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PLEXCONNECT®

Edition 39, September 2022

Product of the Month: Polyurethane

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How to Start an Export Business

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As I reflect back on the last financial year, I realize that although the year ended on a high note for our exports, the quarters since then have been rather challenging. This is mainly on account of high raw material prices that continue to plague operational costs for Indian exporters. The Indian Govt's mulling the idea of implementing BIS on raw material will probably be the final straw for our industry, considering the import dependency on polymers and the high raw material prices as compared to China & other countries and imports of value-added plastics at inverted duties. We strongly feel that BIS implementation is better served on import of value-added plastics. Not only will this discourage cheap imports from China and the likes, but also provide our own processing industry a rightful opportunity to manufacture and market their products domestically without fear of crippling cheap imports! Value added plastics imports amounted to $7 Bn in the last FY as compared to $ 8 Bn of exports. Such imports will further rise with imposition of mandatory BIS on polymers. Plexconcil has been in constant discussion with the Ministry regarding this issue.

Furthermore, although most well-intended, the present ongoing FTA negotiations, which are in different stages with different countries, have not had much impact on plastics exports, mainly because polymer cost is high in India. The Ministry of Commerce & Industry is having regular interactions with councils, and we continue to engage in dialogue and our effort is to always make our grievances heard and understood by the Govt.

During July 2022, India exported plastics worth USD 1,119 million, lower by 3.1% from USD 1,155 million in June 2021. Cumulative value of plastics export during April 2022 – July 2022 was USD 4,395 million as against USD 4,574 million during the same period last year, registering a decline of 3.9%.

Meanwhile, Plexconcil continues to make sure strides in promoting Indian plastics exports. In the past months, we have had very successful participations with our India Pavilion at various leading international trade fairs. Exporters have not only had the opportunity to network and build their business, but the world continues to look favourably towards India for sourcing. As an industry, we need to utilize and find every opportunity to grow our business, irrespective of whatever the challenge is. Undoubtedly, the benefits of entering exports are far too many. Not only does it help grow business, diversify risks and encourage innovation, quality and professionalism, but it is also a focus sector of the Govt that has numerous subsidies and benefits designed to promote exports. In this issue, expert consultant Mihir Shah talks about how one can go about becoming an exporter. For those who have been around and felt the impact of currency volatility on exports, and those planning on hedging Forex, we have another leading consultant, Nijai Gupta help us understand how we can manoeuvre the complexities of FX hedging.

In other news, we look at Polyurethane under Product of the Month, some advice on how exporters can optimize their export packaging and other news and information. On a final note, this is my last note to you all as Chairman of Plexconcil. My journey as COA member and then Chairman has been nothing less than remarkable and I take this opportunity to thank every member of our fraternity, my fellow members of the COA and our Vice Chairman who have always believed in my abilities to lead the Council and help deliver my part in its growth trajectory. I am also grateful to the Secretariat for their constant support through my tenure as Chairman. And very importantly, the Govt of India, Department of Commerce, Department of Chemicals & Petrochemicals and various authorities who have always opened the doors for us to raise our concerns. With your feedback & support I have been able to bring on their table the issues faced by the plastic exports and I assure you that my successors & the council will always continue to work for the benefit of the exporting fraternity.

Thank you all and I look forward to all doing some great work together ahead!

Arvind Goenka

Chairman

Meeting of BGBS 2023 International Trade and Logistics Sector Committee – 2nd July, 2022 | Eastern Region

The above meeting chaired by Chief Secretary of West Bengal. Agenda points were to discuss the Status and Progress of the Sector & Plan of Action of the Sector Committee. Region Director represented the Council at this meeting.

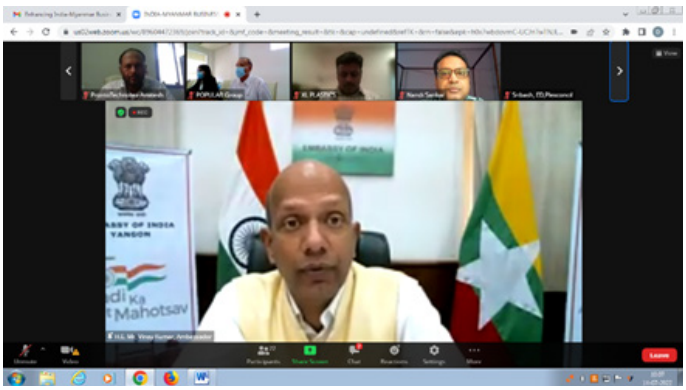
Trade & Policy Meeting – 5th July, 2022 | Western Region

Mr. Sribash Dasmohapatra, ED - Plexconcil, attended the consultation VC meeting on Chemicals (including plastics) called upon by Ms Nidhi Mani Tripathi, JS (FT Europe, DoC) & Chief Negotiator India -UK FTA.

PTFC Meeting (Virtual) organised by Chennai Exports Commissionerate on 12th July, 2022 | Southern Region

The monthly PTFC Meeting (Virtual) organised by Chennai Exports Commissionerate was held to address the grievances with regard to EXIM logistics and other issues at the Chennai Port. The Council was represented by Mr. Ruban Hobday, Regional Director – South.

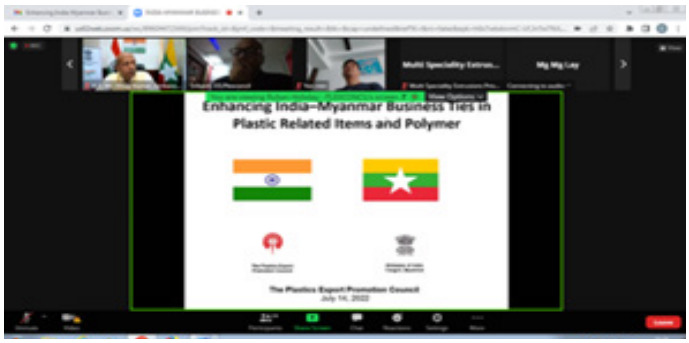
Report on the webinar on "Enhancing India–Myanmar Business Ties in Plastic Related Items and Polymer" held on 14th July, 2022 | Southern Region



The Plexconcil in coordination with the Embassy of India, Yangon, Myanmar organized the webinar titled "Enhancing India-Myanmar Business Ties in Plastic Related Items and Polymer" on 14th July 2022 to facilitate buyer-seller interaction to promote exports from India.

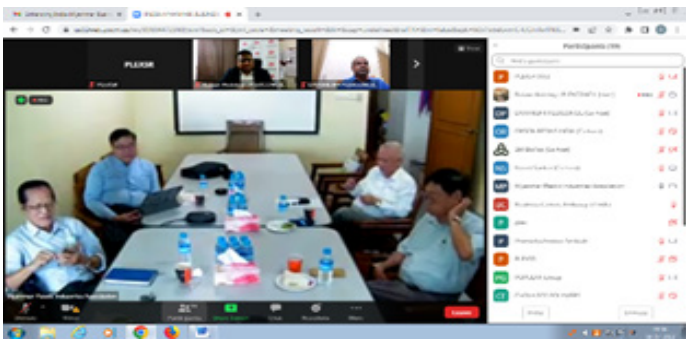
The Plexconcil mobilized 10 Indian Companies who were keen to do business with the 10 Myanmar companies who were from the Myanmar Plastics Industries Association.

The sellers were selected based on profiles of buyers who were keen to import raw material and other products from India as they wanted to enhance their domestic economic activities and improve their domestic production restricting the finished goods imports.



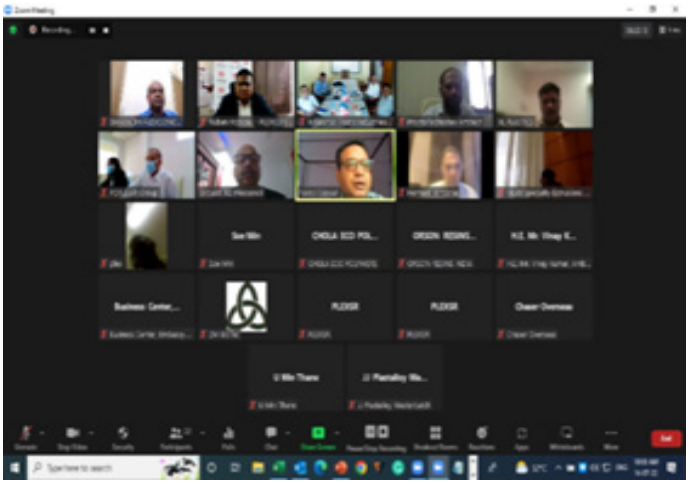
The virtual webinar started with the Opening Remarks by the H.E. Mr. Vinay Kumar, Ambassador of India to Myanmar who appreciated the efforts of Plexconcil and the Myanmar Plastics IndustriesAssociation for coming together to promote business. He emphasised that Plastic was not just restricted to carry bags but is a wonder material used in many industries including automobile, engineering, health and other segment of the industry. He encouraged that Plexconcil to follow up with an action plan to make sure that the webinar would translate into businesses.

Mr. Hemant Minocha, Vice Chairaman, PLEXCONCIL make a brief presentation about the trade between India-Myanmar and the potential for growth in the future. He thanked the Embassy of India, Myanmar for their active support to make the webinar happen with lot of planning and effort.

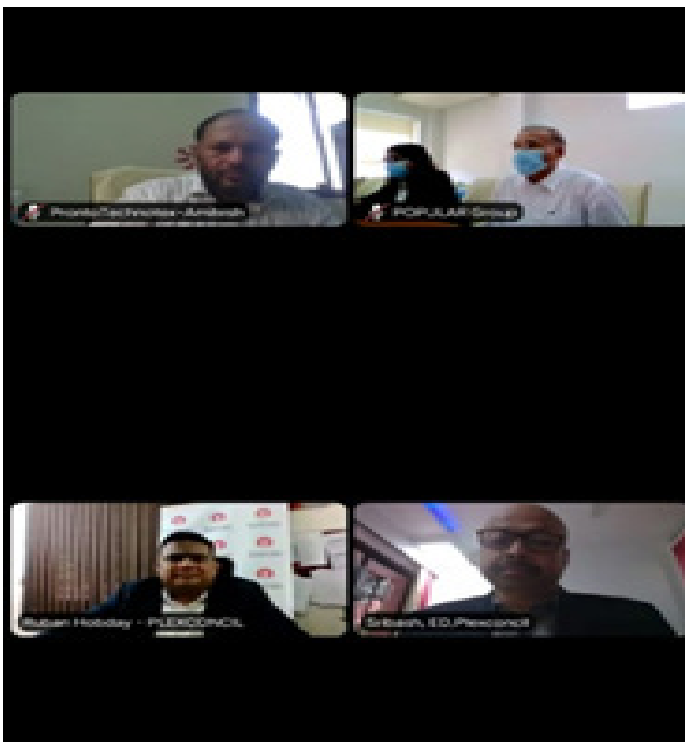


Mr U Tun Win, Chairman, Myanmar Plastic Industries Association briefly spoke about the potential and their keenness to import from India in the future. He thanked the Indian Companies and assured of all support to Plexconcil in the future events.

The Indian and Myanmar companies introduced their business and their expectations followed by the open house where the issues were discussed.



Hindustan Trading Company, Kolkata, India raised the issue of the timeline of “one month” from the time the get their license to import into Myanmar which needs to considered to increase as practically it will not be possible to complete the export from India. The issue was discussed and both Plexconcil and the Myanmar Plastics Industries Association assured to represent the same with the authorities concerned.



Mr. Sribash Dasmohapatra, Executive Director, Plexconcil proposed the closing remarks mentioning that this was an important effort to facilitate the interaction between the buyer-seller. He also requested the Myanmar Plastics Industries Association to continue supporting the efforts of Plexconcil in the future.

2nd Meeting of the Steering Committee Constituted for PLASTINDIA – 14th July 2022 | Eastern Region

The above meeting held under the Chairmanship of Director (Petrochemicals), DCPC mainly to discuss the issues related to preparation of Plastindia 2023 show. Executive Director & RD (East) represented the Council at this meeting.

Exporters Association Meeting held on 19th July, 2022 | Southern Region

The Additional Chief Secretary to Government, Industries Investment Promotion and Commerce Department, chaired the meeting held the Conference Hall of SIDCO Corporate office, Guindy, Chennai to discuss about actions to be taken to augment Exports. In this regard valuable suggestions were received from various stakeholders who were present at the meeting.

The Council also made its submission of points on behalf of the industry and was represented by Mr. Ruban Hobday, Regional Director and Mr. R. Dayanidhi, Asst. Director.

BSM Meeting with PLASTINDIA/Software Vendor – 22nd July 2022 | Eastern Region

Above meeting organized in order to discuss the details of RBSM software. RD (East) attended the meeting.

Trade & Policy Meeting – 27th July, 2022 | Western Region

Mr. Sribash Dasmohapatra, ED – Plexconcil, Mrs. Bharti Parave, Assistant Director – Plexconcil, and Mr. Manish Tulsian, Assistant Director – Plexconcil, attended the VC meeting called upon by Smt. Taruna Doliya, Deputy Secretary, TNB Division for Consultation on Rules of Origin for the India-Canada CEPA negotiations.

Business Exporter Summit 2022 – 28th July, 2022 | Southern Region

Plexconcil partnered with ASSOCHAM during their Business Exporter Summit 2022 at Chennai wherein many fruitful discussions and brain storming were held with various industry stakeholders. Plexconcil was part of a Panel Discussion on 28th July 2022 at their Chennai Event at Hotel Crown Plaza, Chennai. The Council was represented by Mr. Y.V. Raman, Regional Chairman, Mr. Ruban Hobday, Regional Director and Mr. R. Dayanidhi, Asst. Director.

Meeting on RBSM-Plastindia match making tool demo – 28th July 2022 | Eastern Region

Above Demo virtual meeting was organized by Plastindia. ED, PLEXCONCIL RD(East) joined the meeting.

TEXPO 2022 – 29th July, 2022 | Southern Region

TEXPO 2022 organised by Thirumudivakkam Industrial Estate Manufacturers Association (TIEMA) with a vision of benefitting the Micro industries by connecting them to OEM's and administering a business model of developing local business houses for mutual growth. The event had larger participation from Micro & Small Industries. The Council met the trade and committee of TIEMA and informed about the benefits of Exports to the Micro & Small Industries who were present at the event.

PLEXCONNECT- Webinar on Introduction to Trade Remedy Measures and Technical Barriers to Trade for Plastic Industries – 29th July, 2022 | Western Region

PLEXCONCIL organized a Webinar on Introduction to Trade Remedy Measures and Technical Barriers to Trade for Plastic Industries on 29th July, 2022. Major topics covered during the webinar included overview of Technical Barriers to Trade (TBT) Agreement and relevance for Plastic industry, overview of trade remedy laws in India viz., Anti-dumping, anti-subsidy and safeguard measures and relevance for Plastic industry.

Expert speakers of the webinar were Mr. S. Seetharaman, Advocate and Co-founder, Sarvada Legal, Mr. Atul Sharma, Advocate and Co-founder, Sarvada Legal and Mr. TD Satish, Advocate, Sarvada Legal.

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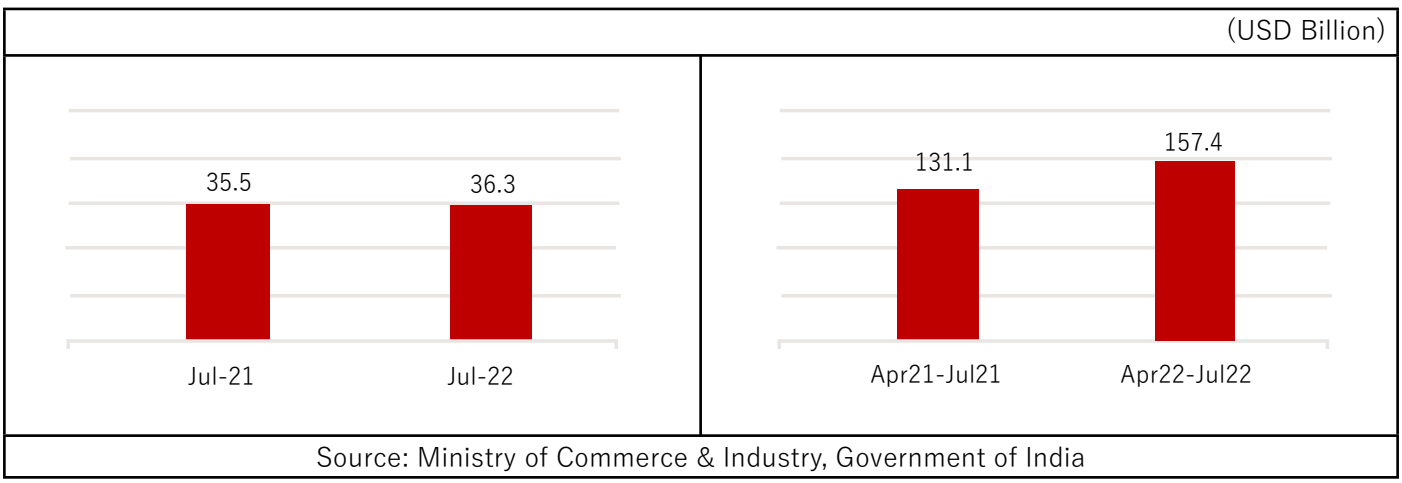
Export Performance – July 2022

TREND IN OVERALL EXPORTS

India reported merchandise exports of USD 36.3 billion in July 2022, up 2.1% from USD 35.5 billion in July 2021. Cumulative value of merchandise exports during April 2022 – July 2022 was USD 157.4 billion as against USD 131.1 billion during the same period last year, reflecting a growth of 20.1%.

Exhibit 1: Trend in overall merchandise exports from India

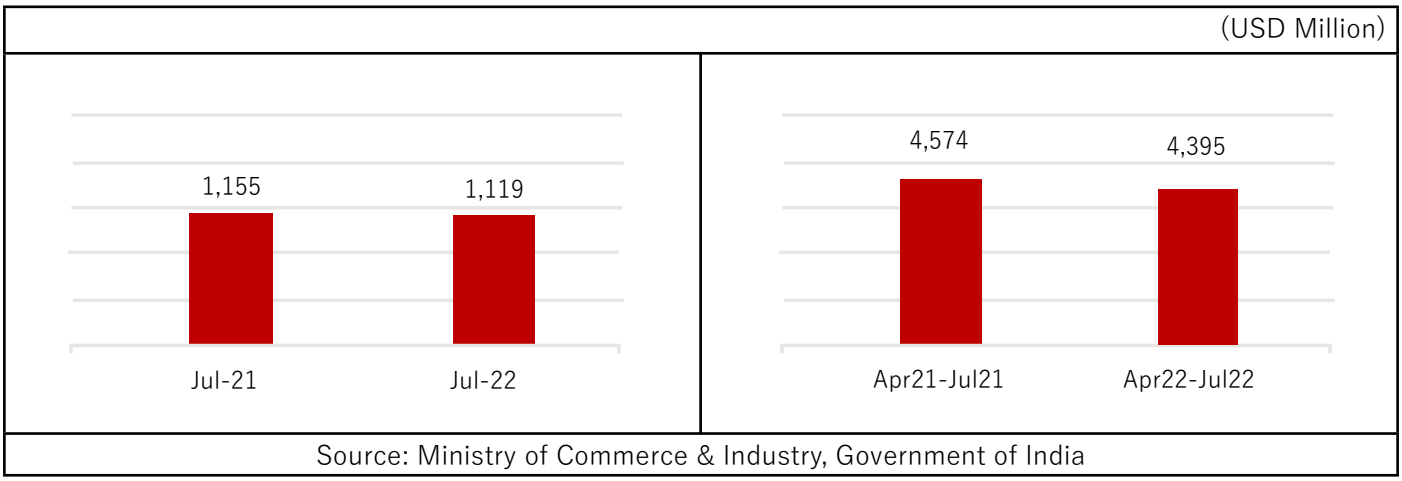


Source: Ministry of Commerce & Industry, Government of India

TREND IN PLASTICS EXPORT

During July 2022, India exported plastics worth USD 1,119 million, lower by 3.1% from USD 1,155 million in July 2021. Cumulative value of plastics export during April 2022 – July 2022 was USD 4,395 million as against USD 4,574 million during the same period last year, registering a decline of 3.9%.

Exhibit 2: Trend in plastics export by India



Source: Ministry of Commerce & Industry, Government of India

PLASTICS EXPORT, BY PANEL

In July 2022, certain product panels, namely Medical items of plastics; Packaging items - flexible, rigid; Writing instruments & stationery; Plastic pipes & fittings; Cordage, fishnets & monofilaments; and Miscellaneous products reported positive growth in exports. However, product panels like Floorcoverings, leathercloth & laminates; Consumer & houseware products; FIBC, woven sacks, woven fabrics, & tarpaulin; FRP & Composites; Plastic films & sheets; Plastic raw materials; and Human hair & related products reported a decline in exports.

Exhibit 3: Panel-wise % growth in plastics export by India

Panel	Jul-21 (USD Mn)	Jul-22 (USD Mn)	Growth (%)	Apr 21- Jul 21 (USD Mn)	Apr 22- Jul 22 (USD Mn)	Growth (%)
Consumer & houseware products	75.3	66.3	-11.9%	254.3	255.3	+0.4%
Cordage, fishnets & monofilaments	21.5	22.7	+5.8%	80.5	93.0	+15.5%
FIBC, woven sacks, woven fabrics, & tarpaulin	149.5	135.8	-9.2%	554.7	543.4	-2.1%
Floorcoverings, leathercloth & laminates	56.7	49.9	-12.0%	214.0	209.6	-2.1%
FRP & Composites	39.4	37.0	-6.2%	139.8	156.3	+11.8%
Human hair & related products	93.1	60.4	-35.2%	312.3	247.1	-20.9%
Medical items of plastics	32.7	41.4	+26.5%	128.8	165.7	+28.6%
Miscellaneous products & items nes	67.2	87.1	+29.5%	256.2	337.4	+31.7%
Packaging items - flexible, rigid	50.5	57.9	+14.7%	197.0	224.3	+13.8%
Plastic films & sheets	166.5	162.9	-2.1%	684.5	703.1	+2.7%
Plastic pipes & fittings	24.4	26.9	+10.2%	83.8	104.2	+24.3%
Plastic raw materials	358.7	348.5	-2.8%	1,600.1	1,262.5	-21.1%
Writing instruments & stationery	19.4	22.3	+15.1%	67.6	92.9	+37.4%
	1,154.9	1,119.1	-3.1%	4,573.8	4,394.9	-3.9%

Source: Ministry of Commerce & Industry, Government of India

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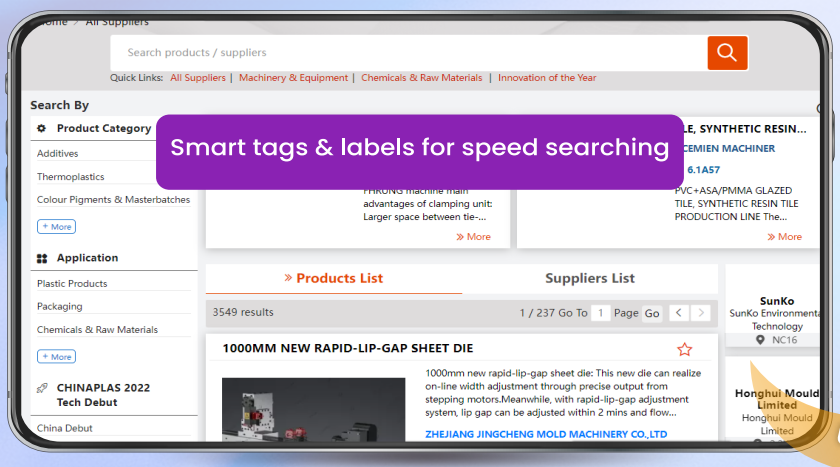

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Export of **Consumer & house ware products** declined by 11.9% in July 2022 due to lower sales of Tableware and kitchenware of plastics (HS code 392410); Jewellery box and similar articles with outer surface of plastics (HS code 420232); Other switches of plastic (HS code 85365020); and Toys of plastics (HS code 95030030). It may be noted that there has been a change in the HS code of Toys of plastics due to which the correct value of exports is not being reflected.

Cordage, fishnets & monofilaments exports were up by 5.8% in July 2022 aided by improved sales of Other twine of polyethylene or polypropylene (HS code 56074900) and Made up fishing nets (HS code 560811).

In case of **FIBC, woven sacks, woven fabrics, & tarpaulin,** exports in July 2022 fell by 9.2% as Indian exporters reported a decline in sales of Sacks and bags of plastics (HS code 39232990) and Flexible intermediate bulk containers (HS code 630532) from India during the month. India's major export destination for above products in Europe and North America.

Export of **Floor coverings, leather cloth & laminates** declined by 12.0% during July 2022 on account of lower sales of Textile fabrics impregnated or coated or covered or laminated with plastics other than PVC and PU (HS code 590390) to the United States.

Export of **FRP & Composites** was down by 6.2% due to lower sales of Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s (HS code 39269099).

Export of **Human hair & related products** fell by 35.2% due to a decline in sales of Human hair, unworked (HS code 050100) and Human hair, dressed, thinned, bleached or otherwise worked (HS code 67030010). India's major export destination for Human hair is China.

Export of **Medical items of plastics** witnessed an increase of 26.5% in July 2022 due to higher sales of Catheters (HS code 90183910); and Cannulae (HS code 90183930).

Export of **Miscellaneous products & items nes** increased by 29.5% in July 2022 due to higher sales of PVC belt conveyor (HS code 39269010); and Optical fibres, optical fibres bundles and cables (HS code 90011000).

Packaging items - flexible, rigid export increased by 14.7% on higher sales of Sacks and bags of polymers of ethylene (HS code 39232100); Carboys, bottles, flasks and similar articles (HS code 392330); Stoppers, lids, caps and other closures (HS code 392350); and Other articles for conveyance or packing of goods (HS code 39239090).

Plastic films & sheets export fell by 2.1% in July 2022 due to lower shipments of Films and sheets of polymers of propylene (HS code 392020); and Films and sheets of polyethylene terephthalate (HS code 392062). India is a significant exporter of the above products to Europe which is battling high inflation and shrinking business activity.

Export of **Plastic pipes & fittings** witnessed a growth of 10.2% due to improved sales of Tubes, pipes and hoses of polymers of ethylene (HS code 391721); Rigid tubes, pipes and hoses of polymers of vinyl chloride (HS code 391723); and Other fittings (HS code 391740).

Plastics raw materials export were lower by 2.8% in July 2022 due to a decline in sales of Linear low-density polyethylene (HS code 39011010 and 39014010); Polyethylene having a specific gravity of 0.94 or more (HS code 390120); Polypropylene (HS code 390210); Poly vinyl chloride resin (HS code 390410); and Other acrylic polymers in primary forms (HS code 390690). It may be noted that prices of most polymers have softened in July 2022.

Export of **Writing instruments & stationery** witnessed an increase of 15.1% in July 2022 due to higher sales of Ball point pens (HS code 960810) to countries in the WANA region and the LAC region.

Exhibit 4: Details of % change seen in top 50 items of export

HS Code	Description	Apr 21 – Jul 21	Apr 22 – Jul 22	Growth
		(USD Mn)	(USD Mn)	(%)
63053200	Flexible intermediate bulk containers	316.2	325.8	+3.0%
39076190	Polyethylene terephthalate: Other primary form	299.4	248.3	-17.1%
39021000	Polypropylene, in primary forms	249.8	137.7	-44.9%
67030010	Human hair, dressed, thinned, bleached or otherwise worked	250.3	183.3	-26.8%
39232990	Other sacks and bags, incl. cones, of plastics	161.3	161.3	+0.0%
90011000	Optical fibres, optical fibre bundles and cables	126.2	205.2	+62.6%
39269099	Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s: Other	138.2	153.3	+10.9%
39202020	Plates, sheets, film, foil and strip, of non-cellular polymers of ethylene: Flexible, plain	123.2	116.9	-5.1%
39076990	Polyethylene terephthalate: Other primary form	100.1	110.7	+10.5%
39269080	Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s: Polypropylene articles, not elsewhere	94.3	90.1	-4.4%
48239019	Decorative laminates	88.7	97.7	+10.1%
39069090	Acrylic polymers, in primary forms (excl. polymethyl methacrylate): Other	126.8	72.6	-42.7%
39014010	Linear low-density polyethylene (LLDPE), in which ethylene monomer unit contributes less than 95 % by weight of the total polymer content	109.1	28.5	-73.9%
39206220	Plates, sheets, film, foil and strip, of non-cellular polyethylene terephthalate: Flexible, plain	86.9	80.1	-7.9%
39232100	Sacks and bags, incl. cones, of polymers of ethylene	66.9	79.4	+18.8%
39012000	Polyethylene with a specific gravity of >= 0,94, in primary forms	101.3	15.8	-84.4%
59039090	Textile fabrics impregnated, coated, covered or laminated with plastics other than polyvinyl chloride or polyurethane: Other	76.4	48.1	-37.1%
39202090	Plates, sheets, film, foil and strip, of non-cellular polymers of ethylene, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles: Other	64.9	61.0	-6.1%
39239090	Articles for the conveyance or packaging of goods, of plastics: Other	56.9	64.7	+13.7%
39046100	Polytetrafluoroethylene, in primary forms	52.8	50.0	-5.2%
05010010	Human hair, unworked; whether or not washed or scoured	55.9	56.3	+0.6%
54072090	Woven fabrics of strip or the like, of synthetic filament, incl. monofilament of >= 67 decitex and with a cross sectional dimension of <= 1 mm: Other	48.6	43.7	-9.9%

56074900	Twine, cordage, ropes and cables of polyethylene or polypropylene	37.3	43.5	+16.5%
90015000	Spectacle lenses of materials other than glass	43.5	46.5	+7.1%
39219099	Plates, sheets, film, foil and strip, of plastics, reinforced, laminated, supported or similarly combined with other materials, unworked or merely surface-worked or merely cut into squares or rectangles: Other	37.4	38.0	+1.7%
39073010	Epoxide resins, in primary forms: Epoxy resins	34.6	39.8	+15.2%
39206290	Plates, sheets, film, foil and strip, of non-cellular polyethylene terephthalate, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles: Other	47.2	33.7	-28.6%
90183930	Cannulae	29.2	46.1	+57.8%
96081019	Ball-point pens	30.9	47.2	+52.6%
39219094	Plates, sheets, film, foil and strip, of plastics, reinforced, laminated, supported or similarly combined with other materials, unworked or merely surface-worked or merely cut into squares or rectangles: Flexible, metallised	31.3	40.8	+30.1%
39199090	Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics, whether or not in rolls > 20 cm wide: Other	29.0	35.0	+20.7%
95030030	Toys of plastics	33.4	9.8	-70.5%
39241090	Tableware and kitchenware, of plastics: Other	34.2	30.9	-9.8%
39206919	Plates, sheets, film, foil and strip, of non-cellular polyesters, not reinforced, laminated, supported or similarly combined with other materials, not worked or only surface-worked, or only cut to rectangular, incl. square, shapes: Other	31.0	34.3	+10.7%
96032100	Tooth brushes	28.6	31.9	+11.4%
39011090	Polyethylene with a specific gravity of < 0,94, in primary forms: Other	25.5	39.7	+55.6%
39011010	Linear low-density polyethylene (LLDPE), in which ethylene monomer unit contributes 95% or more by weight of the total polymer content	35.0	14.7	-57.9%
39219096	Plates, sheets, film, foil and strip, of plastics, reinforced, laminated, supported or similarly combined with other materials: Flexible, laminated	28.9	32.2	+11.3%
39095000	Polyurethanes, in primary forms	24.5	31.8	+29.9%
39119090	Polysulphides, polysulphones and other polymers and prepolymers produced by chemical synthesis, n.e.s., in primary forms: Other	20.7	26.2	+26.9%
39140020	Ion-exchangers based on polymers of heading 3901 to 3913, in primary forms	24.0	26.2	+8.9%
39129090	Cellulose and chemical derivatives thereof, n.e.s., in primary forms: Other	22.1	29.4	+32.8%

39241010	Insulated tableware and kitchenware of plastics	22.2	18.5	-16.8%
39204900	Plates, sheets, film, foil and strip, of non-cellular polymers of vinyl chloride, containing by weight < 6% of plasticisers	21.7	26.9	+23.7%
59031090	Textile fabrics impregnated, coated, covered or laminated with polyvinyl chloride: Other	23.6	26.5	+12.6%
39181090	Floor coverings, whether or not self-adhesive, in rolls or in the form of tiles, and wall or ceiling coverings in rolls with a width of >= 45 cm, consisting of a layer of plastic fixed permanently on a backing of any material other than paper, the face side of which is grained, embossed, coloured, design-printed or otherwise decorated, of polymers of vinyl chloride: Other	18.8	25.0	+32.9%
39206929	Plates, sheets, film, foil and strip, of non-cellular polyesters, not reinforced, laminated, supported or similarly combined with other materials, not worked or only surface-worked, or only cut to rectangular, incl. square, shapes: Other	24.3	23.1	-5.1%
39235010	Stoppers, lids, caps and other closures, of plastics	23.3	25.1	+7.7%
39191000	Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics, in rolls <= 20 cm wide	18.8	27.1	+43.8%
39201019	Plates, sheets, film, foil and strip, of non-cellular plastics, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles: Other	21.0	24.0	+14.3%

Source: Ministry of Commerce & Industry, Government of India

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*Full text & meaning only as per Government of Karnataka (GO) Government Order

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Nijay Gupta,

Nijay Gupta, Consultant and Advisor in Forex Risk Management, NK Gupta & Co.

Forex Hedging: How and When to use it?

Currencies always fluctuate in value when compared to one another. As a result, in the case of international financial transactions, there is always a possibility of foreign exchange loss (or profit) due to these currency fluctuations. A forex hedge is a hedging currency trade, whose sole intent is to protect a current position or an upcoming currency performance. Also known as currency risk and exchange rate risk, it gets activated when the exporter involved in an international transaction trade in a currency that is not its home or domestic currency.

Plexconnect speaks to leading Consultant and Advisor in Forex Risk Management, Nijay Gupta on what is Forex Hedging, the importance of a Risk Management strategy and how exporters can go about planning their own.

Nijai Gupta, Consultant and Advisor in Forex Risk Management, NK Gupta Consulting is a Forex, Treasury, Trade Finance, Retail Banking Consultant, *Trainer & Practicing Cost Accountant of N.K. GUPTA & Co. With a career spanning 40 years, he was a Banker and Treasurer with leading international banks as well as an Associate of ICAI, Kolkata; IIBF, Mumbai and a Visiting Faculty at FIEO, ICAI, BSE Institute, NMIMS, NSE's Investor Awareness Program, IMC and numerous Business Schools in India.*

As a consultant and trainer, he has worked with leading banks, rating agencies, global IT companies, MNC's, Trade associations, Money Transfer Company in UAE, Setting up of the bank (Dahabsheel, Hergesia, Somaliland) under Islamic Laws and banking institutes in the East Africa, UAE and Nepal and India.

(excerpts)

What is Forex Hedging?

A forex hedge is a transaction implemented to protect an existing or anticipated position (export order/ transaction) from an unwanted move in exchange rates. Forex Hedging is to hedge/insure against the volatility in the movement of exchange rate to ensure realization of export proceeds as per the costing done while pricing the product or fixing the Incoterms (International Commercial Terms) at particular exchange rate.

It is important to remember that a hedge is not a money making strategy. A forex hedge is meant to protect from losses, not to make a profit, even if there may be times when the exporter experiences gain due to currency fluctuations. Importantly, most hedges are intended to remove a portion of the exposure risk rather than all of it, as there are costs to hedging that can outweigh the benefits after a certain point.

What is the process of opening a Forex Hedge?

The Forex Hedge can be done by availing PCFC with the bank or booking Forward Contract with the bank or Option contract with Exchange or a Bank or through Futures contract with an Exchange. Below is an explanation of some of the terms associated with opening a Forex Hedge:

Forward contract

Forward Contract is a contract to exchange an agreed amount of dollars for the foreign currency on a decided future date. This leads to an agreement on the price and locks the export sale on that price. Even if the foreign currency (INR, in this case) appreciates, the business is protected, even though you cannot gain in case of a devaluation of the INR.

Futures contract

Here, you agree to purchase currency in the future at an agreed foreign exchange rate. These currency contracts are purchased from exchanges like the NSE. Unlike a forward contract, futures have a secondary market of their own. So, you can sell them before the agreed date as well, in case you see a favorable currency market or need liquidity for your business. The agreed exchange price in a futures contract is generally a range, and what you get at the end of the term is an approximate amount rather than the exact amount.

Currency options

With currency options, banks offer exporters an opportunity to buy or sell a certain amount of currency at a fixed price, on or before an agreed date. Exporters are not under any obligation to buy or sell; the opportunity ends on the agreed date. The price at which the currency can be bought or sold is known as the strike price. To sum up, all these strategies are akin to buying insurance against any currency fluctuation loss that exporters may incur over a period of time. However, bear in mind that exporters will also inevitably miss out on any windfall that may be due to favorable currency movements.

How can an exporter decide on a hedging strategy? What should be the key considerations?

Forex Hedging protects the exporter from losses arising out of currency fluctuations. The exporter doing the hedging can reduce the risk of loss until the settlement of payment.

It can also help exporters with decision making. For example, if the exporter decides to take a long position in the forward market and eliminates the risk of the foreign currency transaction, hedging can help the exporter understand the expenses involved in the exposure management as well as the foreign exchange exposure itself.

Hedging brings certainty to the transaction in terms of price and receivables. By locking the currency value of the export transaction through currency options or future options, the effects of adverse currency movements are eliminated. With the prospect of losing money taken care of, hedging also protects the company's earnings as losses are avoided.

In an unpredictable currency market, exporters may be apprehensive in putting receivables at stake. But with smart hedging practices, they can be more confident in taking up export orders. Thus, hedging also helps exporters expand their businesses by encouraging them to grasp more opportunities.

The exporter needs to have its own Forex Risk Management Strategy as fully hedged or party hedged strategy or could have natural hedge (if there is a matching imports). Based on the policy of the management, the company can go ahead with hedging the forex risk.

What are the advantages of Forex Hedging to exporters?

FX hedging benefits those interested in protecting a portfolio from risks associated with currency, interest rate and commodity or product input. Currency hedging can reduce or virtually eliminate the impact of foreign exchange movements during the term of an investment by way of currency transfer to a paired currency value. Hedging limits the losses to a great extent by ensuring realizing the value/ pricing of the product done at a particular level of Forex vis-à-vis INR rate or self-hedge by not covering the forex risk.

Hedging also enables a company to offset interests on contracts by locking in an exchange rate on a forward contract at effectively no cost while the difference between the interest rates on the two currencies is favorable. Fair value hedges enable a trader with two interest rate swaps that are outstanding to optimize their contract with a currency transfer.

It improves diversification of your holdings. Hedging spreads out your open positions to reduce the risk of a single variable or event hitting your positions with losses across the board.

What are the disadvantages of Forex Hedging to exporters?

Greed is the greatest disadvantage while hedging for the exporters. Like recently the INR depreciated by 7% from INR 73 per dollar to almost Rs. 80 per Dollar. So, management of few Co's lost their contract from overseas buyer or felt loss of opportunity, as most of them already sold/hedged their foreign currency receivables.

Your profit potential will likely be reduced. While a hedge reduces your risk, it also cuts into your profit potential. This is because in cases where profits continue to rise for your initial open positions, your hedged position is likely to decrease in value.

Cancellation of overseas contract or not realizing the foreign currency as per delivery dates of the contract can lead to loss for the exporters.

Although forex hedging is typically used to limit risk for exporters, poor execution of this strategy can be disastrous for your trading account.

Due to the complexity of hedging in forex, exporters —even experienced ones— can never be fully assured that their hedge will counteract any possible losses. Even with a well-designed hedge, it's possible for both sides to generate a loss. Factors such as commissions and swaps should also be carefully considered.

Exporters should not engage in complex hedging strategies until they have a strong understanding of market swings and how to time trades to capitalize on price volatility. Poor timing and complex pairing decisions could lead to rapid losses within a short period of time.

Why and when should an exporter consider Forex Hedging?

Foremost, exporters should make their forex Risk Management Policy and then based on the risk perception, the management should hedge their risk, full or part or consider natural hedge (if they have imports too) to cover the risk in volatility of forex.

A short-term hedge can be a great way to protect profits when you're unsure of certain factors that could cause volatile price movements. This uncertainty can range from a suspicion that an asset has been overbought to concerns that political or economic instability could cause certain forex pairs to plummet in value—particularly when you've opened a long position on those pairs.

However, it is suggested that hedging must be looked at as a long-term inclusion in a company's risk management strategy rather than immediate or short term gains that can prove highly risky,

especially considering unforeseen developments such as the Ukraine crisis or the sudden depreciation in currency values.

How can an exporter exit a hedge?

Exporters can exit a hedge by cancelling the forward contract or taking reverse position of the forex contract already booked with a bank or exchange. When you're exiting a direct or complex hedge and keeping your initial position open, you need to close out only the second position. When you're closing out both sides of a hedge, though, you'll want to close these positions simultaneously to avoid the potential losses that can come if there is a gap.

It's important to keep track of your hedged positions so that you're able to close out the right positions at the right time to complete the execution of this strategy. Overlooking one open position in the process can derail your entire hedging strategy—and potentially hit your trading account with steep losses.

FX Retail platform of Clearing Corporation of India (www. CCILIndia.com)

Nijai Gupta advises all exporters/Importers to take the advantage of FX Retail platform of Clearing Corpn of India with the help of their own AD Bank in India. This platform helps International Trader to track the exchange rate, the exchange margin applied by banks and Forward Forex booking limits granted by bank against a one-time fee of Rs. 500. This can be done on the laptop/desktop of the company official responsible for exchange rate booking etc. Nijai Gupta may be contacted for further details or understanding on nijaikgupta@yahoo.com

POLYMER PRICE TRACKER (DOMESTIC MARKET) JULY 2022

High Density Polyethylene (HDPE)				• HDPE prices slipped by Rs 7500 per MT in July 2022 after remaining stable in June 2022 and increasing by Rs 1000 per MT in May 2022. • In July 2022, HDPE prices reduced by Rs 6000 per MT in the first half of the month. The next price cut took place in the third week of the month.
↑	↔	↓		
May-22	Jun-22	Jul-22		
Linear Low-Density Polyethylene (LLDPE)				• LLDPE prices fell by Rs 10000 per MT in July 2022. Prices had remained stable throughout the last two months of June 2022 and May 2022. • In July 2022, LLDPE prices were reduced by Rs 8000 per MT in the first half of the month. The next price cut took place in the third week of the month.
↔	↔	↓		
May-22	Jun-22	Jul-22		
Low Density Polyethylene(LDPE)				• LDPE prices slipped by Rs 4500 per MT in July 2022 after a decline of Rs 6000 per MT in June 2022 and Rs 3500 in May 2022. • In July 2022, LDPE prices were reduced by Rs 3000 per MT in the second week of the month. The next price cut took place in the third week of the month.
↓	↓	↓		
May-22	Jun-22	Jul-22		
Polypropylene (PP)				• PP prices fell by Rs 7500 per MT in July 2022 after a decline of Rs 4000 per MT in June 2022 and Rs 11000 in May 2022. • In July 2022, PP prices were reduced by Rs 5000 per MT in the first half of the month. The next price cut took place in the third week of the month.
↓	↓	↓		
May-22	Jun-22	Jul-22		
Polyvinyl Chloride (PVC)				• PVC prices dropped by Rs 20000 per MT in July 2022. Prices had declined by Rs 10000 each in June 2022 and May 2022. • In July 2022, PVC prices were reduced by Rs 12000 per MT in the first half of the month. The next price cut took place in the third week of the month.
↓	↓	↓		
May-22	Jun-22	Jul-22		

Source: Industry, Plexconcil Research

How Wash Off Labels are Redefining Packaging

The increasing popularity of sustainability introduced wash-off labels—an eco-friendly labeling option that boosts recyclability and reuse.

Brands are continually uncovering data that shows today's consumers are supporting socially responsible companies despite the higher cost. Businesses cannot afford to ignore the importance of observing sustainable practices and improving their environmental initiatives. More companies are now finding ways to incorporate eco-friendly materials in their packaging, such as using wash-off labels.

If your brand is considering eco-friendly labels for your products, wash-off labels are an excellent alternative to reduce your carbon footprint. Wash-off labels maximize the recycling opportunities while keeping the overall packaging production costs low.

What are wash-off labels?

Wash-off labels are distinguished by their ability to be easily removed during bottle cleaning and recycling processes They are often used on returnable glass beverage bottles, such as for soda and beer. Generally, a wash-off label has a multi-layer design consisting of a PET liner, a polypropylene film, and a wash-off adhesive. They can also be combined with different label materials.

A common challenge with labels when recycling plastic containers is that the label material, adhesive, and ink can contaminate the plastic flake. Wash-off label solutions allow full recyclability of any PET bottle, thermoform, and glass since the labels separate without leaving residue.

Wash-off labels essentially make reusing or recycling packaging items more convenient. The stickers can be removed easily in a hot water bath at temperatures lower than the industry average, unlike traditional labels.

5 benefits and uses of wash-off labels

Wash-off labels have an attractive design

Transparency is a notable characteristic of this label type. They are designed to make it seem like the text or graphics are printed directly on the containers. The margins of the label also seamlessly blend well into the container, so it's not visible unless inspected closely.

The no-label look allows companies to enhance their brand image by experimenting with more intricate or innovative graphics. It also gives the products an instant premium look at a lower cost.

Wash-off labels are durable on packaging

Wash-off labels are resistant to extreme temperature fluctuations, such as humidity, submersion in ice water or room temperature water, and UV light. They are constructed to withstand tropical and hot environments and normal washing conditions. These characteristics make wash-off labels more favorable to work with than traditional labels that use wet glue products.

Wash-off labels are eco-friendly

Removing traditional labels often leaves a residue of the glue and paint on the container. Transparent adhesive wash-off labels are easy and fast to remove as they shrink and peel off on their own during the washing process, minimizing waste volume and maximizing the reuse of containers.

Producing wash-off labels also requires lower water, chemical, and energy consumption compared to paper labels. Using eco-friendly packaging solutions enables your brand to be more purposeful with product packaging and gives you a competitive edge.

Wash-off labels wash off easily

Permanent adhesive puts your labels firmly in place, but it can damage the containers when removing the labels. Using a removable adhesive can prevent such residue, but there's the risk of the labels coming off earlier than expected.

The wash-off labels' ease of removal, including separating impurities and inks, makes the recycling process smooth and rapid. The label peels off and rolls up, separating itself from the packaging for good with little to no effort.

A wash-off label is an ingenious solution to labeling reusable containers that need to be recycled regularly, such as ingredient containers, jars, condiments, and drinks. The wash-off feature remains preserved regardless of how long the label is attached to a container.

Wash-off labels are ideal for returnable or reusable containers

Removing traditional labels with stubborn adhesives can damage containers. Wash-off labels are an excellent alternative for businesses that reuse containers as they peel off cleanly without leaving any residue. It also allows brands to reduce their environmental impact. This applies to companies in the food and beverage industry, which use many returnable bottles.

Another example would be the trays used for meat and fruits at supermarkets. Using wash-off labels on the trays, stacking boxes, crates, and system containers in production or logistics allows for easier re-labeling and immediate reuse.

Consumers and businesses alike have growing concerns about environmental issues. In support of being kinder to the planet, companies enhance their green efforts to show their priorities are beyond generating sales. With labels featured on virtually every consumer product, you must choose the suitable product label and packaging solutions to represent your brand.

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Mihir Ajit Shah,

Consultant, Advisor & Trainer in International Business, Universal Connections

How to Start an Export Business

From the times of Liberalisation, Privatisation and Globalisation to the time to make Local and Go Global, the current mantra of New India in 2022. International Business is now not an option or additional segment for the companies but is one of the Important Strategies and crucial part of the Business Growth Story of all companies. It's important to note that as the road of Export Business opens new opportunities and markets it also welcomes challenges and headwinds which come along.

The Beginning….

It's Important to note prior to starting an Export Business that it is not a part time or Instant Counter Sale proposal, but a Long-Term, full time dedicated business assignment in which one has to be dedicated and consistent to achieve the desired results.

To begin the journey in Exports, it's advisable to form a company under the applicable laws and compete basic registrations including

~ Application of PAN
~ Registration with Registrar of Companies (ROC)
~ Application of GSTIN
~ Application of MSME Registration – Udyam Registration (If Applicable)
~ Product Specific Registrations like FSSAI, FDA, etc….

It is to be remembered that this is just a beginning, but to become an Export Business, the company must apply and have Importer Exporter Code (IEC) number, which is to be applied online from DGFT Website .

The company only becomes eligible to export or import upon having valid IEC Certificate. Apart from IEC, the exporter now must also register itself with the specific Product related Export Promotion Council (EPCs) and obtain a Registration Cum Membership Certificate (RCMC). The RCMC helps exporter not only to claim various export incentives, but also to enhance and support their progress in export business journey.

Registration of the Bank Account and Authorised Dealer Code (AD-Code) of the bank of the Exporter is also required along with KYC for the first exports from any port in India on the customs platform.

Selection of Product

In the Business of selling goods or merchandise it is essential that the ultimate product must do the talking and it must be the one which satisfies the requirements of the buyer.

As an exporter you can select your product by considering various aspects like

~ your existing business
~ your personal or companies' expertise
~ global demand of products in your sector
~ your capabilities and specialities
~ your capacity to modify and adapt your products for International Markets
~ production capacity for global demands
~ financial capabilities for applicable volumes and quality requirements

As a beginner exporter, you must choose your products wisely and apart from your own examination of details it will be great idea to examine and analyse various authentic statistical data available online.

Selection of Market

Based on the product selected by the exporter, its time to decide the applicable Market in the Globe where it wishes to sell. Generally, speaking the world is the market, however it is only wise that a detailed study is undertaken to select the market segment for the product selected. This will help exporter hit the right market and is able to offer the product where there is effective potential. Some factors while selecting the Market are:

- Geographical and Demographical aspect of the Market
- Political Scenario
- Demand of the Product in the Market and the Competition
- Adaptability requirements in the product.
- Technical, legal and procedural challenges in the Market
- Overall Market's demand situation on the product and use.
- Export Statistics of the product and the market.
- Potential of Products with Free Trade Agreements (FTAs) Countries

It may be a good Idea not only for the exporter to look at the demand of the product its selling but also in case of the Raw Material or Inputs, the overall demand of the products manufactured out of it and where the product is used. In cases it's the finish goods the overall demand of the products by the consumer in general must be evaluated.

Identifying the Buyers in Exports

As the exporter its always a question and a struggle to find the buyers in the Global Market. Well, it may seem difficult at the first instance, however, the trick and the take on this is, simply to follow the consistent, dedicated and continuous approach of actions in Global Market similar to what is done in domestic Market.

Global Buyers are not different then domestic buyers. Their needs and wants are same like product quality, timely delivery, advantage and trust on consistent supply from the exporter, competitive pricing etc…. However, the difference with the Global buyers is that they have the world to order from. The Global buyer has options of world suppliers from various countries and various factors like price, quality, technology, tax benefits etc. all play important role in finally placing the orders.

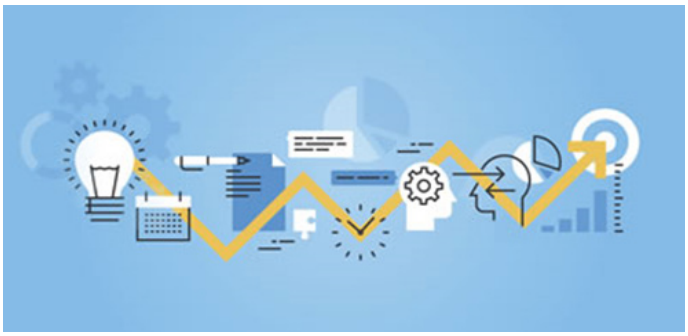
While finding buyers is a long term and continuous process, it must me noted that various tools may help reaching the buyer and assist exporters getting the desired growth in their business.

Participation in International Exhibitions, Buyer Seller Meets, Online Marketing and Physical Meetings with prospective buyers are some of the effective tools being used by successful exporters and have given the desired results.

Support and Assistance can also be taken from the various Indian Missions abroad. In a recent Online Meeting with all the Indian Missions, Our Prime Minister mentioned

Friends,
I would also make a request to our Ambassadors, colleagues from the Ministry of External Affairs present in this program today. In whichever country you are representing India you understand the needs and demands of that country very well. You also have a better idea from which region of India that demand can be fulfilled. I would also like that India House present in different countries should also become representative of India's manufacturing power.

Export Promotion Council (EPCs) organise participation in various International Exhibition, Buyer Seller Meets and Delegations which help exporters to reach their prospective buyers. Point to add is that many of these events are subsidised in cost under various incentive schemes by the various government departments, thereby helping the exporter to participate regularly.



Delivery, Consistency and Competency

When the exporter does regular and constant effort in the market and finding buyers with right product and correct pricing strategy it is most likely to meet success with buyer and orders.

They main part now begins; the exporter must be able to deliver the goods as promised. The Exporter must PASS all the checks like Quality of the product, timely delivery, documentation and compliances. It must be noted that the key here is not just doing it right one time but repeating it again and again and again. Consistency is the rule of the game.

Over the period of time buyer will be offered better rates, better quality by your competitors and thus being not only consistent but also competitive is essential aspect in the growth story of the exporter.

To boost and to support Indian Exporters, Government offers various export incentives and tax refunds to neutralise the effect and make the exporters globally competitive. Gaining proper knowledge through EPCs and other agencies will help exporter be ahead of the game and offer their buyers right prices.

Financing in Exports and the way ahead

Be it any business in the world, Finance is the key ingredient required for its constant progress. Exporters will have to estimate their financial requirement for raw material purchases, processing costs, manufacturing outlay and other services while selecting the right export product. Many markets require more of financial outlay due to high competition, stringent legal norms and quality checks. These factors also require to be measured while assessing the market.

Banks generally will support exporters with better financial facilities with good Interest rate options and Govt. incentive schemes which exporter must examine while entering the International Business. Tools to hedge currency fluctuations must also be used for better FOREX management.

As a company when you grow from a domestic company to exporting company catering to global buyers, its not just that your top line or bottom-line that increases, various kinds of other benefits like change in identity as global company, benefits of scale in purchases, recognition by industry bodies and overall growth of the organisation is what it brings when you become an exporting company.

As it is said…
Success is not Big Step in the Future,
Success is a small step taken right now.

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POLYURETHANE

Polyurethane (PU) is a commodity plastic that find use in automotive & mobility, building & construction, coatings & adhesives, footwear & sports, mattress & furniture, household goods & appliances among others. Polyurethane is made by combining isocyanates (i.e. Toluene diisocyanate or TDI and Methylene diphenyl diisocyanate or MDI) and polyols.

The product is classified under Subheading 390950 of the Harmonized System (HS) of Coding.

World-wide import of Polyurethane is valued at USD 8.5 billion per year approximately.

- In 2021, top-5 exporting countries of Polyurethane were: Germany (21.9%), China (9.9%), United States of America (9.8%), Italy (8.0%), and Netherlands (5.6%).
- Likewise, top-5 importing countries of Polyurethane were: China (10.7%), Germany (6.3%), Viet Nam (5.2%), United States of America (5.1%), and Italy (4.5%).

In 2021-22, India exported 25,955 tonnes of Polyurethane valued at USD 81 million to the world. Indonesia and Bangladesh were the top-2 export destinations both in terms of value as well as volume.

Destination Country	Value (USD Mn)	Destination Country	Qty. (Tonnes)
Indonesia	12.9	Indonesia	4,839
Bangladesh	10.7	Bangladesh	3,386
Singapore	6.2	Malaysia	1,924
Nigeria	5.7	Singapore	1,849
Italy	5.4	Nigeria	1,801
Malaysia	4.7	Italy	1,434
Türkiye	4.2	United Arab Emirates	1,359
United Arab Emirates	4.0	Türkiye	1,124
China	3.4	China	1,117
Sri Lanka	2.6	Sri Lanka	914

Source: Department of Commerce, Govt. of India, Plexconcil Research

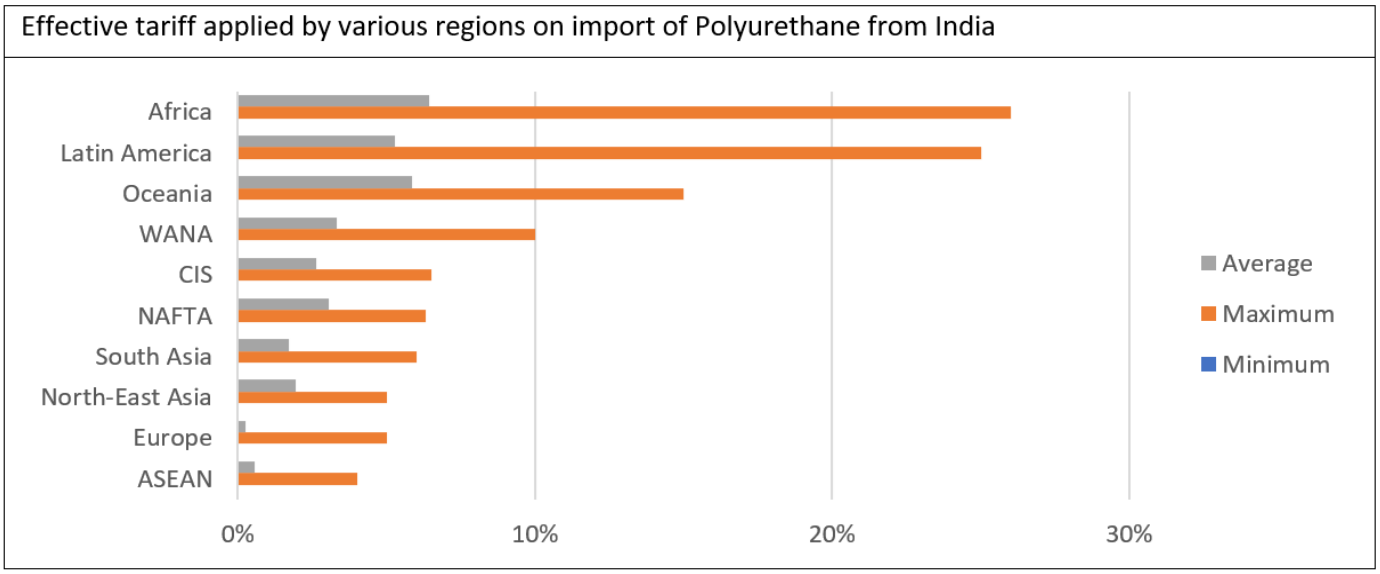
In 2021-22, India imported 123,478 tonnes of Polyurethane valued at USD 373 million from the world. China was the major supplier both in terms of value as well as volume.

Source Country	Value (USD Mn)	Source Country	Qty. (Tonnes)
China	117.8	China	41,020
Singapore	77.8	Singapore	27,589
Netherlands	38.1	Netherlands	15,231
Belgium	26.5	Belgium	8,212
South Korea	23.5	Italy	7,711
Italy	21.6	South Korea	6,118
Germany	18.1	Germany	5,354
Taiwan	13.1	Taiwan	2,668
United States of America	5.0	France	1,535
United Kingdom	4.8	Spain	1,445

Source: Department of Commerce, Govt. of India, Plexconcil Research

Indian firms dealing in Polyurethane have immense potential to export to destinations like Bangladesh, Indonesia, Malaysia, Nigeria, Philippines, Sri Lanka, Thailand, Türkiye, United Arab Emirates, and Viet Nam.

Import of Polyurethane from India by the European Union countries is eligible for zero customs duty due to EU Generalised Scheme of Preferences. There is zero duty applicable on import of Polyurethane from India in Republic of Korea as well as Japan and the United Arab Emirates under the Comprehensive Economic Partnership Agreements signed with India. In fact, few of the ASEAN countries like Laos, Philippines, Thailand and Viet Nam also allow zero duty imports of Polyurethane under the ASEAN-India Free Trade Agreement. Import of Polyurethane is eligible for zero customs duty in Canada, Singapore, Sri Lanka and Malaysia.



Source: Market Access Map, Plexconcil Research

Optimizing Your Export Packaging

Packing is usually considered as one of the most boring, least impactful aspects of a supply chain. With logistics, transport methods, and keeping track of your freight shipments, why should you bother with packaging optimization in supply chain? Well, as it turns out, it can have some surprising benefits, especially when appropriately tackled.

Unlike services exports which are mostly intangible in nature and cross continents as bits and bytes through the submarine internet cables, merchandise exports demand safe packaging for goods to be hauled across the oceans to remain intact and acceptable to the ultimate foreign buyer. Different types of goods need varied methods of export packaging as not all goods and commodities meant for export are the same in shape, size and volume.

Export packaging enables your goods arrive intact and undamaged with your overseas buyer. Export packaging is also often referred to as transport packaging.

Packaging also plays a key role in export success as it helps in the safe keep products, retaining them in perfect condition until reaching the destination and also uniquely positioning and differentiating them. Several geographies have their stringent requirements for packaging material to meet.

The Layers

Export packaging comprises three different layers of packaging that are likely to be needed when exporting your goods.

- Sales packaging is the immediate layer of packaging around your goods. This is the packaging that remains when the goods reach their end-user, eg the bottles in which beverages are contained, or the boxes many electronics items are sold in. Sales packaging often also serves a marketing purpose by containing prominent branding images and information.
- Outer packaging is a middle layer of packaging, usually containing multiple sales packages. It often also serves a retail or promotion purpose, eg a box containing sales units that doubles as a retail display fixture and can be placed directly on a shop shelf.
- Transport or export packaging is the outermost layer of packaging and is designed to protect your goods during transit. Examples of export packaging include wooden crates or boxes, metal drums and plastic shrink-wrapping.

Amid this backdrop, there are established global bodies to guide small and medium enterprises (SMEs) and exporters on packaging, whose aim is to enable these entities in developing and transition economies to emerge more competitive and get linked to the international markets for investments and trade, thereby raising the living standards and creating job opportunities.

The International Trade Centre (ITC), set up in 1964 is a joint agency of the World Trade Organization (WTO) and the United Nations (UN), which offers information, advisory services, training, networks and projects in export packaging.

The joint UN and WTO development agency's export packaging services include one of the most comprehensive knowledge databases on export packaging available for developing countries. ITC's Pack it is a modular information system which comprises of 40 modules of comprehensive coverage of packaging technology, specific product packaging and regulations. Likewise, ITC also publishes a widely renown multilingual glossary of packaging terms and packaging publications.

Moving goods around the world can be arduous on the items in question and the way that they are packed is essential for making sure that they are protected properly from vibration, impact, water, dust, dirt and damage.

There are an array of export boxes available, from export grade cardboard boxes to wooden export boxes – all designed to offer the maximum protection and ease of use. They are also designed to be reused and recycled, making them ideal for any modern, sustainable business.

One last thing to remember before you look at the various options you have when looking at export packaging solutions is that much of global export shipping relies on standardised sizing. The container ship model revolutionised global trade by putting everything in standard sized containers, making loading and unloading very rapid.

The same also applies to the goods put inside containers, as well as on to lorries and more. These are often done on standard size pallets, in standard sized boxes. Choosing the right pallet packing for export is also now a big consideration when exporting.

Choosing the right option

Export boxes vs export crating

The first choice any exporter faces is whether to use export boxes or export crating when looking to move goods. What's the difference? Well, an export box is a box, with a lid – be it wooden or cardboard – while a crate is largely seen as 'more than a pallet, not quite a box'.

A pallet is just a base on which crates, boxes or goods are placed; a crate has slated semi-open sides and can be easily taken a part; while a box is a fully enclosed container.

All three can play a role in storage and shipping and when to use each comes down to one thing: protection. Pallets we shall come to anon, but crates are something of an interim step in protecting goods. They enclose the items to some extent, but often are not as protective as you might like. They have gaps and are not as sturdy, so they let in just, moisture and the atmosphere, all of which can damage what lies within.

To offer the kind of protection most shippers want when exporting, export boxes offer best option. Wooden export boxes offer an easy way to create a solid and sturdy way to ship, which can be easily reused.

Export grade cardboard boxes, meanwhile, can offer the same strength and protection, and can not only be reused, but also easily recycled and repurposed.

Cardboard export boxes differ from your standard cardboard box in a number of ways. For starters they have to be really strong. As a result they are made from double or even triple walled carboard.

These heavy-duty boxes are designed to help export all manner of items from to light weight items right up to metal parts, compressors, boilers, pumps, industrial tools and machinery.

All meet international standards and can be taped shut.

They are also palletizable and can be stacked, although that does depend on how heavy they are with goods inside.

Triple wall cardboard export loading cases offer exceptional protection of goods in transit, with the first 3mm wall acting as a defence against impact and perforation. The second wall provides a 5mm reinforcement against external shocks and the third wall acts as a 7 mm shock-absorber to the contents of the cardboard box.

Wooden export boxes vs wooden export crates

For really long-distance export that is going to involve road, rail, sea and air, or to handle really heavy and/or delicate goods, plywood export boxes offer an excellent and sturdy solution.

Wooden export crates have some uses, but they don't offer the same all-encompassing protection afforded by a box – and a wooden export box really is the gold-standard in export packing.

Made from strong 6mm plywood and reinforced with riveted steel edging, export boxes offer exceptional protection. Also, plywood being a man-made product of layers of processed wood, isn't considered a plant material or a phytosanitary problem & so these boxes can be shipped to anywhere in the world. They protect again impact, heat, moisture, dirt and dust and can be stacked – again depending on how heavy the items are inside.
Another advantage of plywood export boxes is that,

when not in use, they can be easily disassembled and stored flat. This makes them a really green alternative to other export packaging options as they can be reused time and again.

What is pallet packaging for export?

Pallet packaging for export is essential for being able to quickly and efficiently ship goods on standard sized pallets, allowing for merchants to make the most of bulk carriage.

Packaging goods for export relies on being able to stack things in standard dimensions. As we mentioned at the start, it revolves around standardised shipping containers and that modular approach works all the way down the chain to the items themselves.

While you can pack in standard sized boxes, those boxes can be even more efficiently shipped if they are on stackable, standard sized pallets, which in turn go in standard sized shipping containers.

Palletised packaging for export can use either cardboard boxes or plywood cases. Double walled cardboard boxes are strong enough for most palletising export packaging needs and come in standard sizes that fit across standard pallets. They can also be stacked on one another on the pallet to form a good, secure single form to move and ship.

Some also come with their own presswood pallets as a self-assembly kit. These boxes are held to the pallet with plastic bolts and are sturdy enough for long-haul shipping.

They are plant and pest-free, too, so are certified for export to Argentina, Australia, Brazil, Canada, Chile, China, India, Japan, Mexico, New Zealand, South Africa, Taiwan and the USA.

Plywood pallet boxes are also designed to fit securely to standard sized pallets, making for a really strong and export-friendly way to export goods. It also makes them easy to move around warehouses and shipping facilities as the pallet gives extra support when using a variety of forklifts.

It is always recommended that strapping is also used to secure the lid and to further secure the pallet and box to one another.

Country specific rules

Many countries have packaging standards specific to them which require the exporters to adhere to. It is the duty of exporters to stay informed and follow the latest packaging standards specific to a country. Non-compliance can lead to severe penalties, risk of entire cargo getting sequestered and delayed, including the end customer being subjected to expensive litigation and suffering disrepute, especially when exporting hazardous goods. Following export packaging rules in letter and spirit will help in clearing all the inspections without issues on arriving at the export destination.

It

- Information and labeling on the export packages has to be accurate and explicitly clear.
- Export consignments must comply with local rules at the destination. For example, some countries prohibit certain packaging material like straw filling.
- Some countries impose restrictions on wood packaging, including requiring wood packaging to be marked and accompanied by a certificate.
- Some export markets demand minimum weight and volume of packaging. For example, heavy packaging users have to register with Northern Ireland Environment Agency (NIEA) to become accredited as exporters in the United Kingdom. Many export markets have strict rules on packaging waste and collection. Germany's 'green dot system' is a case in point.
- Several export markets mandate easily recyclable packaging material with minimal environmental damage, including strict packaging waste and collection rules.
- There are wood packaging standards aimed at avoiding the spread of forest pests and timber diseases. In some instances, an import license is also required when wood is employed in packaging.
- Australia prohibits the import of non-treated coniferous wood packaging materials (pallets) from select countries to avoid the entry of non-native or invasive species.
- Hazardous goods must be safely packed and clearly labeled.
- Poor packaging can adversely affect transport insurance if it is proved so.
- To avoid disputes in the event of goods getting damaged during shipping, contracts must consider incorporating packaging specifications with buyers.
- Cost savings on packaging using sub-standard materials is never a good idea. Packaging options such as cartons grouped on pallets and later loading into containers has become a mainstay.
- It is better to rope in a surveyor for specific packaging guidance in case of fragile products shippers' facing regular complaints of in-transit breakage.

To conclude, export packaging is a make-or-break part of export operations, requiring shippers to adhere to country specific rules depending on the type of commodity or merchandise being exported. There is enough guidance for exporters through global bodies to successfully export package their products and also weather the storms of many forces which can act on merchandise at every stage of export transactions.

Seven Automation Opportunities You May Have Overlooked

While not every process is appropriate for automation, the rapid advancement of robotics is allowing a much wider array of businesses access to this technology. Here are some areas where automation makes sense that you might not have considered.

Automation and robotics are becoming increasingly important for plastics processors. Faced with labor shortages, manufacturers can gain a crucial productivity margin from automating certain processes. Robotic automation can also help to make the workplace more people-friendly and attractive to the existing and potential workforce.

Indeed, studies show companies that adopt robotics grow faster than those that don't. Unfortunately, many businesses are in a position to benefit from robotics but are unaware of where to start.

Larger plastics processing companies have used robotics for many years, especially for machine tending. The larger companies had higher production volumes, making the ROI attractive. Smaller processing operations, on the other hand, have been slower to adopt robotics because their lower volumes and higher variability in job characteristics have presented a challenge to the technology.

Today, however, the prices of many kinds of robotic solutions have decreased significantly. Automation is more accessible than ever, regardless of the size of the operation, and the number and ways robotics can be applied have expanded.

A Structured Process to Adopting Automation

That said, there remain many areas still ripe for automating. Identifying the best opportunities for robotic automation at the outset is crucial to maximizing your return on investment.

Many manufacturers struggle with where exactly to begin automating. It can be a daunting task, determining where to begin. It starts with understanding your needs. What is your current productivity? How many person-hours are needed to complete the relevant tasks that make up your manufacturing process? Identifying the best opportunities for robotic automation at the outset is crucial to maximizing your return on investment. The best place to start is to take a top-down approach to mapping out your factory, looking for those areas that could benefit the most from automation and where the most significant risks lie.

With these ideas in mind, we've compiled seven processes often overlooked by plastics manufacturers that are ripe for automation.

1. Raw Material Intake

For processors who don't buy railcar quantities, resins and additives typically arrive in sacks of varying sizes stacked on pallets. Workers must unload the truck at the dock and convey the pallets to a staging area. Currently, automating the truck-unloading process may be more difficult for robotics, although some excellent systems are on the market. The ideal candidate for automated truck unloading is in a setting with a low variability in the pallet size, shape, and weight. Special considerations apply to the trucks and the docks for this automation to succeed.

Most processors still rely heavily on operators to move materials around their plant. (Photos: Gain & Co.)

On the other hand, emptying raw-material sacks into a centralized feed system is a task well suited for a robot. Most operations today do this kind of task manually. The worker cuts open the sack, hoists it into a bin, and empties the pellets from the bag into the feed system. The hoisting process may require a gantry or crane if the sacks are larger and heavier.

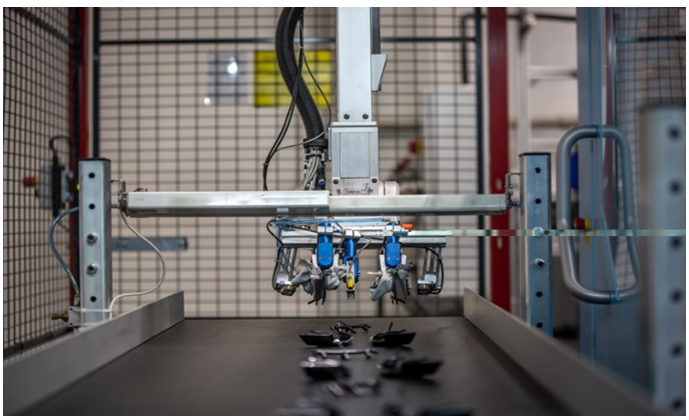
In emptying the sack, dust is generated that can be problematic for the workers, and injuries from utility blades are sadly relatively common.

Robotics can readily automate the jobs of opening the sacks and emptying them into the appropriate receptacles. Automation reduces labor requirements and protects people from unwanted exposure to dust and particles.

2. Machine Tending

Machine tending is not an overlooked task—indeed, it is probably the most common application for robotics by processors. However, smaller operations may have felt the investment was too significant, the variety of products to be handled was too great, and the complexity of the robot programming too high to be a good match for their organization.

Advancing technology has removed those barriers. The cost of robotics has been reduced dramatically over the last decade. The level of artificial intelligence (AI) has improved significantly, allowing a robot manipulator to handle much more variation than ever before. Also, programming the newer category of collaborative robots, or cobots, can be as easy as grabbing hold of the robot arm and moving it into position. By manually placing a robot arm in a sequences of poses, the robot can be taught the motions to make. No programming is required.



Robots have been deployed for years to remove parts from presses. But falling prices and easier programming make this an option that now even smaller molders can consider.

Thus, machine tending is a form of automation that even small operations can adopt, thanks to falling costs. The most common robot used for machine tending in injection molding applications is the XYZ or Cartesian type. Because such a robot is relatively simple, it is less expensive. If the application requires, an articulated robot arm can perform more complex movements.

3. Deburring and Excess Material Removal

After a plastic part has been removed from a mold, excess material will frequently need to be removed. A rotating saw blade, snipper or grinder/sander are often used for deflashing and deburring.

These are repetitive processes that lend themselves well to automation by robotics. The same robot arm that removes parts from the mold can also perform deflashing and deburring in many applications. Alternatively, one robot can be used for machine tending and part removal, and a different robot can be utilized to do the deburring.

One step that is still manual—and perhaps ripe for automation—is deburring/deflashing.

4. Assembly

Molders may include assembly operations to add value to the part. Assembly processes can enhance the value of your company's services and increase profitability. The assembly task may involve joining plastic parts together or adding metal, rubber or other components to the plastic part to make a larger assembly. Assembly operations are readily automated with robotics. Delta-type robots can be used for rapid pick-and-place, and SCARA robots are often used for small-parts assembly.

5. Inspection

Computer vision technology and AI have made rapid advances in recent years. As a result, visual inspections that were once exclusively the domain of manual processes can now be automated. A typical application is to verify that excess material has been sufficiently or properly removed. Blow molding, for instance, is ripe for automated inspection. Computer vision can handle such inspection with high accuracy and repeatability.

Manual vision inspection, in contrast, is much less accurate. In his Quality Handbook, Joseph Juran, a pioneer in quality assurance, argues that 100% manual visual inspection can be expected to be no more than 87% accurate. Conversely, the accuracy of a properly installed computer-vision inspection system can approach 100%. Computer-vision systems never grow tired or become distracted, both significant factors limiting the accuracy of manual visual inspection.

Computer-vision inspection can also measure dimensions and compare shapes (such as concentricity or ovality) to a predefined standard. Because a camera can take 100 frames or more per second, a robotic system can automatically detect and remove defects at rates that humans cannot match. No human would be reasonably expected to reliably spot defects in a rapidly moving conveyor system. Yet computer-vision inspection can do this quite readily. Examples relevant to processors include detecting cracks and verifying that labels or codes are properly applied.

Computer-vision systems never grow tired or become distracted, both significant factors limiting the accuracy of manual visual inspection.

We have seen cases where there is a reluctance to use computer-vision inspection. For example, sometimes the specifications call for manual visual inspection in surgical or medical applications. Therefore, the manufacturer is reluctant to propose something different. Given the greater accuracy and reliability of computer-vision inspection, it is only a matter of time before such obstacles fade away.

6. Packaging & Palletizing

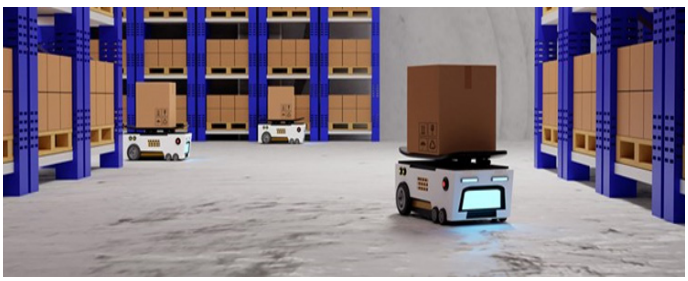
After removal from the machine, secondary operations and inspection, parts need to be placed into primary packaging, and robotics is an excellent solution. When using robotics for this task, speed, repeatability and accuracy are all superior to manual processes. In addition to placing parts into packages, the packaging itself can be formed by automated systems.

When using robotics for packaging and palletizing, speed, repeatability and accuracy are all superior to manual processes.

Placing primary packaging into secondary packages for shipping is also a prime candidate for robots. Once the parts have been properly placed into the secondary packaging, these units can be assembled robotically into pallets for placing onto trucks.

7. Internal Logistics

Another area ripe for automation is the transportation of packages and pallets within a facility. Plastic parts manufacturers can use Automated Guided Vehicles (AGVs) and Autonomous Mobile Robots (AMRs) for such transport.



Automatic guided vehicles can move goods from a primary packaging to a secondary packaging station. On the intake side, such self-driving vehicles can transport incoming pallets to a decanting station.

One typical workflow that AGVs and AMRs can help with is transporting pallets of goods from a palletizing station to the shipping dock. If appropriate, the autonomous robots can move goods from a primary packaging to a secondary packaging station. On the intake side, such self-driving vehicles can transport incoming pallets to a decanting station.

Automation is Within Reach

While not every process is appropriate for automation, the rapid advancement of robotics is allowing a much wider array of businesses access to this technology. Plastics processors are poised to reap the benefits of the future of robotics, and thankfully it's no longer just large corporations able to take advantage. Small and medium-sized businesses are now able to leverage the increased productivity, heightened safety and insulation against labor shortages that can be derived from automation.

Source: ptonline.com

Sabic SK Nexlene Targets POE, POP Expansion by 2024

Sabic and its partner SK geo centric (SKGC) have announced their intent to expand capacity for polyolefin elastomers and plastomers (POEs/POPs) and metallocene low-linear-density (LLD) PE at their joint venture Sabic SK Nexlene Co. (SSNC). The new capacity, due to come on stream at Ulsan, South Korea, in the second quarter of 2024, targets applications in solar panel encapsulation, automotive, footwear, and flexible packaging.

The largest market for POEs traditionally has been impact modification of polypropylene (PP) in automotive components such as bumpers and instrument panels. Solar panel encapsulation has only emerged as a key application for POEs in the past several years, as makers discovered its superior insulating properties for certain module types. Adoption was also accelerated by a shortage of traditional EVA encapsulant grades, with prices spiking in 2021 and making POEs more cost competitive.

In the base scenario, market watcher MLT Analytics expected POEs' share of the solar module encapsulant market to grow from 12% in 2020 to 27% in 2030 based on its proprietary market modeling. A disruptive factor, however, could be the market entry of several homegrown Chinese players expected to emerge in 2024 and beyond who may be content with lower pricing levels, which could further boost market share. Other suppliers of POE encapsulant grades include Dow Chemical, Mitsui Chemicals, and LG Chemical.

Holding up the agreement are (left) Kim Doo-Gyum, Mayor of Ulsan Metropolitan City, South Korea; and Sami Al-Osaimi, Vice President of PE & Sales, Sabic, and Board Chairman for SSNC.

Sami Al-Osaimi, Vice President of PE & Sales, Sabic, and Board Chairman for SSNC said, "We have identified a strong trend toward customized and high-performance polyolefins, especially metallocene polyethylene materials, in several important new technology markets." He added, "Our Cohere POP, Supeer mLLDPE, and Fortify POE polymers are ideally positioned to meet the needs of our global customers for enhanced toughness, flexibility, elasticity, heat-sealing properties, and optical properties, amongst others. The KNC plant capacity increase will provide the operational efficiency to boost the growth of these Nexlene-based materials. At the same time, it will give us a significant competitive edge to strengthen the market penetration of our brands."

The innovative Nexlene technology combines a bimodal solution process with a proprietary metallocene catalyst to yield state-of-the-art ethylene copolymers with tailored molecular weight distribution and modality.

Sabic and SKGC market mLLDPE and POE/POP products independently through their own brands. Sabic's portfolio includes Fortify POE, Cohere POP, and Supeer mLLDPE. SKGC's brands are Supreme POEs and POPs, and Smart mLLDPEs/mMDPEs.

Source: Plastics Today

Covestro Steps Up Production of Sustainable Polycarbonate in Asia Pacific

In another sustainable polycarbonate (PC) initiative in Asia Pacific, Covestro has started on a journey to establish 60,000 tonnes/year of recycled PC capacity in the region by 2026. A groundbreaking ceremony for the first dedicated mechanical recycling production line in Shanghai took place on Aug. 19, 2022. Covestro will also repurpose an existing production line in Thailand to turn out recycled PC. Earlier, Mitsui Chemicals Inc. and Teijin Ltd. announced their intent to collaborate on the supply of bio-based PC.

The new mechanical recycling (MCR) line in Shanghai will address growing demand for more sustainable solutions, in particular with post-consumer-recycled (PCR) materials to be used primarily for the compounding step in the manufacture of electrical and electronic products, automotive applications, and consumer goods. The $27-million line will be capable of delivering more than 25,000 tonnes of high-quality polycarbonate and blends containing mechanically recycled content annually when it is commissioned in 2023.

"To meet the rapid growth in demand for more sustainable and circular solutions from our downstream customers, we will continue to invest in expanding our capabilities," said Lily Wang, Head of Covestro's Engineering Plastics segment, at the groundbreaking event. "This MCR production line is the latest example of our efforts in this regard and signals our commitment to driving the transition to more sustainable products in this region, especially in China."

"The MCR production line is another exciting step we have taken to fulfill our commitment toward a circular economy and achieve our goal to become operationally climate neutral by 2035," said Sucheta Govil, Chief Commercial Officer of Covestro. "Recycling plastic waste is absolutely essential to the circular economy and addresses one of the major global challenges we face together as a society. We will continue to invest in expanding and improving our capacity for recycled plastics and leading the industry to create materials with higher recycled content."

Covestro will also repurpose an existing compounding line at its Map Ta Phut site in Thailand for mechanical recycling. Conversion of the plant is scheduled to be accomplished by the end of 2022, continuing to pave the way and meet market demand for PC from PCR content across multiple industries in the ASEAN region. Based on the current forecast, the unit will supply up to 10% PCR-based product of its annual production volume by 2030. Overall, the company aims to be capable to deliver more than 60,000 tons of polycarbonate with recycled content in Asia Pacific per year until 2026.

The two facilities in Shanghai and Map Ta Phut will boost Covestro's output of PCR polycarbonates Makrolon R and Bayblend R, which contain up to 75% recycled content and can contribute to a carbon footprint reduction of up to 50% while meeting performance and eco-labeling requirements.

Source: Plastics Today

Japanese Resin Makers Collaborate to Market Biomass-Derived Polycarbonate

Mitsui Chemicals Inc. and Teijin Ltd. will become Japan's first companies to develop and market biomass-derived bisphenol A (BPA) and polycarbonate (PC) resins to support efforts to achieve carbon neutrality by reducing greenhouse gas (GHG) emissions throughout a product's life cycle.

The joint initiative follows Mitsui Chemicals' receipt of ISCC PLUS certification from the International Sustainability and Carbon Certification (ISCC), based on which Mitsui Chemicals will begin supplying biomass BPA produced with the mass-balance approach. Teijin also will begin developing and producing biomass PC resin using the same BPA.

In May 2022, Mitsui Chemicals acquired ISCC PLUS certification for BPA raw materials used in PC resins. Mitsui Chemicals will now become the first Japanese company to produce commercial biomass-derived BPA offering the same physical characteristics as conventional petroleum-derived BPA.

Teijin will procure biomass-derived BPA from Mitsui Chemicals to produce biomass-derived PC resins possessing the same physical characteristics as the company's existing petroleum-derived PC resins. The new biomass-derived versions will be used in commercial applications such as automotive headlamps and electronic components.

By expanding sales of products containing plastics produced through biomass conversion, the two companies aim to develop and produce more environmentally friendly products throughout their supply chains. Mitsui Chemicals, for example, is considering expanding its procurement network for bio-based hydrocarbons in order to provide stable supplies of related products to the market. The company, which is in the process of acquiring ISCC PLUS certification for biomass naphtha derivatives, has already received certification for phenol, acetone, BPA, and alpha-methyl styrene.

The aim is to acquire ISCC PLUS certification for all of the company's phenol-chain products and then commence sales by March 2024. Teijin also expects to acquire ISCC PLUS certification in the first half of fiscal 2023 and thereafter start commercial production of biomass-derived PC resins. Teijin plans to emphasize to customers that conventional petroleum-derived PC resins can be easily replaced with biomass-derived versions for more environmentally friendly products.

Demand to reduce GHG emissions throughout supply chains to support carbon neutrality is rapidly increasing, creating a need for more low-environmental-impact products. PC resins recycled from used final products are applicable in automotive and electronics uses, so the development of diverse low-environmental-impact PC resins is highly anticipated.

Since December 2021, Mitsui Chemicals has been using naphtha crackers as core equipment in its petrochemical plants, allowing petroleum-derived naphtha to be replaced with waste vegetable oil and residual oil-derived bio-based hydrocarbons. The company plans to continue introducing derivatives by using the ISCC PLUS–certified mass-balance approach to produce biomass-derived raw materials via chemical reaction. Teijin, meanwhile, will continue developing low-environmental-impact recycled PC resins, in addition to conventional PC resins using petroleum-derived raw materials.

Source: Plastics Today

RecyClass certification for INEOS Styrolution's recycled ABS grades

INEOS Styrolution's mechanically recycled ECO grades have received RecyClass certification. The Recycled Plastics Traceability certification, which is valid for Terluran ECO MR as well as Novodur ECO MR grades, confirms the post-consumer origin of the waste used in the production of the respective products.

The RecyClass certification now guarantees the origins and traceability of recycled material and uses the percentage-based recycled content calculation approach that is verified throughout the entire value chain.

The certification also confirms the post-consumer origin of the waste used in the Terluran ECO MR and Novodur ECO MR materials and facilitates traceability of recycled materials along the value chain, promotes transparent use of recycled plastic in new products, and reinforces reliable and verifiable claims on recycled plastic.

Terluran ECO MR

INEOS Styrolution's portfolio of sustainable ECO materials includes Terluran ECO GP-22 MR50 and MR70, two commercially available ABS grades incorporating 50% and 70% recycled content, respectively. Both grades offer performance on the same level as virgin material, thereby avoiding the need for downcycling.

Louie Mackee, Commercial Product Manager for Sustainable Products, said: "We are delighted to have completed the RecyClass certification for our mechanically recycled ABS grades, guaranteeing the post-consumer origin of the waste used to produce them. We recognise this as an important step towards increasing customer confidence when using materials containing recycled

content, and our portfolio of sustainable ABS products is now stronger than ever."

Novodur ECO MR and Novodur ECO High Heat MR

Mechanically recycled Novodur material is available with a 30% to 70% postconsumer mechanically recycled content. The individual grades come with a significant product carbon footprint (PCF) of up to 57%.

Nils Wittenberg, Technical Product Manager Novodur EMEA, added: "RecyClass certification is a significant step for our mechanical recycling solution. The properties for our Novodur ECO MR speak for themselves. The materials are plug-in solutions. And now, the origin of the postconsumer waste is certified as well."

Source: Interplas Insights

Sustainable, renewable: BASF and Sulzer Chemtech sign MoU

BASF and Sulzer Chemtech have signed a Memorandum of Understanding (MoU) with the goal of advancing technologies for renewable fuels and chemically recycled plastics.

The companies agreed to enter a strategic partnership to reduce the carbon intensity of renewable diesel and aviation fuel. They will also drive the development of innovative, cost-effective chemical processing solutions to improve the conversion of plastic waste into new plastics.

The collaboration combines complementary areas of expertise, integrating Sulzer Chemtech's capabilities in licensed processing technologies and mass transfer equipment with BASF's high-performance adsorbents and catalysts.

Image: basf

Sulzer Chemtech, an established licensor for process technologies for renewable fuels and chemical recycling of plastics, is leading efforts to harness resources that can help global producers achieve their net-zero ambitions. BASF Process Catalysts is driving multiple initiatives aimed at turning plastic waste into a secondary raw material, for example with its newly developed PuriCycle portfolio, as well as providing adsorbent and catalytic materials to produce clean and renewable fuels.

Detlef Ruff, Senior Vice President, Process Catalysts at BASF, said: "Global plastic pollution and mobility are challenges that we can help to solve by joining forces with partners. This is why we at BASF are involved in key strategic collaborations aimed at protecting our planet's resources and transforming the way we do business. We are excited to work with Sulzer Chemtech and use our combined strengths to address plastic pollution and drive the adoption of more sustainable fuels."

Torsten Wintergerste, President at Sulzer Chemtech, added: "Our process technology development team is continuously looking at new ways to support more sustainable, circular practices. The MoU with BASF allows us to broaden the scope of our portfolio and will lead to improved value offerings in both renewable fuels and the plastics recycling value chain. We look forward to working together to deliver advanced technologies that help our customers accelerate their path to net zero carbon emissions."

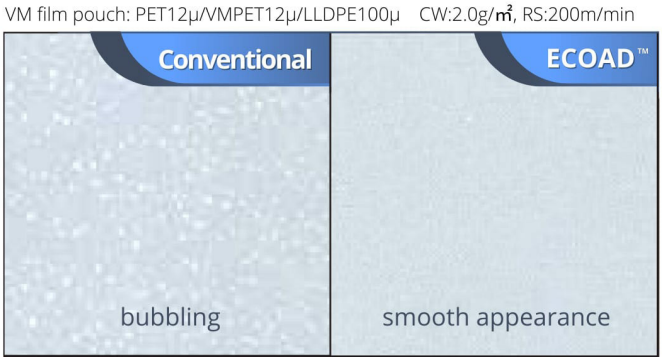
Source: Interplas Insights

Toyo-Morton: New Solvent-free Laminating Adhesives for Metallized Multilayer Packaging Designs

Toyo-Morton, Ltd., Japan's largest manufacturer of laminating adhesives and a member of the Toyo Ink Group, has developed the new ECOAD™ series of polyurethane solvent-free laminating adhesive systems for the food packaging and industrial markets primarily in Asia, where solvent-based systems are dominant. ECOAD adhesive systems are compatible with continuous lamination of metalized packaging structures with two or three layers, while exhibiting a smooth appearance with no degradation to metalized films – a feat that had been difficult to accomplish. In addition, these solvent-free adhesives contain no VOC, offering increased sustainability to end-users.

ECOAD vs conventional solvent-free adhesive

VM film pouch: PET12µ/VMPET12µ/LLDPE100µ CW:2.0g/m², RS:200m/min



"While solvent-free adhesives are popular in Europe and the Americas, they represent only 5 to 10% of all laminating adhesives used in Japan." explained Yusei Uchiyama, engineering team leader of Toyo-Morton. "In general, solvent-free systems are not considered suitable for the continuous processing of multilayer films, as they tend to form bubbles or warp in the laminates. Addressing the bubble problem, Toyo-Morton engineers worked to establish a new methodology for adhesive

layer rheology analysis that enabled them to identify the factors that cause tunneling in metallized laminates. These findings led to the development of adhesives with enhanced physical properties, like the high heat and chemical resistance and laminate durability needed to bring about optimal adhesion without impacting the packaging material."

Furthermore, ECOAD solvent-free systems do not need to be diluted with an organic solvent before laminating bringing significant environmental advantage to end-users. Uchiyama added, "ECOAD adhesives do not include solvent, which results in huge savings in energy use that would normally be needed to dry the solvents. Early testing indicates that ECOAD is capable of reducing CO2 emissions from the adhesive by up to 76% relative to conventional solvent-based products. Also procurement issues are fueling demand and the switch over to more sustainable, energy-efficient solutions."

The ECOAD solvent-free series are comprised of the base adhesive EA-N6008 combined with a hardener, the EA-N5618 or EA-N5633: The EA-N6008 / EA-N5618 solution offers improved heat resistance and durability for zipper bags and enhanced performance in continuous lamination exhibits. The solution imparts a smooth appearance in aluminum vapor deposited laminates such as PET/VMPET and PET/VMCPP, making it suitable for use in shampoo refill pouches and packaging for dried and boiled foods. The EA-N6008 / EA-N5633 solution demonstrates excellent resistance to high acidic content and is specially designed for exclusively aluminum packaging structures such as single-serve sachets for ketchup and chili sauces.

Source: Packaging 360

EV battery base plate lightweight material offers improved fire safety

A critical risk of EV fires is damage to the battery, either when something penetrates the cell wall or if it is exposed to extreme heat. An internal short circuit can occur, followed by 'thermal runaway' and finally a fire or an explosion. The industry aims to reduce both the probability of fire and its inherent danger in all aspects of EV construction.

The composite/aluminium hybrid base plate, subjected to independent fire tests at Horiba MIRA in line with the standard UNECE Reg100 fire testing, confirmed that thermal insulation is improved in comparison to an all-aluminium baseplate. The test showed the hybrid baseplate not only retarded the heat penetration rate into the structure but resulted in a reduction of 60° C in the internal peak temperature maintaining the integrity of the battery cell module.Contrast this to the aluminium baseplate which resulted in sufficient internal temperature to melt the cell carrier with resultant chemical leakage and a potential live path between the cell and the enclosure.

The fibre metal laminate construction of the baseplate results in a much higher puncture resistance at lower plate thickness enabling the glass fibres to spread the impact load over a wider area to reduce peak stress delivering a stronger, lighter enclosure. Stalcom's base plate material comprises aluminium and GF-PP joined by a unique bonding system 'PowderBondPP' from Powdertech Surface Science. PowderbondPP works synergistically transferring the load between the metal and composite materials to further improve puncture resistance offering greater protection to the battery cells it encloses.

Source: JEC Composites

Shiva Performance Materials acquires majority stake in INEOS Styrolution India

Shiva Performance Materials ("SPM") part of the Shiva Group, a leading specialty chemicals player based out of Vadodara, announced today that it will acquire a majority stake in INEOS Styrolution India, a publicly listed entity in India, controlled by the INEOS Group. With this transaction, the INEOS Group will completely exit as the shareholder of INEOS Styrolution India. The transaction triggers a mandatory tender offer (MTO), and the completion is subject to fulfilment of required customary conditions.

This acquisition will enable SPM, a leading manufacturer of Acrylic Resins, Resin Solutions and Emulsions for Graphic Arts Industry (Printing and Packaging applications), to expand its product portfolio and command a market leadership position in the ABS (Acrylonitrile Butadiene Styrene) and SAN (Styrene Acrylonitrile) market in India.

Rakesh Agrawal, Whole Time Director and Chairman, Shiva Group said, "We are extremely proud to acquire a majority stake in INEOS Styrolution India Limited from the INEOS Group. This transaction is highly gratifying to me personally, because I had previously led and managed its operations during 1978-2012 as a Managing Director. Its leadership position in the Indian ABS and SAN market will help us to cater to growing demand from automotive, consumer durables and other industries. Our vision is to carry forward the rich legacy that will be left behind by INEOS, and vigorously expand the capacities of ABS, SAN and Polystyrene over time to reduce India's dependence on imports of ABS and SAN"

Avendus was the Exclusive Financing and Transaction Advisor and Cyril Amarchand Mangaldas was the Exclusive Legal Advisor to Shiva Performance Materials Private Limited on this transaction.

About Shiva Performance Materials:

Shiva Performance Materials is a leading manufacturer of Acrylic Resins, Resin Solutions and Emulsions for Graphic Arts Industry (Printing and Packaging applications). It also produces Toner Resins and Styrene Maleic Anhydride Resins. It strives to create products with better technology that helps the printing and packaging industries and meet specific needs for ecologically friendly solutions without sacrificing functionality and performance.

Further, it is committed to continual improvement in quality, environment and occupational and health & safety enactment and will strive for the highest standards to fulfil our responsibility towards our customers.

Mumbai Startup Ecosys is Reducing Plastic Waste by Producing Eco-Friendly Cleaning Solutions

Established in 2018, Ecosys is a Mumbai startup that provides eco-friendly cleaning products in the form of Polyvinyl alcohol (PVA) capsules.

Entrepreneur Sumit Goyal was on a visit to Mumbai for his CA internship when he saw plastic all over the Juhu beach. He realised that plastic was not the problem, but the misuse of plastic-based products was the real problem.

"I come from a family where there is no concept of single use plastic. We never used to throw plastic bottles after use. Hence, when I visited Juhu Beach, I was shocked to see the situation. I understood that people here have the nature of use and throw," says Sumit, who comes from Shrimadhopur in Rajasthan.

To tackle the increasing plastic waste issue, Sumit joined Prachi Bansal to establish Ecosys in 2018. The startup aims to introduce smart and innovative products, which help drive the goal of an eco-friendly and sustainable ecosystem.

Ecosys has designed a soluble cleaning capsule packed into a PVA film (Polyvinyl alcohol), which is a water-soluble and biodegradable substance. These 10 ml capsules make 1 L of cleaning solution when dissolved in water.

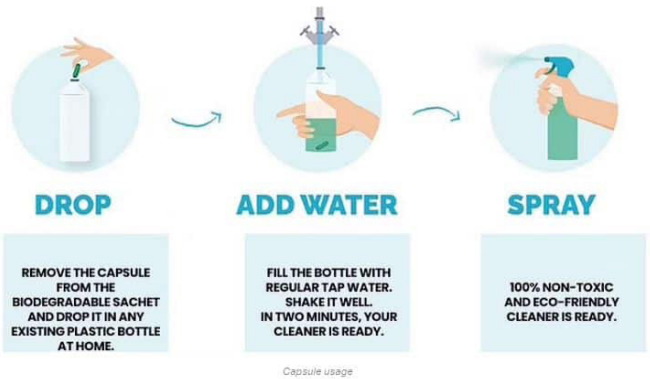
The company claims that by using this capsule, consumers will not have to purchase a new cleaning solution, packed in plastic materials. Through this, a total of 1.92 kg of plastic consumption per month in each household will be saved, leading to zero tolerance against plastic waste.

Genesis

After completing his CA internship, Sumit started a textile export company in 2013. He connected with Prachi through a friend a year later. Prachi was studying fashion management in Milan, Italy, and they both spoke about the problem of plastic pollution in India.

Sumit then learned from Prachi about the production of Polyvinyl alcohol (PVA) detergent pods for laundry washes in the West. She mentioned the businesses were only making detergent, and that they might cooperate to make surface disinfectants, cleansers, and other items instead, Sumit recalls.

Sumit and Prachi sought mentorship from professionals such as chemical sciences and engineers to understand and build cleaning products using PVA Packaging that was non-toxic and did not involve plastic.



Capsule usage

Selling the product

After starting Ecosys, the co-founders launched the products across ecommerce channels such as Amazon and Flipkart. They had six different capsules under the cleaning range, including glass cleaner, floor cleaner, kitchen, and utensil cleaner. Each product is priced differently starting from Rs 75 for glass cleaners to Rs 199 for floor cleaners.

"Initially, customers were reluctant to shift to our product. No one wanted to test or use capsules as they were already using products from established companies like Lizol, Colin, etc.," Sumit explains.

However, the team then came up with an idea where customers could return the PVA capsule if they found it ineffective. This was a hit among customers, and there has been no looking back since then.

Sumit adds that Ecosys sold about 500 bottles in the first year, but with great difficulty. Today, he claims to have saved more than 80,000 bottles from reaching the landfills. "In India, no one is selling the entire range of products like us. Customers are preferring quality and innovative products at home today, which is an advantage for us," he adds.

Competition and plans ahead

Plastic has become one of the most pressing environmental issues that we are facing today. Union environment minister Bhupender Yadav recently said that India is generating about 3.5 million tonnes of plastic waste annually and the per capita plastic waste generation has almost doubled in the last five years.

Like Ecosys, there are many startups in India that are trying to combat plastic pollution. While Beco (Be Eco) manufactures sustainable alternatives to single-use plastic products such as facial tissues, toilet rolls, and kitchen towels; ZeroPlast Labs offers tailor-made lightweight bioplastic compounds and 100% biodegradable, water-soluble plastics.

Going forward, the Ecosys team wants to launch more products, especially in the laundry and handwash segment. Furthermore, it plans to go to different households and educate them to reuse plastic bottles.

Source: Packaging 360

Eco-Friendly Food Packaging Doubles as Quality Sensor

Scientists at the Institute of Advanced Study in Science and Technology (IASST), led by Prof Devasish Chowdhury of the physical sciences division and his student Sazzadur Rahman, an INSPIRE senior research fellow, have developed a smart biodegradable biopolymer nanocomposite that can detect relative humidity — an invention that is useful in food packaging.

Two biopolymers, guar gum (a variety of beans) and alginate (obtained from brown algae), were blended with carbon dots (nanomaterial) to make a nanocomposite film that was successfully used to detect relative humidity. The smart sensor is based on the fluorescence 'on-off' mechanisms against humidity.

The food industry has an increasing need for non-toxic, biodegradable, low-cost, and environment-friendly packaging material to replace petroleum-based material like plastics. Besides, it needs smart and active packaging material to detect and report food quality in real time. Such smart and active packaging systems respond to signals while interacting with the food packaging environment. Perishable packed foods are easily damaged by changes in relative humidity.

The nanocomposite film shows a change in fluorescence in the presence of high humidity. Hence, the fabricated nanocomposite film can monitor the packed food's freshness using just a UV light source. "Smart and active packaging can help consumers select a fresh product without breaking the pack. Such innovative packaging boosts sales and reduces consumers' time in identifying fresh food products," said Chowdhury.

Polyaniline-powered supercapacitors

Supercapacitors or ultracapacitors are energy storage devices; they combine the characteristics of conventional capacitors and batteries to give a sudden kick-start to devices by providing a large amount of power and sustained energy release. A new low-cost, pristine, conducting polymer-based electrode and redox-active electrolyte combination can give enhanced electrochemical performance and cycling stability to supercapacitors, facilitating energy storage and powering in wearable integrated devices.

The electrode materials play a vital role in determining the performance and stability of supercapacitors. Conducting polymers like polyaniline and polypyrrole are excellent candidates for electrode materials due to their flexibility, stability and tunable electrical and electrochemical properties. They are also inexpensive, lightweight and can be synthesised easily. However, supercapacitors fabricated with these electrodes fail to sustain their electrochemical capacitance (ability to store electric charge) after a few cycles of continuous

operation. The poor energy density of these devices is another issue that limits their usefulness.

The Materials for Energy Storage and Optoelectronic Devices Group, headed by Dr Sreekanth J Varma of the physics department of Sanatana Dharma College, Alappuzha, has found a means to improve the performance of polyaniline-based supercapacitors and achieve high specific capacitance per unit area, or areal capacitance, and prolonged life. They found that when electrodes made from pristine, porous, conducting and high molecular-weight polyaniline, synthesised through self-stabilised polymerisation (SSDP), are used with an electrolyte powered by a redox-additive (which boosts redox reactions), the energy storage devices deliver incredible performance.

The conducting polymer-based electrode is lightweight and highly stable. The supercapacitors' enhanced performance and long life are attributed to the binder-free nature, porosity, high and homogeneous molecular weight, and appreciable conductivity of the electrode material, as also the electrode and redox-activated electrolyte combination.

Germ-killer concoction

Over time, air filters become a part of the problem they are supposed to solve, by becoming breeding grounds for microbes. Dr Suryasarthi Bose, associate professor in the department of materials engineering at Indian Institute of Science, Bengaluru, has come up with a concoction that kills the germs in filters.

The plant-based biopolymer, when coated on filters, leads to the formation of hydrogen peroxide, which ruptures the germs. The ability of the coated filters to deactivate germs has been successfully validated at government labs like NABL and they are in use at several hospitals and other organisations in India.

AiRTH, a start-up that was involved in the development of the product, has taken up the manufacture of this biopolymer. "The germ-destroying filters will decrease the burden on the healthcare system, and (help) reopen commercial spaces like offices with confidence and have a safe working environment," says Ravi Kaushik, CEO, AiRTH.

Therapeutic protein and milk

Therapeutic proteins (TP) have a great role in counteracting diseases like diabetes, arthritis, blood clotting, and several others. However, the exorbitant cost of producing TPs has placed them beyond the reach of the common masses. Insulin, alpha and gamma interferons, blood coagulation factors, and so on, are some of the most important marketable products. Milk-based expression of these therapeutics in livestock animals has the potential to make them affordable.

The National Institute of Animal Biotechnology, Hyderabad, has used mice and rabbits to develop a technology for generating these costly therapeutic proteins in milk. This would reduce the need to import such therapeutics, according to NIAB.

Anti-corrosion coating

Scientists at the International Advanced Research Centre for Powder Metallurgy & New Materials (ARCI), Hyderabad, have developed low-cost iron-based intermetallic powders that can be used as a corrosion-resistant coating for materials exposed to harsher environments like high temperature in thermal power plants, where oxidation, corrosion, and wear-and-tear take place simultaneously.

There is a need to protect the component surface from wear-and-tear using a suitable material for enhanced economic viability.

Such surface coating on a turbine blade can enhance the service life and hence increase the operation hours of the turbine. ARCI scientists have addressed wear-and-tear by synthesising iron-based intermetallic powders and depositing them on the surface using the detonation spray coating (DSC) technique.

Additionally, ARCI has developed gas-atomised iron aluminide powder and used DSC to deposit it on mild steel substrates without any cracks or spalling. The coatings have demonstrated four times increased corrosion resistance in aqueous corrosive media than mild steel.

Source: Packaging 360

Patents For Plastic Recycling Hit Record High

A record 2,149 patents for plastic recycling were filed last year (2021), up 7% from 2021 and an eightfold increase since 2016, says Mathys & Squire, the intellectual property firm.

Mathys & Squire says the plastic recycling industry is competing to develop technology that will produce clear recycled plastic. Current recycled plastic has a yellow or grey tinge, unlike the clear colour that consumers expect of a premium product.

A vast range of methods for separating and sorting clear recycled PET are being tested, including the use of fans, centrifuges, lasers and optical lenses. The main priority is to achieve a higher quality 'feed' of recycled plastic that will provide the desired lack of colour.

Global brands are searching for a source of clear recycled plastic due to consumer and regulatory pressure to reduce or even eliminate virgin plastic from their supply chains. Coca-Cola and Pepsi have each pledged to use at least 50% recycled PET by 2030.

85m tonnes of PET plastic is produced globally per year. Mathys & Squire says that given the pressures on corporates to use more recycled PET, the company that perfects clear recycled plastic stands to generate very large revenues from licensing its technology.The race is on to develop the holy grail of cost-effective, clear recycled PET. That is the key driver behind the surge in innovation we have seen in this area.

Chris Hamer, Partner at Mathys & Squire said: "The race is on to develop the holy grail of cost-effective, clear recycled PET. That is the key driver behind the surge in innovation we have seen in this area."

"Stakeholders are increasingly demanding low-carbon products, which in turn is creating a huge market for recycled plastics."

"Whoever can develop a cost-effective method of producing clear recycled plastic will be able to tap into what some major players estimate to be a potential £100 billion market."

Last year Chinese companies filed 1,970 patents relating to plastic recycling, 1,937 more than second place India. China is leading the way in patent filings as the country is in the middle of a single-use plastic crackdown.

In July of last year, China's National Development and Reform Commission which oversees economic planning of mainland China published a "five-year plan" to boost plastic recycling and incineration capabilities. The five-year plan also commits to greatly reducing the use of single-use plastics.

Source: Packaging 360

India aims to achieve 2 trillion dollar exports by 2030 : Commerce Minister

India aspires to achieve 2 trillion dollars worth of exports by 2030, says Piyush Goyal, Union Minister of Commerce and Industry, Consumer Affairs, Food and Public Distribution and Textiles while releasing the 'Department of Commerce Restructuring Dossier' at Vanijya Bhawan, New Delhi.

This will make us among the top nations in world trade and change the way the world sees us, commented Goyal.

Goyal said, "Prime Minister Narendra Modi has led from the front and energised the entire export ecosystem. It is due to the constant guidance and mentoring by the Prime Minister that we not only met but also beat export targets."

The PM has urged all the missions across the world to focus on 3 Ts - Trade, Technology, and Tourism. These are now an integral part of the duties of all the Missions, added Goyal.

He noted some of the ideas that have emerged out of restructuring exercise include a dedicated 'Trade Promotion Body' to drive formulation & execution of promotion strategy, digitization of trade facilitation processes, rehauling of the data & analytics ecosystem, and capacity building of Indian Trade Service to drive specialization & institutional memory.

Releasing the report, Goyal said restructuring of the entire department of commerce aims at preparing India to become a key global player in world trade.

Goyal said, "The restructuring rests on five major pillars: Increasing India's share in global trade; assuming leadership role in multilateral organisations; democratisation of trade; creating 100 Indian brands as global champions; and setting up economic zones in India to strengthen the manufacturing base and attract greater investments to India."

The Minister mentioned that Prime Minister Narendra Modi had launched Mission Karmayogi with the objective of skill development and upgradation of employees in government departments and ministries.

He said, "Restructuring of departments of commerce has been undertaken to meet the needs of the future. This will enable us to adopt international best practices and prepare ourselves for greater multilateral and bilateral engagement with other countries."

Source: Indian Chemical News

Collaborate to make Chabahar port an instrument for regional growth: Sonowal

Underscoring the importance for both sides to collaborate on further steps to be taken to make Chabahar port an instrument for regional growth in trade shipment, says Sarbananda Sonowal, Union Minister of Ports, Shipping & Waterways and Ayush, when he called on Vice President of Islamic Republic of Iran, Mohammad Mokhber at Tehran.

The two leaders discussed further bolstering the Indo Iranian bilateral relations. The Vice President, who is Iran's Special Envoy for relations with India, appreciated the visit of India's Shipping Minister as it provides impetus to further the bilateral cooperation between the two countries.

The development of Chabahar port would lead to an increase in trade and shipment volume, added Mohammad Mokhber, Vice President of Islamic Republic of Iran. Speaking after his visit to the Vice President of Iran, Sarbananda Sonowal said, "Extremely pleased to meet the Vice President of Iran, Mohammad Mokhber where we discussed ways and means to further strengthen and consolidate the vibrant Indo Iranian bilateral relations. We continue to strengthen our dynamic relationship with Iran. India's Prime Minister, Narendra Modi, has asked me to communicate about the highest level commitment to further deepen and expand our relationship for a mutually beneficial one."

Earlier, Sonowal attended a bilateral meeting with Minister of Roads & Urban Development, Islamic Republic of Iran, Rostam Ghasemi. On this occasion, both the countries signed a Memorandum of Understanding (MoU) on recognition of Certificates of Competency in Unlimited Voyages to help seafarers from both the countries as per the provisions of International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (1978).

Sarbananda Sonowal and Rostam Ghasemi had a fruitful bilateral meeting on deepening the Indo Iranian relations. The signing of the MoU is aimed at smoothening the movement of seafarers from both the countries. The Union Minister reiterated the importance of the bilateral relationship between the two countries.

The role of Chabahar as a trade multiplier for the region was highlighted by the Union Minister at the meeting as the potential of the port to act as a swift, economical trade conduit between Central Asia and South Asia, even South East Asia, remains to be tapped fully.

Since India Ports Global Private Limited (IPGPL) assumed operations of Shahid Beheshti Port, it has handled over 4.8 million tons of bulk cargo. With close cooperation between India's IGPL and Iranian stakeholders including Iran's Port and Maritime Organisation, Iranian Customs Administration and the Chabahar Free Zone Authority, Shahid Beheshti Port Authority and other stakeholders, the port is likely to act as a catalyst to unlock the huge trade potential in the region.

Sarbananda Sonowal is on a three days official tour to Iran. Following his Iran visit, the Minister will be on a day-long official visit to UAE where he will pay a visit to Jebel Ali port and participate in bilateral meetings as well as an investors meet.

Source: Indian Chemical News

India's ONGC and IOCL consortium may bid to acquire bankrupt JBF Petrochemicals

Three months after approval from the board, Indian government-owned Oil and Natural Gas Corporation (ONGC) has decided to participate in a bid to acquire Mangalore-based chemicals company JBF Petrochemicals which is bankrupt. ONGC is working on strategies to submit a joint bid in association with another government-owned company Indian Oil Corporation Ltd (IOCL) for which a consortium is proposed to be set up.

A media report said that ONGC has already entered into a consortium with Indian Oil Corporation for the purpose of acquiring JBF Petrochemicals. The consortium is likely to submit a financial bid shortly, the report said. An

email sent to ONGC and IOCL separately did not elicit any response.

The ONGC board, in its meeting held on May 30, 2022, approved the participation by the company in the corporate insolvency resolution process of JBF Petrochemicals as a consortium of the company and IOCL. Earlier, Reliance Industries Ltd (RIL) was understood to be the lone bidder for JBF Petrochemicals which is up for sale after defaulting bank loan to the tune of Rs 5,000 crore. The lenders extended the deadline for submission of bids till August-end following interest from several companies including ONGC and IOCL.

A consortium of banks led by IDBI Bank had lent US$ 464 million to JBF Petrochemicals for the Mangaluru project. Other banks incorporated into the lenders' consortium include Indian Overseas Bank, Bank of Baroda, and Union Bank of India. The project involved the construction, development, and setting up of a plant for manufacturing 1.25 million tonnes per annum of purified terephthalic acid (PTA), the raw material for polyester fibre and polyethylene terephthalate (PET) resin, which makes jars and bottles for mineral water and carbonated soft drinks. This plant was considered to be among the largest of its kind in India.

Earlier in 2018, RIL had made an offer to the lenders to take over the unit following a detailed presentation on its turnaround plan. Reports said that KKR Jupiter Investors Pte. Ltd (KKR) had also expressed its interest in resolving the stressed firm, with a proposal for setting up 100 percent of the principal outstanding of the banks.

Another report said that JBF lenders had agreed in principle to implement KKR's resolution plan and incorporate changes in the management with a one-time settlement offer of a minimum 100 percent principle, provided the same was paid by March 2018. The financial creditors, however, recalled its entire debt to the tune of US$ 260 million on the day of the final decision on KKR's resolution attempt.

Spread across 114 acres of land allotted in Mangalore Special Economic Zone (SEZ) for this project, the PTA plant was proposed to be set up at a cost of US$750 million and scheduled to commence commercial production in the third quarter of the financial year 2018. The project was proposed to be funded through a debt of US$ 464 million and an external commercial borrowing (ECB) underwritten by IDBI Bank. KKR has invested to the tune of US$ 150 million in this project.

British Petroleum was proposed to provide technology support to this project and engineering, procurement, and construction (EPR) management of the project was awarded to Technip, India, and Italy. The company had tied up for raw material procurement with OMPL, a subsidiary of MRPL.

JBF had made a big ambition about this plant. After commencement, JBF was supposed to become the only PTA-integrated polyester company in India other than Reliance Industries Ltd. At the time of the proposal of this plant, JBF's total PTA requirement stood at 800,000 tonnes per annum. Hence, JBF's Mangalore PTA plant was aimed to meet all of JBF's internal PTA requirements, with excess capacity proposed to be sold in the open market.

Through this plant, JBF targeted to save around $10-15 a tonne in the freight for its RAK facility, due to a reduction in logistical costs that it incurred for procuring PTA from South East Asia.

Source: Polymer Update

Established since 1955, the Plastics Export Promotion Council, PLEXCONCIL, is sponsored by the Ministry of Commerce and Industry, Department of Commerce, Government of India. PLEXCONCIL is a non-profit organization representing exporters from the Indian plastics industry and is engaged in promoting the industry exports.

The Council is focused on achieving excellence in exports by undertaking various activities and initiatives to promote the industry. The Council undertakes activities such as participation at international trade fairs, sponsoring delegations to target markets, inviting foreign business delegations to India, organising buyer-seller meets both in India and the overseas etc.,

The Council also routinely undertakes research and surveys, organizes the Annual Awards to recognize top performing exporters, monitors the development of new technology and shares the same with members, facilitates joint ventures and collaboration with foreign companies and trade associations as well as represents the issues and concerns to the relevant Government bodies.

The Council represents a wide variety of plastics products including – Plastics Raw Materials, Packaging Materials, Films, Consumer Goods, Writing Instruments, Travel ware, Plastic Sheets, Leather Cloth, Vinyl Floor Coverings, Pipes and Fittings, Water Storage Tanks, Custom made plastic Items from a range of plastic materials including Engineered Plastics, Electrical Accessories, FRP/GRP Products, Sanitary Fittings, Tarpaulins, Laminates, Fishing Lines/Fishnets, Cordage/ Ropes/Twines, Laboratory Ware; Eye Ware, Surgical/ Medical Disposables.

Membership Benefits

- Discounted fees at International Trade Fairs and Exhibitions
- Financial benefits to exporters, as available through Government of India
- Disseminating trade enquiries/trade leads
- Instituting Export Awards in recognition of outstanding export performance
- Assistance on export financing with various institutions and banks
- Networking opportunities within the plastics industry
- Listing in PLEXCONCIL member's directory
- Special price for Dun & Bradstreet's D-U-N-S® REGISTERED™ SOLUTION (Plus Variant)
- Basic Website Development Assistance *

*Nominal Charges Applicable

The Plastics Export Promotion Council added the following companies/firms as new members during July 2022. We would like to welcome them aboard!

Sr. No	Name of the Company	Address	City	Pin	State	Director Name	Email
1	A B Plastics	Shed No 22 A Road No 6 New Estate Udhna Udyog Nagar	Surat	394210	Gujarat	Gayatri Panigrahi	abplastics22a@gmail.com
2	Aacculab Health-Care	10b Umesh Mukherjee Road 24 Parpganas (North)	Kolkata	700056	West Bengal	Chinmay De	aacculabhealthcare@gmail.com
3	Aaryan Mirai Private Limited	J-1033, Jakhoda, Bhadurgarh,	Jhajjar	124505	Haryana	Sangeeta Chawla	impexdocs@marvel-vinyls.com
4	Accurate Engineers	M 21, Midc Addl Industrial Area, Kudavli, Murbad	Thane	421401	Maharashtra	Satish Badgujar	badgujarin@gmail.com
5	Amicis Pharmacon Llp	Gujarat Pharma Techno Park,19, Bavla Sarkhej Road,Sari Sanand,	Ahmedabad	382220	Gujarat	Prashant Patel	prashant@amicispharmacon.com
6	Aquatek Sanitary Fittings Private Limited	Sf.No.718/2b 1, Amman Kovil Street , Pappampatti, Moripalayam Village,	Coimbatore	641659	Tamil Nadu	Deepak	ashok@aquatekindia.in
7	Bulkpack	Sf-08, A Block Ajantha Vihar Apartments, Near Dairy Cross , Yelahanka New Town, Bangalore , Bangalore Karnataka, 560064	Bangalore	560064	Karnataka	Palanivel S	palani1411@gmail.com
8	Ctm Technical Textiles Limited	205, New Cloth Market,O/S Raipur Gate,	Ahmedabad	380002	Gujarat	Amitkumar Agarwal	amit@ctmtechtextile.com
9	Fibre In Poly Products	Shop No 5 & 6 Pratap House, Vakola Bridge Santacruz East	Mumbai	400055	Maharashtra	Shailendra Sajjankumar Murarka	shailendra.murarka@gmail.com
10	Gorecycle Private Limited	Kh-80, Ground Floor, Street No. 4,Samaipur	Delhi North West	110042	Delhi	Hitesh Yadav	mohittakkar.ca@gmail.com
11	Kelwa Polymers	Survey Number/Plot Number 18/1, 19/1, 39/1, Village Jamli, Tahsil-Doctor Ambedkar,	Indore	453441	Madhya Pradesh	Krishna Pal Singh Kelwa	arungangwal06@gmail.com
12	Limbada Trading And Consultancy	Nani Naroli, Patel Faliyu, Nani Naroli	Surat	394110	Gujarat	Imran Limbada	imranlimbada437@gmail.com
13	Macro Sheet India Limited	2/54 Vidhyadhar Nagar,	Jaipur	302039	Rajasthan		msiljpr21@gmail.com
14	Mahalaxmi Poly Fab	Survey No-467/468, Nandasan, Dangarva Road, Nandasan, Ta-Kadi,	Mehsana	382715	Gujarat	Pradip Rameshchandra Patel	pradip2165@gmail.com
15	Marvel Industries & Services Private Limited	A-40, Rajouri Garden, West	Delhi	110027	New Delhi		impex@marvel-industries.com
16	Mawra Exim	Siti Sarve Number 5678 , Ground Floor Bharvad Sheri, Near Old Bus Station Savarkundla; Savarkundla	Savarkundla	364515	Gujarat	Savat Nisar Yunusbhai	nisar.savat@gmail.com
17	Modi Propac Private Limited	278, New Cloth Market O/S Raipur Gate, Sarangpur,	Ahmedabad	380002	Gujarat	Anuj	anuj@modipropac.com
18	Narmada Extrusions Limited	403, Rajani Bhawan, 569/2, M.G.Road,	Indore	452001	Madhya Pradesh	Neha Sharma	commercial@nelbags.com

19	Navin Plastic Tech	21a,Bridgeway Colony, 5th Street	Tiruppur	641607	Tamil Nadu	A.Senthilkumar	info@navinplastic.com
20	Ocean Polyfab Industries Llp	Survey No. 915 & 918, Plot No. 129 & 130 Situated At Radhamadhav Eco Industrial Park, Village-Degam	Vapi	396191	Gujarat	Pradip Parsottambhai Kaneriya	oceanpolyfab@gmail.com
21	Om Printing And Flexible Packaging Private Limited	Gat No . 34, Nampur Roa Nilgavan Phata, Tal. Malegaon	Nashik	423203	Maharashtra	Shripal Raj Lodha	khalidhussain@uma-polymers.com
22	Paras Technopack	101/A/1, G.I.D.C.,Ranoli,	Vadodara	391350	Gujarat	Vishal Shah	vishal@parastechnopack.com
23	Rahil Airbubbles Private Limited	Nh 8b, Survey No 34,Plot No 5/6, Shapar Veraval,-Kotdasangani,Rajkot	Rajkot	36002	Gujarat	Bharatbhai Devkaranbhai Baraiya	pphollowsheet@rhynofoam.com
24	Saran Exports	Plot No.195,Phase-4,Udyog Vihar,	Gurugram	122015	Haryana		saranexports8732569@gmail.com
25	Shish Polylam Private Limited	Plot No. 18 To 23, Block No. 290, R.S No.265-266,Vill.Pipodara, Ta. Mangrol,	Surat	394110	Gujarat	Kakadiya Ramesh Virjibhai	cfo.shish@gmail.com
26	Shri Balaji Industries	218/1 Sain Vihar Near Neelam Dharam Kanta,	Ghaziabad	201001	Uttar Pradesh		sbalajiindustries21@gmail.com
27	SHRI KHEMISATI POLYSACKS PRIVATE LIMITED	Gala No-18 Bldg No.16 A Samhita Ware Hsgcom Sakinaka, Near Sakinaka Telephone Exc	Mumbai	400072	Maharashtra	Rajesh Tibrewal	khemisati@khemisati.co.in
28	VIKAS ECORAIN SOLUTION INDIA PRIVATE LIMITED	B-1, Girikunj Industrial Estate, Mahakali Caves Road,Opp Nand Kishore Industrial Estate	Mumbai	400093	Maharashtra	Anushka Vikas Rane	verma@vikasindus.com

Source: Plexconcil