phthalate (DEHP), a known endocrine disruptor. Both the FDA's Center for Devices and

Radiological Health and the EU Medical Device Regulation (MDR) 2017 have emphasized

minimizing DEHP exposure, prompting manufacturers to explore alternative flexible substrates like thermoplastic elastomers (TPEs). However, TPEs present unique challenges in assembly, as traditional methods such as solvent welding and existing adhesives are often ineffective.

The shift away from PVC materials has created a pressing need for adhesives capable of bonding effectively with TPE substrates. Many existing adhesives fail to achieve required strength or to maintain performance under heat and humidity aging, critical for medical device reliability. In addition, adhering to EU MDR regulations on CMR (carcinogenic, mutagenic, or toxic for reproduction) and endocrine substances is essential, further limiting material options.

Henkel addresses these challenges with the launch of two innovative light cure adhesives: Loctite AA 3952 and Loctite SI 5057. These adhesives are specifically designed to bond TPE substrates and overcome the limitations of traditional assembly methods. The key benefits of the products include:

- **Enhanced bonding performance:** Reliable adhesion to TPE materials, especially TPE-S and TPE-O, ensuring robust and durable device assembly.
- **Resistance to environmental factors:** High performance under heat and humidity aging conditions.
- **Regulatory compliance:** Formulated to meet EU MDR 2017 standards regarding CMR and endocrine substances. Both products are also ISO 10993 tested for biocompatibility, ensuring safety in medical device applications.

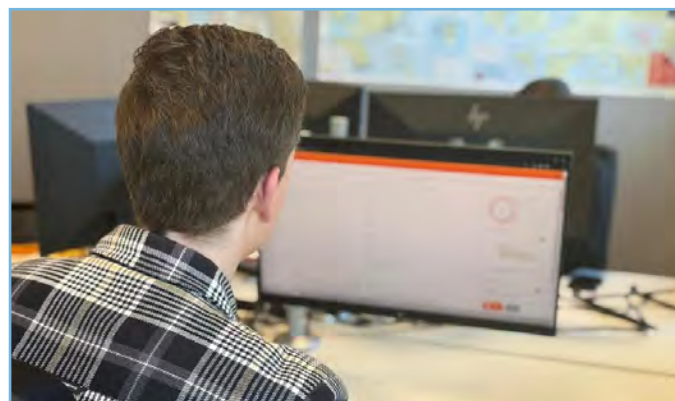
“At Henkel, we are dedicated to providing our customers in the medical industry with innovative adhesive solutions, pre-empting and complying with the respective safety standards,” said Dr. Julia Kurtz, Director Marketing & Strategy Industrial Adhesives at Henkel. “With the introduction of Loctite AA 3952 and SI 5057, we are addressing the growing need for safe and effective flexible substrates such as TPEs by providing innovative adhesives for their assembly. Our new products are ISO 10993 tested and formulated with patient safety and comfort in mind, ensuring their suitability for use in medical device bonding.”

Henkel's extensive portfolio for medical devices includes adhesives for assembly, low - pressure molding technologies, skin bonding, circuit board assembly, and printable conductive inks. A comprehensive range of Loctite brand dispensing, curing and motion control equipment is available to ensure efficient and optimized assembly processes. As medical devices continue to evolve with advanced technologies, Henkel remains a trusted partner, delivering safe and innovative assembly solutions.

(Source: Henkel / 29.01.2025)

Strohm Launches Advanced Pipe Design Tool

TCP Designer™ is transforming pipe engineering with a user - friendly solution to simplify design workflows.



Strohm, the world's first and leading provider of Thermoplastic Composite Pipes (TCP), launches TCP Designer™, its new web-based tool developed to help companies design and engineer thermoplastic composite pipes for their projects.

TCP Designer™ helps users ensure their piping systems meet critical requirements for water depth, pressure, temperature, and means of installation – all in one seamless experience. The online tool is designed to streamline pipe design assessments during the Front-End Engineering Design (FEED) stage of projects, enabling engineers to evaluate the suitability of TCP for various applications quickly and accurately.

By inputting project-specific specifications, users can instantly generate datasheets with key parameters such as size, weight, stiffness, and minimum bend radius, enabling them to easily and quickly assess

factors such as installation feasibility and in-place analysis. For instance, this allows the user to quickly assess the wide range of vessels available to install the lightweight TCP in any water depth.

The tool simplifies decision-making, reduces design iteration time, and supports the adoption of cost-effective, lightweight, and corrosion-resistant TCP solutions in energy infrastructure, and other industrial projects.

Strohm's CEO, Martin van Onna, commented: "While there is a plethora of information about designing and engineering steel pipes, the same cannot be said for composite pipes. Strohm has an extensive track record, both offshore and onshore, but there is still a degree of hesitation in the industry due to a lack of information about TCP's capabilities and potential.

"We want to empower our clients, but also engineering houses around the world, by providing the right tools to simplify complex challenges. TCP DesignerTM allows users the independence to design their own piping systems that align perfectly with their project requirements, with the confidence that Strohm's engineering department is a phone call away if they'd like to discuss specific projects. Its innovation designed for efficiency, precision, and peace of mind."

TCP DesignerTM offers intuitive features that streamline the complex process of pipeline design and engineering. With a user-friendly interface and robust computational capabilities, users can customize pipe design to match specific project needs and environmental conditions and have the data sheets for their projects in minutes.

(Source: Strohm/28.01.2025)

SULZER Launches PyroConTM to Enhance Plastic and Biomass Waste Reduction

SULZER's new PyroCon technology rapidly cools the gases emitted during pyrolysis, a process that heats and liquefies plastic without oxygen, limiting harmful

pollutants. The resulting pyrolysis oil can be used as a fuel or refined to produce valuable chemicals. PyroCon's rapid cooling (quenching) of the pyrolysis gases prevents further chemical reactions and potential product degradation, improving quality and yield for the circular economy and helping to reduce plastic waste.

Drawing on its success at Indaver's Plastics2 Chemicals plant in Belgium, and the legacy of its plastic waste projects at Quantafuel (Denmark) and Carbolig (Germany), SULZER is proud to add PyroCon, its new rapid condensing technology for biomass and plastic pyrolysis, to its portfolio of chemical technology solutions.

Improving quality and yields

PyroCon addresses key critical operational challenges including anti-fouling technology, low maintenance design, flexible capacity and feedstocks, ranging from polyolefins (PP/PE) and polystyrene (PS) to bio-mass waste residues. The solution is further designed to allow optimal reaction control for pyrolysis processes by rapidly quenching pyrolysis products, leading to increased yields.

Promoting a circular economy

PyroCon optimizes superheated vapor condensation through unique liquid recirculation in a compact design capable of handling up to 600°C vapor inlet temperatures, joining other SULZER Chemtech solutions that are essential to promoting circularity for solvents, chemicals, and plastics.

"We are continually striving to improve efficiencies and create value for our clients," said Tim Schulten, President of SULZER Chemtech. "Our new PyroCon technology effectively ensures the integrity of the plastics and bio-waste pyrolysis process, making it a valuable technology for sustainable waste management and energy recovery."

(Source: SULZER/28.01.2025)

PLASTIC RAW MATERIALS



Revolutionary Polymer Unlocks the Future of Data Storage



A new polymer can store data in nanoscale indents, offering higher storage density and better sustainability by being quickly erasable and reusable. Credit: SciTechDaily.com

Researchers at Flinders University have developed a low-cost, high-density polymer that can store data efficiently using nanoscale indents and can be erased and reused multiple times.

Innovative Data Storage Material

A groundbreaking material for high-density data storage offers a more efficient and sustainable alternative to traditional hard drives, solid-state drives, and flash memory.

This low-cost polymer stores data as tiny “dents,” forming nanoscale patterns that hold more information than conventional hard disk drives.

Developed by the Chalker Lab at Flinders University, the polymer can have its data erased in seconds using brief heat bursts and can be reused multiple times. The innovation is featured in the esteemed journal *Advanced Science*.

Sustainable and Efficient Data Storage Solutions

“This research unlocks the potential for using simple, renewable polysulfides in probe-based mechanical data storage, offering a potential lower-energy, higher density and more sustainable alternative to current technologies,” says first author and PhD candidate Abigail Mann, from the College of Science and Engineering at Flinders University.

Made from low - cost materials, sulfur and dicyclopentadiene, the researchers used an atomic force microscope and a scanning probe instrument to make and read the indentations.

Senior author Professor Justin Chalker says the development is the latest example of new era polymers capable of making a difference to a wide range of industries.

High Density and Reusable Data Storage Technology

“The age of big data and artificial intelligence is increasingly driving demand for data storage solutions,” says Professor Chalker.

“New solutions are needed for the ever-growing computing and data storage needs of the information era.

"Alternatives are being sought to hard disk drives, solid-state drives, and flash memory which are constrained by data density limits – or the amount of information they can store in a particular area or volume."

Using the method, the polymer chemistry team at Flinders University demonstrated data storage densities that exceed typical hard disk drives.

Advancing Mechanical Data Storage

The polymer chemistry method allowed for the data writing, reading and erasing to be repeated many times, which is important in computing and data storage.

The concept of storing data as indents on the surface of materials has been explored previously by computing giants such as IBM, LG Electronics and Intel. While this mechanical data storage strategy provided some very promising demonstrations and innovations in storage, the energy requirements, costs, and complexities of the data storage materials are some of the barriers to commercializing the technology.

Senior researchers Dr. Pankaj Sharma and Dr. Christopher Gibson say the Flinders polymer addresses these challenges with its unique physical structure that allows mechanical force to encode the data via an indentation, and a chemical structure that allows rapid reorganization of the polymer upon heating to erase that indent.

"The low cost of the building blocks (sulfur and dicyclopentadiene) is an attractive feature that can support future development of the polymer in data storage applications," adds Chalker Lab PhD candidate Samuel Tonkin.

Reference: "Probe-Based Mechanical Data Storage on Polymers Made by Inverse Vulcanization" by Abigail K. Mann, Samuel J. Tonkin, Pankaj Sharma, Christopher T. Gibson and Justin M. Chalker, 16 December 2024, Advanced Science. DOI: 10.1002/adv.202409438

Universal Masterbatch Introduces Polymerless Masterbatch

Universal Masterbatch has developed special polymerless masterbatch, which replaces pigments in end products. These masterbatches are compatible

with all plastics and rubber polymers equivalently. Moreover, they help reduce inventory costs, processing time, energy and have good dispersion properties.



Key Features:-

- It contains no polymer, hence, does not alter the properties of your resin.
- No exposure to heat; hence, the processor retains the total strength of the pigment.
- High pigment content reduces its loading. The lower the loading, the higher the strength such as impact, tensile strength of mouldings, flexural strength etc.
- Develops the pigment to its full strength in the first stage itself thus, minimizing variation within the acceptable range specified by the customer.
- We offer lubricating additives, which help to reduce the AMP of the machine, leading to increasing production.
- General loading is between 0.8% to 1% of masterbatch in the total batch.
- Available in both powder and pellet form.

SABIC Unveils its New Polypropylene Pipe Solution, SABIC VESTOLEN P9421

SABIC has unveiled its new polypropylene pipe solution, which is made with a random copolymer. The new solution, SABIC VESTOLEN P9421, aims to provide improved properties at high pressures and temperatures with enhanced durability and reliability.

Boasting high thermal stability designed for high heat-resistance performance, the VESTOLEN P9421 also features a long service life. All these considerations make the material ideal for manufacturing cold and hot water pipes and

fittings that can transport drinking water. The new material is classified as a tailored compounded solution. It meets specific pipe application requirements, fulfils domestic piping system's needs and provides improvements in quality, versatility and durability, all of which make the solution compatible with various pipe applications.

"SABIC is committed to enabling its customers with innovative material solutions for domestic piping systems with local content," said Mohammed Al-Zahrani, SABIC Vice President, PP Business Unit.

Farris Al-Koblan, CEO, of Al Koblan Thermopipe Factory Co, added, "We are proud of our collaboration with SABIC spanning two decades. We are confident that local polypropylene random copolymer products are manufactured with the high quality."

The SABIC green-coloured VESTROLEN P9421 grade has passed multiple testing scenarios and was demonstrated in final applications across different value - chain partners in Saudi Arabia. The commercially available solution has been introduced to Al Koblan Thermopipe Factory Co, which has led to the successful deployment in a variety of pipe applications.

Eastman Copolyesters Receive RecycClass Certification

Eight copolyester resins and their equivalent recycled content grades were classified as compatible with recycling processes.

Eastman received RecyClass recyclability approvals for eight copolyester resins and their equivalent Renew grades. Renew grades are a version of the resin which includes recycled content.

Six copolyesters, also known as specialty polyethylene terephthalate (PET), were classified as fully compatible with the state-of-the-art recycling processes for PET bottles in Europe. This includes:

- Cristal EN076
- Cristal One
- Cristal One Pro

- Cristal One IM812
- Cristal One E
- Cristal One E Lux

Additionally, two of Eastman's resins, Cristal EN067 and Cristal EN059, were recognized as having "limited compatibility," indicating that they slightly impact the recycling process or the quality of the recycle.



Eastman's Cristal grades were recognized as recyclable using established recycling processes.

The approval follows independent testing conducted by PTI-Europe and Plastics Forming Enterprises (PFE), following an adapted version of the Recyclability Evaluation Protocol for PET bottles.

The modified copolyesters do not interfere with the established recycling processes and are marketed as a solution for non-beverage packaging applications such as skin care jars, bottles, caps and color cosmetics. With their lower crystallization rates compared to standard PET, these resins offer durability, high transparency and luster in final products, according to Eastman.

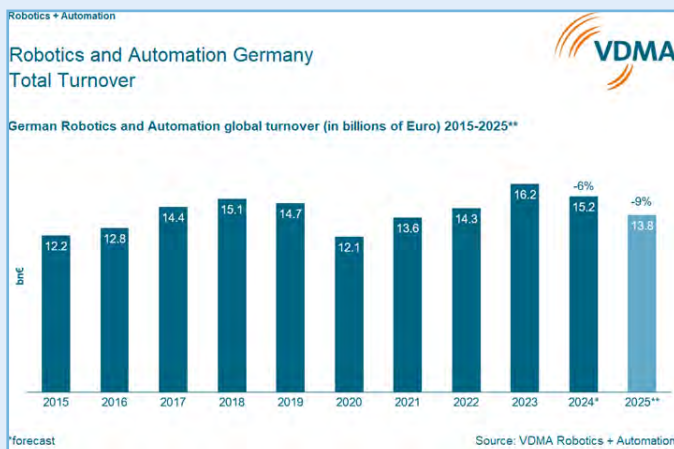
RecyClass is a nonprofit, cross-industry initiative advancing recyclability, bringing transparency to the origin of plastic waste and establishing a harmonized approach toward recycled plastic calculation and traceability in Europe. RecyClass develops recyclability evaluation protocols and scientific testing methods for innovative plastic packaging materials, which serve as the base for the design for recycling guidelines and the RecyClass online tool. RecyClass has established recyclability certifications for plastic packaging, recycling process certification and recycled plastics traceability certification for plastic products.

(Source: Plastics Technology / 31.01.2025)



German Robotics and Automation Industry Forecasts Downturn in 2025

Germany's VDMA Robotics + Automation Association is anticipating a 9% decline in 2025 sales to €13.8 billion.



VDMA is forecasting a second straight year of declining robotics and automation sales in 2025 after four consecutive years of growth. Source: VDMA

Saying that the sector has lost its competitiveness and seeing an “urgent need for action,” Germany's VDMA Robotics + Automation Association is forecasting that 2025 sales will be down 9% to €13.8 billion. That projected shortfall comes on the heels of a disappointing 2024 when the sector saw sales fall 6% to €15.2 billion euros.

“The sales trend in the robotics and automation industry calls for action,” says Dietmar Ley, chairman of VDMA Robotics + Automation Association. Ley said the downward trend goes beyond cyclical demand fluctuations and includes “tangible structural causes.” Among these, Ley cited “excessive” dependence of the sector on Germany's automotive industry, as well as “weaknesses in competitiveness that business and politics must address with consistent reforms.”

Domestically in Germany, order intake fell sharply in 2024, dropping 16%, while foreign sales declined by 2%. For the German robotics industry, exports to the eurozone were a lone bright spot, rising 44% in 2024. Foreign demand excluding the eurozone, by contrast, was down 13%.

In terms of recommended reforms, Ley says the German robotics and automation industry needs to focus on its competitiveness and make accelerating innovation a priority. In addition, he says the industry needs to bring costs down to a competitive level. Due to global competition, Ley also called on the government to target disadvantages the industry faces, including “disproportionate regulation and excessive costs.” Despite the challenges, Ley says, “all long-term growth trends for our innovative industry remain intact. We now have to set the right course.”

(Source: Plastics Technology / 10.02.2025)

Brückner, FP Corporation and the Really Big Thing



Contract conclusion for a new stretching line for ultra-thick simultaneously stretched film applications.

Japanese FP Corporation (FPCO), a leading manufacturer of food containers, has made a groundbreaking advancement in film technology with the development of the world's first ultra-high-rigidity biaxially oriented polypropylene (OPP) sheet. This innovation is the result of a collaboration with many different companies and Brückner Maschinenbau with their advanced film stretching technology – and has now culminated in a contract for a new stretching line.

A decade of innovation and collaboration

Over the past 10 years, FPCO has conducted extensive research and testing at Brückner's technology center and pilot line. This partnership has optimized FP Corporation's material as well as Brückner's simultaneous stretching technology LISIM® to produce high-class thick BOPP films for a variety of applications, ranging from food containers to industrial uses such as for the automotive industry.

1. The world's first ultra-high-rigidity biaxially oriented polypropylene sheet for various applications

Innovative food trays: The new BOPP sheet has pioneered a new category of food tray used for “frozen to microwave” due to superior cold & heat resistance. Namely, meeting the growing demand of frozen foods in the field of food trays, the newly developed BOPP sheet can be used for production of a food tray for frozen food and can also be used for microwave oven cooking as it is.

Industrial applications and home furnishings

- **Inherent characteristics as PP:** Light weight, chemical resistance, recyclability
- **Characteristics from biaxial stretching:** Transparency & high gloss, high rigidity and toughness, cold resistance

- **Remarkable characteristics:** Excellent formability, decorativeness, mono-material

The new OPP sheet with a thickness of 150-300 micron, exhibits excellent mechanical features such as high rigidity and high toughness, when utilized as a sheet for “In-Mold Labeling” (IML), rigidity and toughness of the molded article can be significantly enhanced. Therefore, compared to a conventional IML article, the amount of injection resin can be decreased to 20% by mass in order to attain the same level of mechanical strength of the conventional IML article. Moreover, if the sheet is decorated with printings on injection side, it can be produced a decorated IML article that contributes to paint-free system. This makes the IML article suitable for automobile parts and other industrial parts, and this advancement contributes to reducing environmental impact.

2.A laminated OPP sheet

- **Features:** High rigidity, impact resistance, toughness, light weight, thermoformable and excellent decorative properties due to superior transparency
- **Applications:** Automotive, home furnishings, solar cells, and as a partial replacement for materials like steel, aluminum, and carbon - fiber - reinforced plastics

The laminated OPP sheet with a thickness of 1-3 mm is suitable as building material, including windows, waist-high walls, carport roofs and solar panels, supporting materials due to its transparency, mechanical strength, and light weight. Furthermore, when arranged as a decorated sheet, it can be used in several fields such as automobile exterior, automobile interior, housing & furnishings. In particular, when used as exterior material for automobile, it also enables paint-free system and significantly contributes to the reduction of environment impact.

Boris Pasternack, Brückner Maschinenbau's Head of Sales East Asia says: “After more than 10 years of intensive collaboration with FP Corporation, we are thrilled to see this innovative development move into production – a remarkable example of German - Japanese partnership and pioneering spirit.”

Yoshihiro Nishie, FP Corporation's General Manager of Comprehensive Research Institute and Basic Technical Engineering Dept. adds: “Over a decade since the commencement of foundational research, the world's first BOPP sheet technology has been successfully developed, thanks to a fruitful partnership with Brückner. This achievement can be attributed to the culmination of both companies' technical expertise.”

Future Prospects

The new OPP sheets have already received positive recognition across various industrial fields. FP Corporation is currently designing a new plant to start production in late 2027, with plans to market these products through alliances with related industries. This collaboration not only highlights the innovative capabilities of both companies but also sets a new standard for sustainable and high-performance materials in the industry.

About LISIM®

Simultaneous lines stretch the film in both directions at the same time. Brückner's LISIM® technology (Linear Motor Simultaneous Stretching) uses linear motors driving clips without any mechanical connections – that means a fast and flexible production (not least because of the variable stretching ratios in machine direction) and at the same time less wear parts, low maintenance. Since 1998, several LISIM® production lines have been successfully in operation.

About FP Corporation

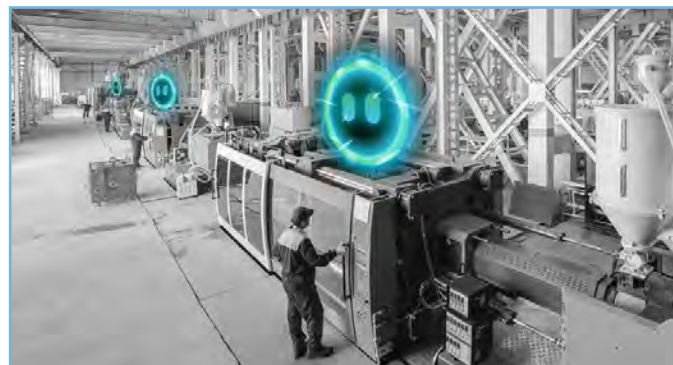
FP Corporation was established in 1962 as a specialist manufacturer of disposable food containers for use in supermarkets, groceries, and other stores – within this sector the company is the absolute number one. Analogous to the strong commitment of the Japanese economy in general to the circular economy FP Corporation developed the “FPCO Method Recycling” to recycle used food trays and PET bottles collected from supermarkets and other locations around Japan into new containers in order to reduce waste and decrease the amount of petrochemical derived raw materials used.

(Source: BRÜCKNER / 10.01.2025)

Boost Profits and Slash Downtime

Get an Expert Advisor at Every Machine

We understand the challenges and frustration that come with lacking workforce knowledge, high production costs and waste. That's why we created **the world's most powerful molding process solution** that works day and night to ensure your processes are up and running how they should be.



Using RJG solutions, people with virtually any experience level can fix a process. Our real-world customers love their results:

"We are now able to make more than twice as many parts in the same amount of time—one process part output increased from 16,000 to 40,000 parts per day." – Christopher Weaver, Project Engineer, Flaxan LLC / Medron LLC

New! Enhanced Features

Get knowledge you can trust delivered by CoPilot's MAX AI process advisor using Master Molder® techniques, without the need to track down a process engineer:

- Increase Labor Efficiency
- Address Employee Recruitment & Turnover
- Improve Output & Slash Downtime
- Contain Bad Parts
- Hit Deadlines

(Source: RJG Mold Smart)

Innovating Mould Temperature Control

At Fakuma 2024 (Friedrichshafen, Germany, 15-19 October), **Frigel** will present its latest process cooling solutions, specifically designed to maximise productivity by significantly reducing cycle times and energy and water consumption. In the area of reducing cooling cycle times, the Tuscan company is launching **the fourth generation of its super-compact Turbogel B4 mould temperature control units**, which, for an investment with an average payback time of just a few weeks, mean an increase in the productivity and

profitability of the production cell. The increased efficiency of the heat transfer between the recirculating water flow and the mould cavity allows the actual cooling cycle time to be drastically reduced compared to conventional TCUs.

The new units are available in **Turbogel S** (for injection moulding) and **Turbogel P** (for the packaging industry). **The former** is a system designed to optimise the process, improve productivity and promote high quality moulded parts. These new units have shown productivity increases of between 20 and 40% and are available in single - zone (B4SM) and dual-zone (B4SD) configurations.

Each unit includes a high - performance booster pump per zone, actuated modulating cooling valve, and 6 to 24 kW heater per zone. **Turbogel P** units are specifically designed for low temperature injection moulding applications such as packaging and thin wall containers, caps and closures, as well as blow moulding and extrusion. Replacing direct cooling from central chillers, these units reduce the cooling cycle time of chilled water processes, increasing mould heat transfer efficiency and boosting productivity by 10 to 20%. These units are available in single and dual zone configurations, with a high - performance booster pump per zone (with or without inverter), modulating cooling valves and cooling capacity to meet the highest demands.



Other Frigel innovations at Fakuma 2024 include **the Microgel Syncro RSY mould temperature control unit with patented Variotherm technology**, integrated water chiller and dual-zone booster pumps. This on-board unit allows a drastic reduction in cycle time, up to 60%, without affecting the surface

quality, as well as dimensional and mechanical properties of the moulded parts. The reduction in cycle time is achieved by using chilled water from the integrated chiller only during the actual cooling phase of the cycle, and by digital synchronisation with the moulding process, which provides a "deep cooling only when necessary" signal, thus reducing the cooling time while keeping the cavities warm during the injection phase. The Microgel Syncro range includes more than 10

models with cooling capacities from 16 to 56 kW and heating capacities from 12 to 24 kW. Replacing standard TCUs, this technology does not require changes to moulds or moulding parameters, making the system communicate with the press while remaining completely autonomous and easily implemented by operators.

At Fakuma, Frigel will also be presenting the Ecodyr Adiabatic Cooler 4DK, a centralised closed-circuit adiabatic cooling system designed to replace cooling tower technology; 3PR 4.0, complete real - time control unit for the entire refrigeration system (parameters, functions, alarms etc.); Thermogel TDK, high-precision single-zone pressurised water TCU; Microgel RSM/RSD, a range with optimised mechanical design, increased reliability and a wide range of options, where powerful pumps and precise temperature control up to 90 °C ensure long-term high performance and improved product quality with minimum cycle times.

(Source: MACPLAS 2024)

Automation Systems Triggers Mandatory Takeover Bid for Piovan



The legal conditions have been met to trigger the requirements for launching **a mandatory takeover bid on Piovan shares. This was announced by Automation Systems**, a company whose capital is indirectly held by the Investindustrial VIII fund. In July 2024, Automation Systems had acquired a majority stake in Piovan, an operation that, upon completion, foresaw a takeover bid for the remaining shares.

The offer will amount to **14 euros per share for each of the 16,478,541 shares, representing 30.74% of Piovan's capital, in addition to 416,062 shares that may be allocated under incentive plans, for a total of 16,894,603 shares, equivalent to 31.52% of the company's capital** listed on the Euronext Star segment of the Milan Stock Exchange. Once the acquisition of Piovan's entire share capital is finalised, the company will be delisted.

(Source: MACPLAS/05.02.2025)

CIRCULAR ECONOMY/ BIO-PLASTICS/ RECYCLING



Advancing PCR Plastics Processing: Real-Time Insights and Collaborative Solutions

PCR plastics introduce variability in flow behaviour, crystallization rates and mechanical performance. Such deviations can lead to production delays, defects, and costly rework, undermining efficiency and profitability. **sensXPERT** explores the solution that lie in transforming hidden material behaviour into actionable insights.



Dielectric sensor technology provides a direct view into the material's electrical properties—such as its dielectric constant and loss factors — during processing. This real-time visibility allows manufacturers to detect deviations in flow, cure

and crystallization as they happen, enabling corrective actions that safeguard product quality.

How dielectric sensors offer critical insights

Dielectric sensors are essential for monitoring material behaviour in real time. Unlike traditional temperature and pressure sensors, which provide only indirect data, dielectric sensors measure the electrical

properties of the material itself, including the dielectric constant and loss factors. These properties shift in response to changes in material composition, flow behavior and crystallization.

Placed directly within the mold, dielectric sensors track how the material flows and solidifies, offering manufacturers immediate feedback on its behavior. For example, shifts in the dielectric constant can indicate changes in viscosity, signaling potential flow issues or uneven filling of the mold. Similarly, fluctuations in loss factors can highlight differences in crystallization, allowing molders to detect structural defects early in the process.

Visualizing material behavior for real - time quality control

The data gathered by dielectric sensors is transformed into visual representations, allowing manufacturers to compare material performance against predefined quality benchmarks. These real - time visualization tools are essential for molders working with PCR plastics, where deviations are common due to the inherent variability in the material.

Through real-time graphs and charts, manufacturers can monitor how the material flows, crystallizes and solidifies. By comparing this visualized data with expected behavior, manufacturers can quickly determine if the material is meeting critical criteria such as dimensional stability, strength and surface finish.

Enhancing visualization insights with AI and data science

While dielectric sensors provide real-time data, AI and data science further enhance these insights by identifying patterns and potential deviations. AI models, trained on historical production data, analyze sensor inputs to detect subtle deviations that may not be immediately visible.

In this context, AI enhances the visualization tools by providing deeper insights into material behavior. By layering AI analysis on top of real-time sensor data, manufacturers can better understand how PCR materials behave under specific conditions and how these behaviors relate to product quality. These AI-driven tools form a foundational layer within the AVIDENS Consortium, enabling seamless integration of data insights with practical solutions across the plastics value chain.

The AVIDENS Consortium

The AVIDENS Consortium was established to address these challenges through a collaborative network spanning the plastics value chain.

Schwarz Plastic Solutions and sensXPert are the primary partners collaborating directly with customers to address the complexities of PCR plastics processing. Schwarz Plastic Solutions brings decades of expertise in injection molding and process optimization, ensuring seamless integration of advanced insights into manufacturing workflows. sensXPert provides its advanced dielectric sensor technology and AI-driven analytics, enabling real-time tracking of molecular-level material behavior and ensuring deviations are detected and corrected dynamically.

The consortium is supported by NETZSCH Analyzing & Testing and Precupa, who play pivotal roles in project support. NETZSCH provides advanced laboratory equipment to characterize material properties such as flow behavior, rheology and thermal enthalpy under thermal treatment conditions. Precupa specializes in mold design and build - up, offering coatings for specific applications and supporting the scaling of molds from trials to full-scale production.

Meraxis and LabV provide additional services to complement the consortium's efforts. Meraxis supplies virgin, post-industrial and post-consumer recycled plastics, enabling experimentation with diverse blends. LabV offers a centralized platform for

managing and analyzing lab data from various laboratory machines, ensuring a unified environment for seamless data connection and a single source of truth.

(Source: Interplas Insights / 13.01.2025)

'Back to Plastic': Trump to Sign New Executive Order to Junk Eco - Friendly Paper Straws, Elon Musk Reacts



US President Donald Trump said Friday that he would stop a plan by the Biden administration to phase out plastic straws across the federal government, saying its "BACK TO PLASTIC." "I will be signing an Executive Order next week

ending the ridiculous Biden push for Paper Straws, which don't work," Trump posted on his Truth Social site.

The Biden administration last year ordered a phaseout of single - use plastic from the federal government's food service operations, events and packaging by 2027, and from all other federal operations by 2035.

Trump wants plastics back

Trump's move is the latest on environmental issues by the Republican president, who pulled out of the Paris climate change agreement soon after his inauguration for a second term and has pledged to "drill, baby, drill" for oil. It was not clear whether Trump planned to call off that wider effort or whether he was focused just on bringing back plastic straws. The White House did not immediately respond to a request for clarification.

President Donald Trump on Friday raged against eco - friendly paper straws promoted by his predecessor Joe Biden, and pledged that the United States would return to using plastic ones.

"I will be signing an Executive Order next week ending the ridiculous Biden push for Paper Straws, which don't work. BACK TO PLASTIC!" Trump said on social media.

Democrat Biden had announced a target to eliminate single-used plastic utensils like drinking straws by 2035 in government departments.

Trump's move is the latest on environmental issues by the Republican president, who pulled out of the Paris climate change agreement soon after his inauguration for a second term and has pledged to "drill, baby, drill" for oil.

The growing trend for paper drinking straws has long irritated Trump. "They want to ban straws. Has anyone tried those paper straws? They're not working too good," he said during a campaign rally in the 2020 election against Biden.

"It disintegrates as you drink it, and if you have a nice tie like this tie, you've got no choice." Trump's campaign team has also sold branded plastic straws with the slogan: "Liberal paper straws don't work."

Trump's decision to support plastic straws received backing from Elon Musk, who shared a screenshot of the Truth Social post on X, adding, "Greatest President ever!"

Plastic consumption has gone up

Plastic consumption has quadrupled over the past 30 years to more than 400 million tons a year, according to estimates by the Organization for Economic Cooperation and Development. Around the world, the equivalent of one garbage truck of plastic enters the ocean every minute, experts estimate. And recycling has struggled to keep up: Only an estimated 9% of plastic waste generated globally is recycled.

Concerns have also mounted over the health effects of micro plastics in food, water and human bodies. Flame retardants, phthalates, bisphenols and other chemicals present in plastic can also be hazardous to human health and the environment.

Nations have been negotiating a global plastic-waste treaty, amid rising recognition that the world can't recycle or manage its way out of a deluge of plastic waste. But those talks stalled in December after pushback from producers of oil and gas, which provide the building blocks of plastic. The latest directive to turn the federal government back to plastics would help the fossil fuel industry by stoking demand for plastic. Oil and gas companies donated heavily to Trump's campaign.

(Source: The Economic Times / 09.02.2025)

Polystyrene Recycling Alliance Launches to Expand Recycling Access and Drive Higher Recycling Rates

Initiative Aims for "Widely Recyclable Status" for Polystyrene.

Washington, D.C. — The Plastics Industry Association (PLASTICS) announced the formation of the Polystyrene Recycling Alliance (PSRA), marking a significant step toward improving polystyrene recycling across the United States. This collaborative effort unites the polystyrene (PS) and expandable polystyrene (EPS) industries together with a diverse group of stakeholders from brands, converters, and recyclers, united by a shared goal: achieving "widely recyclable status" for polystyrene.

"This collaboration is a huge step forward for polystyrene sustainability, enabling more Americans to recycle a wide variety of polystyrene items," said Matt Seaholm, President and CEO of PLASTICS. "Polystyrene is inherently recyclable, is being recycled today, and will be recycled at much greater scale in the future. Recycling is real, and we are proud to pursue this initiative at the Plastics Industry Association (PLASTICS) to join the full value chain in working together to promote plastics sustainability."

In partnership with experts at Resource Recycling Systems (RRS), the PSRA established a comprehensive roadmap to guide this initiative. Initial data indicates that 32% of the U.S. population currently has access to recycle one or more polystyrene items. Several formats are on the brink of qualifying for a "check locally" recycling status. Furthermore, with ongoing and planned industry investments in recycling capacity, PSRA expects recycling access for several polystyrene formats and applications to approach "widely recyclable status" by 2030. We will work collaboratively across the value chain and invest in infrastructure and education to accelerate progress.

From preserving food quality and safety to enhancing pharmaceutical transportation and medical applications, enabling economical appliance manufacturing and transportation, and contributing to efficient building construction, polystyrene is integral to various industries and used across diverse sectors and applications.

"Polystyrene is an essential material that provides numerous life-enhancing benefits, and a favorable carbon footprint compared to other materials," said Richard Shaw, Chair of the Polystyrene Recycling

Alliance. “Our focus is to expand end-of-life recycling options for all types of polystyrene through strategic investments and partnerships with other stakeholders committed to a circular plastics economy.”

To support these initiatives, the PSRA will establish a recycling investment and education fund aimed at expanding polystyrene recycling throughout North America. These investments will seek to develop and deploy innovative ways to enhance and modernize recycling systems.

“We’re committed to addressing the challenges of recycling polystyrene,” said Patrick Krieger, Senior Vice President, Sustainability of PLASTICS. “By collaborating with communities, material recovery facilities, and drop-o programs, we aim to significantly improve recycling access and education for polystyrene. This is just the beginning, and we are optimistic about our strategy and approach to ensure all polystyrene is recycled at scale.”

(Source: PLASTIC INDUSTRY ASSOCIATION / 28.01.2025)

Thailand Bans Imports of Plastic Waste

Campaigners welcome move but say success depends on enforcement and global agreement on a treaty.



Thailand has banned plastic waste imports over concerns about toxic pollution, as experts warn that failure to agree a global treaty to cut plastic waste will harm human health.

A law banning imports of plastic waste came into force this month in Thailand, after years of campaigning by activists. Thailand is one of several south-east Asian countries that has historically been paid to receive plastic waste from developed nations. The country became a leading destination for exports

of plastic waste from Europe, the US, the UK and Japan in 2018 after China, the world's biggest market for household waste, imposed a ban.

Japan is one of the biggest exporters of waste plastic to Thailand, with about 50m kg exported in 2023.

Thai customs officials said more than 1.1m tonnes of plastic scraps were imported between 2018 and 2021.

Penchom Sae-Tang, the director of the NGO Ecological Alert and Recovery, said: “The ban on all plastic scrap imports should be seen as a triumph for civil society in preventing hazardous waste entering Thailand.” But she warned vigilant monitoring and robust cooperation with authorities would be vital to make sure the ban was enforced.

Imports of plastic were often mismanaged in Thailand, with many factories burning the waste rather than recycling it, leading to damage to human health and the environment.

Punyathorn Jeungsmarn, a plastics campaign researcher at the Environmental Justice Foundation, said: “While this is a great step forward for Thailand, there is more work to be done. After the law comes into effect, the Thai government must work to ensure its enforcement and implementation. This means industrial, environmental and customs agencies must cooperate to prevent any illicit imports of plastic waste ... the current law does not address the transit of plastic waste, meaning Thailand could be used as a transit state to send waste to our ... neighbours. The Thai government must guard against this.”

The ban comes into force as discussions continue in an attempt to rescue the global plastic waste treaty. Last year nations failed to agree the final wording of the treaty after talks in Busan. More than 100 countries supported a draft text that included legally binding global reductions in plastic production, which stands at more than 400m tonnes annually, and phasing out certain chemicals and single-use plastic products.

But the resistance of oil-producing countries including Saudi Arabia, Iran and Russia to cuts in production led negotiators to concede defeat.

Prof. Steve Fletcher, the Director of the Revolution Plastics Institute at the University of Portsmouth, said a failure to agree a treaty to end plastic pollution was a threat to human health.

"Plastic pollution is now recognised as not only an environmental crisis but also a critical human health crisis. The need for decisive international action to tackle plastic pollution has never been more urgent," he said.

In an article in the British Medical Journal, Fletcher said the unresolved disagreements at the treaty talks over cuts to production hindered progress towards a global agreement to protect human and environmental health.

Emerging research shows that there are substantial health risks from micro plastic exposure, including increased risk of stroke, heart attack and death. Some studies suggest micro plastics play a role in dementia, the article said.

Burning plastic as a method of waste management posed severe health risks, which was compounded by the trade in plastic waste, he said.

Dr. Cressida Bowyer, the deputy director of the Revolution Plastics Institute, which has carried out research into the dangers of open burning of plastic waste, said: "With 16% of global municipal waste burned openly, rising to 40-65% in low-and middle-income countries, vulnerable populations bear the brunt of this crisis. The toxic fumes from burning plastic are a silent but deadly contributor to global health burdens. Urgent action is needed."

No date has yet been agreed for further discussions on the global treaty to end plastic waste.

(Source: The Guardian/07.01.2025)

South Korean Researchers Accelerate Plastic Circularity by Turning Waste into Fuels

Researchers from South Korea have made a breakthrough in the fight against plastic waste by demonstrating how adding water to ruthenium-based catalysts can enhance the catalytic conversion of polyolefins into fuels like gasoline and diesel. The discovery paves the way for more sustainable recycling techniques for plastic packaging.

Polyolefins account for 55% of plastic waste worldwide. The traditional recycling methods for them rely on melting and remodeling plastics into lower-quality materials. However, catalytic recycling breaks down plastics into chemicals and fuels.

The study published in Nature Communications discovers the benefits of adding water during polyolefin depolymerization when using ruthenium-based catalysts.

Dr. Insoo Ro, professor of Seoul National University of Science and Technology and a lead author to the research paper, says: "This approach represents a viable alternative to conventional waste management practices and offers a solution to reduce landfill and ocean pollution caused by polyolefins — the largest contributor to plastic waste."

Synergistic catalysis

Through extensive experimentation, the research team found that catalysts with both metal and acid sites showed improved conversion rates when water was added to the reaction mixture.

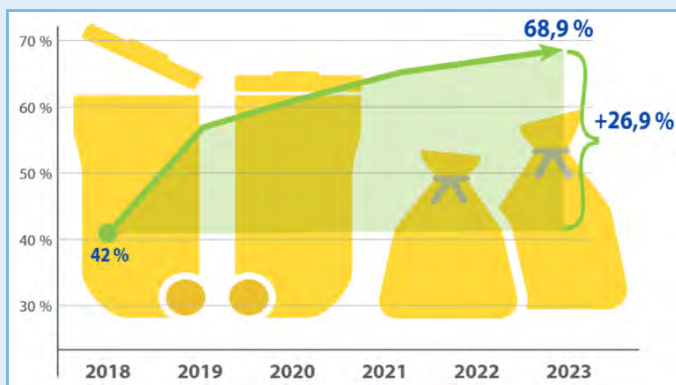
"The addition of water alters the reaction mechanisms, promoting pathways that enhance catalytic activity while suppressing coke formation. This dual role improves process efficiency, extends catalyst lifespan and reduces operational costs," explains Dr. Ro.

Their optimized Ru/zeolite-Y catalyst achieved a 96.9% conversion rate under optimal conditions. Beyond the lab, the team conducted a techno-economic analysis and life cycle assessment of their approach, exploring its feasibility for commercial-scale application.

"By demonstrating a sustainable and economic approach to transforming plastic waste into valuable resources, our research could help drive policy changes, inspire investment in advanced recycling infrastructure and foster international collaborations to address the global plastic waste crisis. Over time, these advancements promise cleaner environments, reduced pollution and a more sustainable future," he concludes.

Germany Achieves Record 68.9% Recycling Rate for Plastic Packaging under "Yellow Bag" System

Germany has reached a significant milestone in plastic packaging recycling, with a material recycling rate of 68.9% recorded in 2023. This achievement, announced jointly by the Central Packaging Registry (ZSVR) and the German Environment Agency (UBA), reflects a remarkable 27 percentage-point increase since the introduction of the Packaging Act in 2018.



Dr. Isabell Schmidt, Managing Director for Circular Economy at the German Association for Plastics Packaging (IK), emphasised the industry's success in surpassing regulatory goals: "The legally mandated recycling target of 63% has been significantly exceeded once again. This achievement underlines the development of a thriving market for recycled plastic materials from packaging, representing a major leap forward for the circular economy."

Four Out of Five Plastic Packages in Germany Are Highly Recyclable

The report also highlighted the critical role of recycling - compatible design in driving these outcomes. Today, 80% of consumer plastic packages in Germany are designed to be highly recyclable, enabling them to replace virgin plastics after processing. Despite a reduction in the overall packaging volume, the demand for recycled materials within the sector continues to grow, solidifying the packaging industry's role as a dependable market for recycled materials even during periods of economic fluctuation.

"Our industry has led the way," Dr. Schmidt noted. "Eighty per cent of plastics recycled in Germany already come from packaging. It's now time for other sectors, such as construction and automotive, to adopt recycled materials on a larger scale."

This milestone underscores Germany's commitment to advancing the circular economy and positions plastic packaging as a key resource in sustainable recycling. The success of the "Yellow Bag" system serves as an example for other industries and countries aiming to increase their recycling rates and transition to a more circular economy.

(Source: Packaging Connections / 24.01.2025)

Mondelēz International is moving to 80% Recycled Plastic Packaging for Cadbury Sharing Bars

Mondelez International is making the packaging for their iconic Cadbury core sharing bars more circular. The new packaging, which will be sold in the UK and Ireland, will be made using 80% certified recycled plastic, which can be attributed to plastic sourced from advanced recycling technology and uses ISCC PLUS certification.



Mondelez International is on a journey to increase their use of post-consumer recycled plastic across the Cadbury tablets portfolio in the UK and Ireland. As part of this effort, 80% of the plastic used in the packaging can be attributed to recycled plastic through mass balance and ISCC (International Sustainability and Carbon Certification) PLUS certification. This will be the highest percentage of recycled flexible plastic used within the Cadbury brand globally.

Starting from 2025, in a phased approach, the project aims to cover approximately 300 million Cadbury sharing bars.

The new packaging, created in collaboration with Amcor, is made using our AmPrima® recycle-ready solution and incorporates our AmFiniti™ recycled material. This more circular packaging solution helps leading brands, like Mondelez, answer consumers' desire for their favorite products to be packaged more sustainably. It also helps brands comply with upcoming EU regulations, such as the Packaging & Packaging Waste Regulation (PPWR).

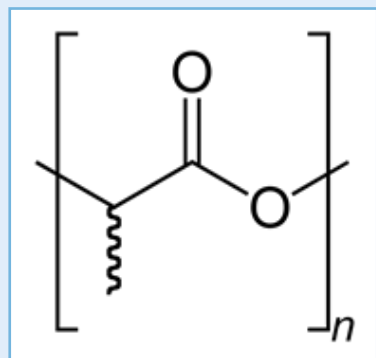
The AmFiniti™ solution for Cadbury sharing bars uses advanced recycling material to convert post-consumer plastic waste into new products, with a quality suitable for food-grade applications.

To help consumers understand more about the packaging and how to recycle it, the new Cadbury wrap features on-pack labels plus a QR code to access more info about the journey the Cadbury brand is taking, including a consumer-friendly explanation of mass balance. Consumers can also access the Recycle Now® locator tool from WRAP, to check local collection and recycling points for a wide range of packaging materials.

(Source: amcor/07.11.2024)

Polylactic Acid doesn't Discharge Microplastics to the Environment

Polylactic acid, also known as PLA, is a thermoplastic monomer. It is derived from renewable, organic sources such as corn starch or sugar cane. This means that PLA is different from most plastics. It will not fall apart into persistent microplastics, but fully degrade in the presence of water (hydrolysis). As more microplastics become a persistent problem at the end of their life, this is a promising way out.



Polylactic acid

These are the findings by Hydra Marine Sciences, in a study commissioned by Holland Bioplastics – an association advancing bioplastics knowledge worldwide.

Polylactic acids a biobased polymer made entirely from fermented plant sugars. The study shows that in an aqueous environment, PLA will hydrolyse into molecules of ever-smaller size (hydrolysis).

Lactic acid

Hydrolysis is an abiotic process that occurs in the presence of moisture or humidity. In such conditions, Polylactic acid will fall apart into smaller fragments. The rate at which this occurs is determined by temperature. Eventually the polymer chains are so short that the material becomes soluble in water. There it will subsequently be biodegraded by microorganisms into biomass, water, and carbon dioxide. In other words: no toxic substances will result from these processes.



Lactic acid, the monomer building block of PLA, is classified as safe and non-toxic both in the US and the EU. The same holds true for many PLA grades in food contact requirements. Additionally, specific grades of polylactic acid have been approved and used for decades in medical

applications like sutures and tissue scaffolds. Such substances are safely absorbed and bio assimilated by the human body after use. We now use it to make a wide range of products: cups, cutlery, bin liners, flexible food packaging. In other words, PLA seems fit for overcoming at least part of the microplastics problem.

Microplastics, an underestimated problem

Microplastics form a problem underestimated by industry. In this area, consumer sentiment may be well ahead of industrial policy. Lux Research's Anthony Schiavo warns for a backlash. He is of the opinion that 'companies need to be proactive about consumer sentiment by identifying and formulating out the worst sources of microplastics and engaging directly with microplastic cleanup efforts and technology, before the backlash really starts.'

Others agree. Erwin Vink, Board Member of Holland Bioplastics, says that we need to choose more responsible materials for the products we rely on, on the one hand; and on the other hand develop a better plastic collection and waste processing infrastructure. Polylactic acid will be part of that solution, as it will not have the long-term effects of present micro - and nanoplastics, the end phase of non-biodegradable substances. Even though, also with PLA, we should avoid littering the environment with it.



Biodegradable plastics

Fortunately, there are more biodegradable plastics like polylactic acid. There are polyhydroxyalkanoates (PHAs), starch blends, cellulose-based plastics and lignin-based polymer

composites. PLA stands out because it is not just environmentally benign, it is also a cheap and very

versatile plastic. And it has a low carbon footprint. We produce lactic acid from plant sugars by fermentation. This is then polymerized into the polylactide biopolymer, PLA.

Polylactic acid, says Wikipedia, has become a popular material due to it being economically produced from renewable resources. In 2021, PLA had the highest consumption volume of any bioplastic of the world. PLA is the most widely used plastic filament material in 3D printing, due to its low melting point, high strength, low thermal expansion, and good layer adhesion. It has many properties that may propel it to the most widely used plastic in the world.

(Source: Bio Based Press)

Marine Biodegradable Cellulose Fibre Moulding Material



Panasonic HD (Kadoma, Japan) has developed a moulding material with full marine biodegradability by applying the technology the company has been developing to incorporate highly concentrated cellulose fibre derived from plants into resins. By adding plant-derived cellulose fibre at high concentrations to marine biodegradable resins, Panasonic HD has succeeded in developing a moulding material that achieves both excellent mechanical properties and marine biodegradability.

Overview

The global demand for reducing the use of resins has increased due to concerns over environmental impact, such as marine plastic pollution, depletion of petroleum resources, and global warming. This aligns with the United Nations' Sustainable Development Goals (SDGs), including the goal

aiming for efficient use of natural resources (Goal 12) and the prevention and significant reduction of marine pollution (Goal 14).

Since 2015, Panasonic has been working on reducing the use of petroleum-derived resins. It had developed a composite processing technology that incorporates cellulose fibre at a concentration of 55 % in 2019. In 2021, Panasonic further advanced the technology to increase the amount of cellulose fibre up to 70 %, and over 90 % or more biomass content in March 2022. In December 2022, it further enhanced the biodegradability of this material in natural environments by developing a fully biodegradable moulding material using biobased resins (such as PLA).

To reduce environmental pollution risks especially in marine environments, where even a moulding material that is completely biodegradable in soil is difficult to decompose, Panasonic has proceeded with efforts to develop marine biodegradable moulding material. By modifying mixing and moulding technologies, Panasonic has succeeded in developing a plant-derived cellulose fibre moulding material (100 % biomass content) that has complete marine biodegradability and comparable strength to polypropylene (PP) used in durable applications. Just like conventional kinari, the new material is also available as white pellets that can be coloured as needed.

This new material has been certified as a "Marine Biodegradable & Biobased Plastics" by the Japan Bioplastics Association.

Panasonic plans to start selling pellets of this material by 2027 and aims to leverage its unique properties for many applications, including household appliance casings, automotive parts, consumer goods, and beverage & food containers. Through these efforts, Panasonic aims to promote corporate activities contributing to a sustainable society by reducing resin usage.

Features

1. Development of high - concentration cellulose fibre moulding material with marine biodegradability.
2. Achieving both durability and marine biodegradability comparable to PP.
3. Contribution to the global environment by reducing the use of petroleum-derived resins with natural components as the main ingredient.

Flexural elasticity and bending strength value versus polypropylene (PP)

| | Marine biodegradable material (New) | Biodegradable material (Developed in 2022) | PP |
|---------------------|-------------------------------------|--|-----|
| Flexural elasticity | 4.8 | 3.5 | 1.0 |
| Bending strength | 1.1 | 1.5 | 1.0 |

Panasonic Group Environmental Initiatives

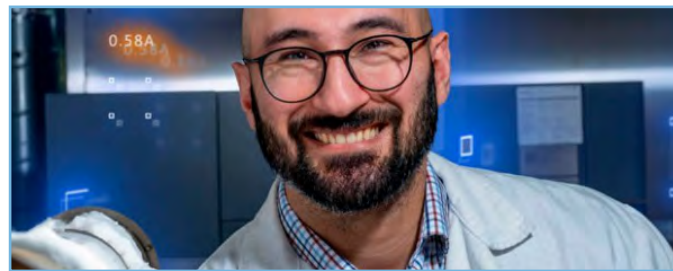
The Panasonic Group has set forth its long-term environmental vision, "Panasonic GREEN IMPACT," with the aim of achieving both a better life and a sustainable global environment for all. Under PGI, Panasonic Group strives towards achieving virtually net - zero CO2 emissions from its operations by 2030. Additionally, it will contribute an impact of more than 300 million tonnes of reduced and avoided CO2, which is equivalent to about 1 % of the current global total of approximately 31.7 billion tonnes by 2050. The group also works on business activities to realize a circular economy in which resource efficiency contributes to decarbonization and reduces the consumption of limited natural resources. AT.

(Source: bioplastics / 14.01.2025)

Researchers Create an AI Model that Facilitates the Development of a New Biodegradable Plastic

Plastic is durable, versatile and economical to produce. Unfortunately, it is also often harmful to the environment. A team of talented researchers, led by Milad Golkaram, nominated for TNO's Young Excellent Researcher Award 2024, has created an AI model that makes it much easier to develop a new biodegradable plastic.

Polymers are the building blocks of plastic. Milad Golkaram's team has created polySCOUT, a machine-learning program to develop new biodegradable polymers. 'Our AI model predicts the chemical structure of whatever polymer we want. So, if you need a material with certain properties, you enter those properties into the model, and then the model produces a chemical structure for a suitable polymer.'

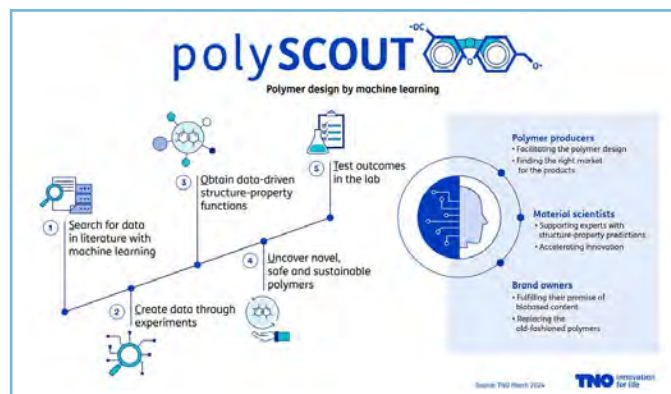


Already in use

TNO is already using it in the field, such as in its collaboration with Senbis, a textile manufacturer. The aim is to develop biodegradable synthetic textile fibres. Milad: 'The synthetic textiles we use a lot today produce microplastics that enter the water cycle, eventually ending up in our food and drink. Ideally, you want these microplastic particles to break down before they enter our bodies.'

Pushing boundaries

There are often a lot of questions when it comes to biodegradable plastic. Is it strong enough? Is it sustainable? Is it scalable? How long does it last? Is it toxic? Is it affordable? The polySCOUT model can answer these, Milad explains. 'We are creating something unique, pushing the boundaries of science and technology in this field. That's what I'm proud of.'



Immediate result

PolySCOUT also saves a lot of time. Milad: 'Back when I was studying, we had to go into the lab to develop new polymers. It was a matter of trial and error, a process that can take years. With machine learning, our model learns more and more about the properties of polymers. It can recognise correlations faster than people can, and draw conclusions from them. This means you actually get the desired result almost immediately.'

Speciality Shades

for All Upgrades
Advanced Additives and Custom Colours.



MASTERBATCHES • COMPOUNDS • TOLL COMPOUNDING • BIOPOLYMERS



For You. Right Through.

■ Innovation ■ Technology ■ Precision ■ Performance

+91 - 22- 66929701 | info@rajivplastics.com | www.rajivplastics.com



Introducing

The Next Generation of N-SERIES

A New Benchmark in Small Tonnage Injection Molding



KEY ADVANTAGES



#UNRIVALED
EFFICIENCY



UNMATCHED
PRODUCTIVITY



UNBEATABLE
VALUE

#Patent Pending



UNPRECEDENTED
EXPERIENCE

The Next-Gen N-Series machine comes with advanced upgrades that revolutionize the low-tonnage injection molding segment.

With its unique **Mode Switch feature**, which seamlessly adapts between the Eco Mode and Performance Mode, these upgrades offer measurable benefits in the form of reduced power consumption, faster cycle time, and reduced noise and vibration – the key success markers for plastic processors. These metrics make the N-Series a wise investment choice. Book now to power up efficiency and productivity!

enquiry@milacron.com | +91 72279 09818 | milacron.com | Follow Milacron India    

©2025 Milacron LLC. All Rights Reserved.