iPf
Since 1958

PLASTICS INDIA

AN OFFICIAL ORGAN OF INDIAN PLASTICS FEDERATION

VOLUME - 4 ISSUE - 8 www.ipfindia.org 20th November 2014 Rs. 5/-

INDIA'S MOST INVITING MOULDED FURNITURE

SWAGATH®

MOULDED FURNITURE

Exclusive range of moulded furniture made from virgin polymers by Uma Plastics Ltd

For Trade Enquiries, Please Contact : 1800 123 0080
Website : www.swagath.co

IndianOil PROPEL®

100% TRUST. 100% VALUE.

A range of world-class petrochemicals

For Polymer Products :
PP, HDPE, LLDPE manufactured by
Indian Oil Corporation Limited

Please Contact: Del Credere Associate cum Consignment Stockist

Uma Plastics Limited
An ISO 9001:2008 & ISO 14001:2004 Certified Company

Regd. Office: 14 B, Camac Street. Kol - 700 017, India
Ph: +91-33-22810775 / 6967 F: +91-33-22813961
M: +91-9830142233 E: polymers@umagroup.in

Servo plast Master Batches

Servo group is one of India's leading manufacturer of plastic master batches. Servo group is dedicated in field of plastics & flexible packaging since last 25 years. Servo Group recent leap in plastic compound bring you latest innovations in field of polymer compounds with unmatched quality & consistency, leaving other orthodox technologies far behind. With State of art production facilities and fully fledged laboratory our products adhere to the requirement of highest standards. We are engaged in continuous R&D and our products are tested in our own extruder tape line & blown film plant before commercial production.

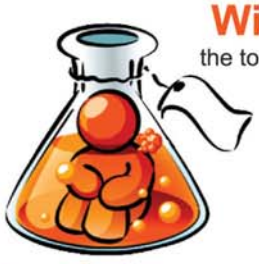
The combination of having a good infrastructure, world class machinery, excellent laboratory, best raw materials, dedicated work force has made our produce master batches you will always trust.

The Masterbatches You Can Trust

Product List

- Premium AFMB for PP Woven Sacks
- Premium AFMB for HDPE Woven Sacks
- FILLER for PE & PP Lamination
- TPT FILLER for Clear / Transparent Films
- PLASTFILL FILLER for Blown films
- WHITE TiO_2 Masterbatches
- COLOUR Masterbatches
- ADDITIVE Masterbatches
- **SERVOMEGA Performance Enhancers**

Servo plast
Hi-performance Masterbatches



Withstands
the toughest conditions.

The key to
your success
is here....

Servo Plast Additives like UV Masterbatches Optical Brightners, etc. are specially engineered to meet the toughest quality standard

Servo plast
Hi-performance Masterbatches

Servo-Mega performance enhancers & Plastic modifiers reduces wastage & improves productivity

Servo mega
Performance Enhancers

Manufactured by
Servo Packaging Limited.
Servo Plastics Pvt. Limited.
704 & 707, Todi Corner, 32, Ezra Street, Kolkata-700 001
Tel : 2235 1309/1315/6439, Fax +91-33-2221 5631
Email: sales@servoplast.in, kolkata@servoplast.in
www.servoplast.in

EDITORIAL

PLASTICS INDIA

A journal for the growth and development of plastics trade & industry

President
Pradip Nayyar
Vice President
Ramesh Kr. Rateria
Hony. Secretary
Ashok Jajodia
Hony. Joint Secretary
Sisir Jalan
Hony. Treasurer
Banwari Lal Tak

EDITORIAL BOARD

Manish Kr. Bhaia – *Editor*
Ashok Jajodia – *Co-Editor*
Ashish Agarwal – *Member*
P. K. Ghosh – *Member*
Raj Somani – *Member*
Vineet Nemani – *Member*

Owner Indian Plastics Federation, Printer and Publisher Sri Ashok Jajodia, Published from 8B, Royd Street, 1st Floor, Kolkata 700 016 and Printed from **CDC Printers (P) Ltd.**, Plot No. 5,6,16 & 17, Tangra Industrial Estate - II, 45, Radha Nath Chowdhury Road, Kolkata - 700 015.

Phone : 2329 8856-57, Fax : 2329 8858

E-mail : cdc@cdcprinters.com

Editor : Manish Kr Bhaia

Published by :

INDIAN PLASTICS FEDERATION

8B, Royd Street, 1st Floor
Kolkata - 700 016 (INDIA),
Phone: 2217 5699 / 5700 / 6004
Telefax : 91-33-2217 6005
Email : office@ipfindia.org

- The opinions expressed by the authors do not necessarily reflect or are in agreement with the views of the Federation.
- The Federation does not accept responsibility for the correctness of news, commercial intelligence and statistics given, although every care has been taken to verify them from authentic sources. Users of same should, in their own interest, consult legal authorities and financial channels before dealing any transaction.
- All rights reserved. Reproduction without the permission of the Editor is prohibited.

Dear Friends,

Diwali and Durga Puja makes the month of October so very special and long awaited. With the festivities, comes a long stretch of holidays which are essentially dedicated to celebrating and upholding the rich and diverse culture of Indian traditions, values and beliefs. If we are alert in paying careful attention to the rich customs, we are left overwhelmed by the depth and clandestine learning of knowledge rich stories and incidences. These stories and happenings are not alien in concept. They are very much relevant and appropriate and can be aptly correlated to the modern personal and professional lives we are leading.

Having read the book 'Jaya' by Devdutt Patnayak and for my own interest in the subject, my introspection on this subject left me pregnant with inspirational thoughts rooted in the depths of India's rich mythological history and epics and how we can incorporate the same in our business.

The book along with my observation helped me redefine the concept of FAMILY OWNED BUSINESS. Families in Ramayana and Mahabharata, significantly, are not defined by blood. Ram and Laxman are half-brothers. Of the five Pandavabrothers, none have a common father. Also, Krishna is raised by foster parents. What can define a family owned business then is not blood or law or custom alone, but the single most important element in a family owned business is trust. There are minimum rules; only trust defines all actions.

What about the relationship between our personal and professional lives? Are they interwined? Of course! In the Ramayana, the kingdom of Ayodhya is more important than Raghu-kula. In the Mahabharata, the Kuru-kula family is more important than the kingdom of Hastinapur. In the Ramayana, Ram, son of King Dashrath, upholds the tradition of the Raghu-kula, goes into exile so that the integrity of the royal family is never questioned and Ayodhya feels secure under its leadership. Similarily, the organization has to be bigger than any individual-whether employer or employee.

What I am sharing is just to tickle your brain cell to march your organization towards an industry giant. We don't have to solely depend upon IIM and Harvard case studies to get answers to vanilla-basic and fundamental questions. We need to open our minds and realize that the answers are right there, waiting to succumb before a genuinely intrigued seeker!

With these thoughts, I welcome you to the November issue of the monthly magazine of the Indian Plastic Federation.

Happy reading!

Manish Kr. Bhaia
Editor

INDEX

PRESIDENTIAL ADDRESS

Dear Members,

Five months have passed since the new Modi government has come to power. In these five months the economic outlook for the country has been very optimistic which is clearly indicated by the increase in the share prices. Bold reforms that were held up due to difference of opinion seem to be moving forward. Many announcements have been made for increasing FDI participation in different sectors e.g. defense, rail etc. Our Hon'ble PM has recently increased the size of his ministry that well help the government to perform better.

This month the undersigned and Shri Ajay Shroff, a committee members, visited Ho-Chi-Minh City, Vietnam where the 14th Vietnam International Plastics & Rubber Industry exhibition was held from November 5 – 8, 2014. IPF was offered a stall on barter basis and we took this opportunity to promote Indplas. Brochures, Leaflets were distributed in every booth in the exhibition.

The problem of plastic waste and its segregation for ultimate disposal has been bothering the scientific community for many years. A technology has been developed that will help solve the waste problem by chemical means, thereby making a significant contribution to environmental protection, since it makes automatic sorting feasible. The methodology of this techniques is briefly given below.

Plastics emit fluorescent light when exposed to a brief flash of light, and the emission decays with time in a distinctive pattern. Thus, their fluorescence lifetimes are highly characteristic for the different types of polymers, and can serve as an identifying fingerprint. The new technique involves exposing particles of plastic to a brief flash of light which causes the material to fluoresce. Photoelectric sensors then measure the intensity of the light emitted in response to the inducing photo-excitation to determine the dynamics of its decay. Because the different polymer materials used in the manufacture of plastics display specific fluorescence lifetimes, the form of the decay curve can be used to identify their chemical nature. With this process, errors in measurement are practically ruled out; for any given material, one will always obtain the same value for the fluorescence half-life, just as in the case of radioactive decay. Therefore, recycled plastics can be processed quite efficiently.

Polymers represent an interesting basis for the sustainable cycling of technological materials. The crucial requirement is that the recycled material should be chemically pure. In that case, bottles made of PET, for example, can be relatively easily turned into synthetic fibre for use in waterproof windcheaters.

Members by this time may be aware that PI-2015 exhibition will be held at Gandhinagar, Gujarat. The venue is one of the best exhibition ground with all modern facilities. Gujarat – situated on the west coast of India - has many sea ports that facilitate international trade, unlike other states that are either landlocked for have limited access to the sea. International exhibitors will certainly be able to prosper and do good business in India if they participate in this exhibition.

With best wishes,

Pradip Nayyar
President

From the Desk of Hony. Secretary

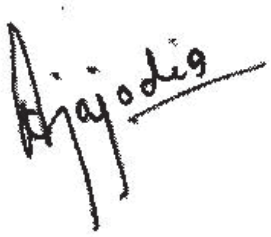
Dear Members,

The work on Indplas'15 is going on smoothly. We are putting our efforts on foreign participants to make a true International exhibition in India. Our agents in Taiwan and China are doing their part to bring exhibitors from these countires. We are participating in International Exhibitions on barter booths to propogate Indplas'15 and to target foreign exhibitors and to support our Overseas agents. We participated in Vietnamplas exhibition held at Ho-Chi-Minh City, Vietnam from November 5 – 8, 2014 where Shri Pradip Nayyar & Shri Ajay Shroff represented and marketed our Indplas'15. They had very good response from the exhibitors. We also had a barter booth at first Nepalplast exhibition held at Kathmandu from 14-16th November, where Mr Manish Singhania, who was on his personal work, handled the Indplas booth. People were anxious to know about Indplas and were interested to visit. The on line booking of Indplas'15 has started. We have started approaching various companies including past Sponsors to sponsor Indplas'15 as Diamond/Platinum/Gold/Silver sponsors. We are expecting a favorable response from all of them.

Construction work of IPF KC is progressing on time. IPF KC team is regularly visiting construction site at regular intervals to see the progress. As reported earlier construction of the foundation of IPF KC is complete. We have started working on the types of courses that will be conducted at the centre. A visit of our members to the centre is also being planned so that members can visually see the construction work completed at our centre. Latest photographs of site are published in this issue for your reference and to give a view of construction in progress.

On the 1st of November Office Bearers along with other members of Team IPF organised a Deepawali get-together at The Sapphire Banquet, Kolkata. A fun filled Shaam-e-Ghazal was conducted by Sri Raju Das & Party that was followed by dinner. This programme was organised to provide opportunity to our members to meet and increase closeness amongst us and strengthen our bonding. Our President Shri Pradip Nayyar, felicitated several members with a memento for the distinguished performance in the term 2013-14. We hope that the momentum built up over the year will continue during this term also and we will see new faces in IPF come forward and take lead in development of Plastics and IPF.

With Best Wishes,



Ashok Jajodia
Hony. Secretary

GLOBAL FLEXIBLE PACKAGING MARKET PROJECTED TO GROW AT A CAGR OF 5.1% FROM 2013-18

The global flexible packaging market is projected to grow at a CAGR of 5.1% from 2013-18. As per rnrmarketresearch.com, polyethylene dominated this global market by material accounting nearly 32% of the total market share and is projected to grow at a CAGR of 5.1% during the forecast period. Polypropylene accounted for the second largest share in the segment growing at a CAGR of 4.9% during the period under review. Polypropylene comprises of Biaxially oriented polypropylene (BOPP) and Cast polypropylene (CPP). Of these two, the Biaxially oriented polypropylene segment holds a significant share of around 80%, growing at a CAGR of 5.2% from 2013 to 2018. Paper and Aluminium are growing at a CAGR of 5.5% and 5.4% respectively. Cellulosic is one of the materials which show potential growth in the future. It is projected to grow at a CAGR of 8.2% through to 2018.

The North American market is expected to show a modest growth trend, owing mainly to the saturated end-use market in the region. The European market, which has also witnessed signs of maturity, is given a small boost by the East European nations. Environmental awareness among consumers has meant that there is a swing in market shares among the packaging materials. Changing consumer preferences and high disposable incomes in APAC economies drives the end-use market. The APAC region is leading in the flexible packaging market shares. The developing economies such as China and India are driving the growth in this region. Consumer preferences in convenience foods, westernized eating habits in terms of packaged food demands and rising disposable incomes are some of the important factors influencing the trend. In the same way, the growing food and beverage processing industry in Brazil and other Latin American countries drives the growth in ROW. The Olympic Games scheduled in Brazil will also act as a significant boost to the tourism industry, and in turn the consumption of packaged food in the region.

Most of the countries in the Asia-Pacific are emerging economies that exhibit a strong economic growth in the future. With the growth in per capita income, consumers have adopted trends and preferences from the developed western markets. The growing population and the consequential demand for packaged food, beverage, personal carte products and pharmaceuticals are driving the markets in these developing regions. China and India are heading these growth trends. The thriving food and beverage, personal care products and pharmaceutical processing industries and the increasing consumer awareness regarding benefits of these products and their packaging types are the key fundamentals driving the markets in these regions. The flexible packaging market is considered to be one of the most dynamic packaging markets exhibiting diversified types of packaging and materials used across the regions. This report estimates the market size of this global market in terms of revenue and volume. Food, beverage, personal care products and pharmaceutical industries are the most important constituents of consumer packaged goods. Food packaging dominates the market share in terms of value as well as volume. In terms of geography, the report is segmented into Asia-Pacific, Europe, North America and Rest of the world (ROW). This global packaging market is broadly divided on the basis of raw materials used such as polypropylene, polyethylene, EVOH, PA, BOPET, PVC, Cellulosic, Alluminium and Paper. With a huge market potential and growing consumer preference, the market is likely to witness substantial growth in the coming years, In the current packaging environment, flexible packaging is an important packaging solution for a saturated industry. It pays a vital role in protecting and extending the shelf life of end-products. A variety of resins may be used for

conversion and developing the required packaging solutions.

Depending on the characteristics of the end-product and value to be offered by packaging, the selection of resins and packaging type is decided. The right packaging type is essential to preserve the end-products such as food, beverage, personal care products, pharmaceuticals and prevent untoward chemical reactions endangering the consumer's health. Hence, an efficient and suitable packaging solution is imperative for every product. The flexible packaging market consists of various stake holders such as, packaging manufacturers, traders, distributors and raw material suppliers of food, beverage, personal care products, pharmaceuticals and end-users. The companies enjoying substantial market share are Amcor Ltd. (Australia), Sealed Air Corporation (U.S.), Bemis Company Inc. (U.S.), Mondi (South Africa), Huhtamaki Oyj (Finland) and Sonoco Products (U.S.). Key industry players are increasing their business and consolidating their presence by pursuing mergers and acquisitions in potential markets. Top six players in this global packaging industry held a market share of around 58.0% indicating participation of a large number of players in this market. This fragmented industry structure is primarily due to the availability of number of pack types and raw materials used for flexible packaging.

Source : Popular Plastics & Packaging

JBF INDUSTRIES LTD. HAS STARTED COMMERCIAL PRODUCTION AT ITS POLYETHYLENE TEREPHTHALATE

The 3,90,000 tonnes per annum (tpa) project, which is co-located on the BP Aromatics site, was executed through JBF Global Europe BVBA, wholly owned step subsidiary of JBF Industries Limited. PET is one of the most commonly used food grade packaging polymer due to its chemical inertness and appealing physical properties.

Film project set up through JBF Bahrain SPC is already running satisfactorily. With this, two out of three projects which JBF Industries was implementing, have started commercial production.

The third project to manufacture purified terephthalic acid(PTA) at SEZ Mangalore is progressing as per plan and production is expected by last quarter of 2015. The PTAplant will have 1.25 million metric tonnes per annum capacity, which JBF Industries claims to be among the largest in India.

Source : Popular Plastics & Packaging

UNION BUDGET 2014-15 PROPOSALS PERTAINING TO PETROCHEMICALS / PLASTICS

Reduction of the basic Customs Duty on ethane, propane, ethylene, propylene, butadiene and ortho-xylene from 5% to 2.5%.

Exempt 4% SAD on PVC sheet and ribbon used for the manufacture of smartcards.

Exemption from basic customs duty on specified inputs for use in the manufacture of EVA sheets and back sheets.

Exemption from Excise duty for EVA sheets and solar back sheets and specified inputs used in their manufacture.

Exemption of Polyester stretch fiber and Polyester filament yarn manufactured from Plastic Waste and scrap including PET bottles from Excise duty w.e.f. from 29th June 2010 to 7th May 2012. Levy prospectively a nominal duty of 2% without Cenvat benefit and 6% with Cenvat benefit on such PSF and PFY.

Source : Popular Plastics & Packaging

EMERGING MARKETS AID RECOVERY OF KEY PLASTICS MACHINERY MAKERS

By Andy Lau

Europe has always been a place to offer breakthrough in plastics technology. Despite a near static European economy this year, the plastics machinery sector in the continent, led by top-notch countries like Germany, Austria and Italy, has found favorable markets as it continues to recover from the bumpy ride in 2013.

Germany: VDMA predicts 3% sales growth

Germany's plastics and rubber machinery manufacturers saw a 1% drop in sales last year. Turnover in core machinery manufacturing fell slightly short of the most recent record of 6.5 billion.

"For the year (2013) as a whole, incoming orders exactly matched the previous year's total, albeit with a rising trend," commented Thorsten Kuhmann, Managing Director of the VDMA Plastics and Rubber Machinery Association.

"Demand from abroad stabilized, especially in the second half of the year. It is pleasing to note in this context that the rate of growth in orders from euro area countries accelerated sharply."

Exports of Germany's plastics machinery rose again in 2013. During the period from January to November, an increase of 4.1% compared with the previous year was recorded, taking the exports amount to a new record of around 4.6 billion. More than 70% of total output was exported to foreign countries.

	Import		Export	
	2013	2014	2013	2014
Flexographic printing machines	4,505	1,822	17,425	17,794
Injection molding machines	13,103	15,772	28,793	23,957
Extruders, extrusion lines	4,902	4,304	62,481	82,821
Blow molding machines	967	2,408	27,623	36,166
Thermoforming machines	647	2,304	10,078	15,886
Presses	1,675	4,599	21,997	20,868
Various machinery for molding or forming	2,426	1,764	31,579	37,096
Other machines	16,488	15,855	115,035	107,106
Part and components	35,274	35,587	80,561	92,543
Molds	62,011	56,560	165,432	176,106
Total	141,998	140,975	561,004	611,019

2014 January to March Italian plastics an rubber machinery foreign trading (in 000 euro)

"Our top sales markets are proving very strong," noted Mr Reifenhuser. "China is more than making up for last year's dip in growth and the US is also growing faster than average. The major South Asian markets – India, Indonesia and Thailand – are experiencing a pause in growth.

"Within the EU, our members' reports confirm the rates of growth in exports to Italy, Spain and Portugal," he said.

However, the association has scaled back its expectation for the current year from a 6.9% growth predicted in 2013 to 3%, although the total output is forecast to reach 7 billion, the highest ever.

"On the basis of the data from the past six months and following the significant improvement in last year's results, the figures have been revised downwards," explained Mr. Ulrich Reifenhuser, Chairman of the Association.

Meanwhile, exports are set to see small increases in both 2014 and 2015.

"The outlook for the industry's two most important markets, China and the US, continues to be positive, even though the very high recent growth rates will level off," said Mr. Khmann. "However, the trend in deliveries to Russia, Brazil, Turkey and India is markedly negative."

Moreover, the potential effects of the political crisis surrounding Ukraine and Russia are not known yet. The latter, in particular, is the third largest sales market in the past few years for Germany.

VDMA reported that order intake from domestic market has been gaining momentum again with growth rates well ahead of those recorded for foreign orders.

"We are working on the assumption

that, given the general increase in investment in plant and equipment, this welcome development is set to continue this year and next, thereby providing a major stimulus," predicted Mr Reifenhuser.

Italy: Italian machinery sector sets to rebound

Assocomaplast, the Italian Plastics and Rubber Processing Machinery and Molds Manufacturers' Association, expects 2014 to be a better year than 2013.

"Basically we are at the same level as last year at the moment but we are predicting a significant recovery in the second half of 2014 as incoming orders are increasing," said Mario Maggiani, Managing Director of Assocomaplast.

Since Russia is one of the major export markets for Italian machinery, the political situation between Russia and Europe could cause some concern. However, Mr Maggiani remains confident that 2014 will be a better year than the previous one, with about 6-7% growth in exports.

According to figures of Italy's National Institute for Statistics (ISTAT) for foreign trading, exports of Italian plastics machinery increased by almost 9% in the first quarter of this year, compared with the same period of 2013.

Contributing to this general rise in exports was the double-digit growth in sales to some key countries, first and foremost, China. In 2013, Italy exported 121 million worth of plastics machinery to China, its 5th largest foreign destination.

Mr. Maggiani said that Italy's extrusion machinery and molds are well accepted by the Chinese market, representing 15% and 10% of Italy's total machinery exports respectively.

Other noteworthy positive changes were those for sales of Italian technology to such destinations as the Czech Republic, Mexico, the US, Russia, and Turkey.

Running counter to this positive trend, exports towards Brazil have declined, while sales to India performance was below average +4%.

Imports continued to be weak, though to a lesser extent than last year, reflecting a domestic market that still hasn't found its feet, noted the association.

The Italian domestic market is still flat at the moment, Mr Maggiani confirmed, but may recover in the second half of this year.

"We start to see the light at the end of the tunnel," he said. "Over 50% of our machinery is exported to other European countries, so it is important that the region performs stronger."

Austria: A static 2013

According to Austria foreign trading statistics, export value of plastics machinery in 2013 totaled 1.25 billion, up 0.1% year on year. Import value amounted to 296.3 million, down 4.4% compared with 2012.

The Austrian plastics industry encountered a bit of slowdown recently, admitted Raymund Gradt, Consul Commercial Counselor at the Austrian Consulate General, Shanghai.

"It was understandable because the major markets for Austria are the European Union and other European countries," he commented, stating that Austria is a small country while all the companies involved in the plastics industry are globally oriented.

Mr Gradt also said that demand from China came down a bit, possibly due to the fact that the global economy is rather static, and there was less demand for China's products.

In 2013, Austria's export of plastics machinery to China amounted to 35.1 million, down 9.8% compared with the previous year.

However, Mr Gradt saw a rise in demand for quality in the Chinese market. It provides an opportunity for Austrian businesses. During difficult times, Chinese companies have to improve their product quality, otherwise, they could not compete in the world market.

"What is missing is the segment with high quality yet standardized machinery," he noted. "It serves the mass market which is of top level but need less customization." That is what Engel is aiming for with a newly established injection molding machinery line, Wintec, in China, he said.

Mr Gradt also praised the growth of CHINAPLAS, which has gradually

turned itself from a regional trade fair into a global platform for the plastics industry as China's plastics industry continued to rise in the world market.

"Congratulations to CHINAPLAS. This is now a meeting place, not only for China, but for Asia and other parts of the world," he said. "It once started as a Chinese fair, but we are now used to meeting customers there. Not just from India, Japan, Southeast Asia but also from Latin America."

EUROMAP: European market slowly comes back

According to EUROMAP, the Europe's Association for Plastics and Rubber Machinery Manufacturers, its member companies have a market share of 48% globally.

"We did lose some share to the Chinese manufacturers, but this situation has been stabilized in the past few years," said Luciano Anceschi, President of EUROMAP.

He pointed out that European machinery can help to combat certain manufacturing difficulties, for example, rising energy and labor costs. "We clearly see that market requirements are moving towards high quality and our machinery is ready for this."

Meanwhile, the European market is slowly recovering, according to Mr Anceschi. The UK is getting back some manufacturing activities, while Southern Europe is getting slightly better.

A major reason for moving manufacturing activities back to Europe is that the difference in production cost is as big as before. "No more than 20%," he said.

With the aim of boosting the European plastics machinery sector, EUROMAP has signed a declaration of intent with SPI: The Plastics Industry Trade Association in the US, with regard to free trade within the plastics industry in June.

A key feature of free trade is the complete dismantling of tariffs. Many of the objections currently being expressed, according to the two associations, are insignificant compared with the opportunities that would arise from an agreement.

The Transatlantic Trade and Investment Partnership (TIPP) represented not a risk but an opportunity, emphasized Mr Khmann, who is also Secretary General of EUROMAP.

"The TTIP is a milestone in terms of cooperation in our sector, and this should have a very positive impact on our business relationship," commented William R. Carteaux, President and CEO of SPI.

Both associations are urging political representatives in the EU and the US to give greater consideration in their talks to the interests of the machinery manufacturing industry, which is largely made up of medium-sized enterprises.

To date, the requirements of these companies have been largely ignored, although at 13% of total EU exports to the US, machinery manufacturers account for a greater share than the motor industry.

Source : China Plastics and Rubber

DEVELOPMENTS IN PHARMACEUTICALS BARRIER PACKAGING

Healthcare markets are growing worldwide as populations age and medical advances extend to new regions, bringing a high demand for cost-effective medication in user-friendly packaging. The barrier properties of the containers and blisters are critical in maintaining the product integrity and there are a range of polymer materials that will achieve the target shelf-life for different pharmaceuticals. In Europe the blister packaging format is more dominant and it is used to aid compliance with printed dates and even electronic monitoring of patient behavior.

AMI is pleased to invite you to participate in the debate at the technical conference, on Barrier Pharma Packaging 2014 to be held October 14-15 at the Hyatt Regency Hotel in Princeton, New Jersey, USA.

In North America there are FDA and USP protocols to be used when selecting packaging and Boehringer Ingelheim Pharmaceutical will kick off the program with a review of the regulatory initiatives related to packaging. Dr Michael Eakins will follow this with an outline of the US Pharmacopeia approach to extractables and leachables in drug packaging.

Honeywell Healthcare and Packaging will outline the global trends; Asian markets are rapidly

expanding and Mr Anand Khare from ACG Pharmapack in India will highlight the branding and protection issues with pharmaceutical packaging. Blister packaging varies between geographic areas and Perlen Packaging will outline the industry in the Americas and Europe. Justin Schroeder of PCI will talk on adherence strategy and how to navigate the development process to achieve child-resistant, consumer-friendly and compliance prompting packaging! Permeation properties are critical to preservation – Glaxo Smith Kline will talk on the hierarchy of barrier materials. This is followed by Bemis Healthcare Packaging with a new approach to high barrier and Kuraray on the value of EVOH in the pharmaceutical industry. At Bilcare Research one focus has been drug stabilization through scientific packaging development. The expert consultants at Montesino will speak on balancing barrier requirements and cost reduction needs, covering materials and other aspects. In terms of containers, Hoffman Neopac has developed easier to use formats for healthcare workers while Clariant Healthcare Packaging has calculated time of protection using multilayer barrier bottles and active ingredients. The pharmaceutical industry has been plagued by counterfeit products and packaging materials can be used to verify authenticity both through track and trace procedures, but also by incorporating signature molecules into the polymer. Infratrac has worked on barrier-friendly anti-counterfeiting measures and Tracelink has studied the new track and trace regulations to help businesses to prepare and be compliant.

Source : Popular Plastics & Packaging

USING 3-D PRINTING FOR MOLDS TO SPEED MEDICAL PART DEVELOPMENT

3-D printing and additive manufacturing equipment maker Stratasys Ltd. is collaborating with U.S. design and product developer, Worrell Design Inc., to accelerate medical device development through the use of 3-D printed injection mold tooling.

Worrell is producing injection molded prototypes using final production materials in 95 percent less time and at 70 percent less cost compared with traditional aluminium molds.

Stratasys said it had identified an under-utilization of the 3-D printed injection molding process in medical device development and was working with Worrell to help fill this gap. Both companies are based in Minneapolis.

Nadav Sella, senior manager of Manufacturing Tools at Stratasys, said: "Worrell is a leading design firm with the expertise and infrastructure necessary to integrate injection molding and 3-D printing within the product development cycle. In an industry where products have the potential to save lives, we want to use this collaboration to demonstrate how medical device manufacturers can bring their products to market significantly faster than ever before."

Medical device manufacturers traditionally face two main obstacles in getting medical devices to market: tooling costs and the U.S. Food and Drug Administration regulatory process.

Traditional tooling is both costly and time-consuming, as new molds must be created every time a prototype is refined before manufacturing. To reduce potential iteration risks and tooling costs, Worrell uses Stratasys PolyJet-based 3-D printers to create injection molding tools and then inject the same materials that will be used in a finished medical device, creating higher-fidelity prototypes.

Kai Worrell, Worrell's chief executive, said: "We were recently approached by medical device start-up, MedTG, to design and engineer a dual-flow needleless blood collection system that reduced the need for multiple injections, increasing patient comfort and hospital efficiency. By using 3-D printed injection molds to prototype the device, we were able to reduce the costs associated with traditional tooling by approximately 70 percent, as well as cutting times by 95 percent."

Source : Plastics News

KOHLBERG BUYS MEDICAL PLASTICS FIRM PPC

Medical plastics processor PPC Industries Inc. said Nov. 4 it's been acquired by private equity firm Kohlberg & Co., in a move both companies said is designed to accelerate PPC's growth and provide a platform for acquisitions.

PPC, based in Pleasant Prairie, Wis., makes tubing, film and bags in the medical, food and industrial markets, and employs more than 500 people at seven factories in the United States, Costa Rica, Ireland and Malaysia.

"This transaction will give PPC access to capital, and it positions the company to continue to thrive,'' said Jonathan Waldron, CEO of PPC, in a statement.

Terms were not disclosed and officials with PPC and Kohlberg did not comment beyond the news release.

Kohlberg bought PPC from New York-based private equity firm AEA Investors, which according to AEA's website, acquired PPC in 2006.

Kohlberg, which sold medical injection molder Phillips-Medisize Corp. last year for a reported $800 million, said its background in the medical and packaging industries will help PPC expand.

"We look forward to working closely with [PPC Industries] to support its continued growth and development, both organically and via acquisition," Kohlberg Partner Seth Hollander said in a statement.

PPC recently completed an investment of its own. Its subsidiary Kelpac Medical said in June that it bought a "major capital position" in specialty medical tubing manufacturer Apollo Medical Extrusion of Sandy, Utah.

PPC said on its website it has 40 blown film lines of up to seven-layer capacity at its factories worldwide, including 32 at facilities in Wisconsin. It also has eight co-extrusion lines in Wisconsin.

The company bought San Clemente, Calif.-based Kelcourt Plastics in late 2010, creating its Kelpac Medical unit. Kelpac in early 2011 opened a medical tubing plant in Tullamore, Ireland.

PPC also has facilities in San Jose, Costa Rica, and Johor, Malaysia. It said its main plastic extrusion operations were in Wisconsin and Costa Rica.

It supplies tubing, films and bags to the medical device market, as well as specialty food manufacturers and markets for industrial film and bag, auto-insertion bag and protective systems.

"We are extremely impressed with PPC's high quality product offering and deep customer partnership, supported by its robust new product development pipeline and state-of-the-art manufacturing capabilities," Hollander said.

Source : Plastics News

BUILDINGS COULD REACH NEW HEIGHTS WITH HELP FROM PLASTIC-COATED ROPE

Skyscrapers will be able to soar to greater heights with help from plastic in the latest lift technology developed by Kone Corp., an elevator and escalator maker based in Helsinki.

Kone put a high-friction polyurethane coating over a carbon fiber core to create what it calls UltraRope. The hoisting innovation is much lighter and stronger than conventional steel rope, giving it an energy efficiency edge for Kone to highlight at Greenbuild International 2014 in New Orleans, from Oct. 22-24.

UltraRope could enable high-rise elevators to travel heights up to 1 kilometer, which is 3,281 feet, or 0.62 miles. That's twice the distance currently feasible.

"The new ultra-light rope technology eliminates the disadvantages of existing steel ropes — high energy consumption, rope stretch, large moving masses, and downtime caused by building sway," Santeri Suoranta, director of Kone's high rise platforms, said in an email.

Moving mass refers to the weight of everything that moves — ropes, counterweight, elevator car and passengers — when an elevator travels up or down. Steel rope

becomes too heavy to pull people up beyond certain points. However, the reduced weight of Kone's plastic-coated rope puts greater heights and energy efficiency within reach.

How big a leap the technology takes the construction industry remains to be seen, but Kone is in the process of filling some tall orders for UltraRope, including what promises to be the tallest building in the world. Called Kingdom Tower, the edifice is going up in Jeddah, Saudi Arabia.

Kingdom Tower is expected to reach a height of 1 kilometer, which would leave the current record set in 2010 in its dust. That distinction goes to the 828-meter (2,716-foot) Burj Khalifa in Dubai, United Arab Emirates. Although foundation work just wrapped up for the record challenger, the final floor count of the structure still isn't known.

"The exact number of floors might still change, but we're talking about something between 150 and 170 floors," Suoranta said.

So far, the plans call for a seven-story, five-star Four Seasons Hotel; seven stories of office space; 61 stories of residential units, restaurants, cafes, gyms and spas; and the world's highest observation decks at 644 meters (2,112 feet) offering views of the city of Jeddah and the Red Sea.

Kone is equipping the building with 57 elevators and eight escalators, or as they call it "people flow solutions." Seven of the vertical transporters will be the world's fastest double-decker elevators and travel speeds of 10 meters (32.8 feet) per second, or 197 feet per minute.

"Technically, adding speed is actually not too complicated, but it is always important to take into consideration the user experience so that passengers don't feel the speed while they are in the elevator," Suoranta said.

The pressure change from shuttling people too rapidly into the air can cause ear-popping discomfort and motion sickness.

Kingdom Tower also will boast the world's highest elevator rise at 660 meters (2,165 feet). None of the elevators will go from the bottom to the highest occupied floor.

"It's not about construction challenges, technically this is possible, but it is because of the optimized space efficiencies in high-rise buildings," Suoranta said. "Typically this leads to different elevator groups, which are zoned and have different destination floors. This optimized grouping also makes the journey as smooth as possible for the elevator users so that the elevator doesn't stop on every floor."

Passengers will need to change elevators at a sky lobby to reach their destinations.

Kone began testing the tensile strength, bending lifetime and material aging of UltraRope in 2010 before unveiling the new product to the world in 2013. UltraRope should last twice as long as steel rope, according to Suoranta.

"Polyurethane is used as an outer coating and epoxy as an inner one," he said. "Polyurethane's purposes are to increase friction and protect against abrasive wear."

The polymer's main purpose, however, is to increase friction against the traction sheave and carry torque to the suspension system, Suoranta said. UltraRope is attached to the hoisting machine and passes over the traction sheave. As the machine rotates, the friction between the rope and sheave transfers the torque and moves the ropes, which allows the elevator car to move up and down.

UltraRope will less use energy than steel rope and the polyurethane coating won't need to be lubricated, further reducing maintenance.

"This is important because buildings account for about 40 percent of the world's energy consumption, and elevators and escalators can take up between two to 10 percent of energy use in an individual building," according to a Kone news release about how UltraRope can protect the environment while revolutionizing the building industry.

Kone's website has testimonials from experts in the field, including a building critic who says the unconventional cable also "lays down the gauntlet to which the art of architecture must now respond."

Urbanization is pushing advancements in the elevator industry, according to Kone officials. They say more than half of the world's population currently lives in an urban area and the United Nations projects the ratio will increase to 70 percent by 2050.

Their response: As population densities increase in big cities, so does the need to build higher rather than spread out.

With a population of 5.1 million people, Jeddah is the second largest city in Saudi Arabia and home to the largest seaport on the Red Sea. It also is a major resort destination and a primary gateway to Mecca, which is holiest city in Islam, visited by 15 million Muslims a year.

In Jeddah, above-ground construction of Kingdom Tower started in September. The first 10 floors should be done by year's end with construction completed in 2018. The structure will be the centerpiece of a development called Kingdom City.

Kone, which had annual sales of 6.9 billion euros ($8.76 billion) in 2013, booked the Kingdom Tower order in the second quarter of 2014 and announced it June. The building was commissioned by the Saudi Bin Laden Group and designed by architect Adrian Smith and Gordon Gill Architecture. The building's owner and developer is Jeddah Economic Co., which selected Kone for the project.

Source : Plastics News

TEKNOR ANNOUNCES PVC WITH HIGH FLAME RETARDANT PROTECTION

Teknor Apex Co. reports it has new halogen-free flame retardant jacketing with exceptionally high protection without compromising other properties.

The Halguard 58300 series is aimed at data center cables, control cables, energy cables and other demanding applications, the Pawtucket, R.I., company states. It has high oxygen-limiting index and can achieve a UL94 rating of V-O with test specimens as thin as 0.025 inch. Grades are available with Shore D hardness of 48 to 52.

Server farms operated by Internet companies demand very high flame retardance. Teknor Apex vinyl division manager Michael Roberts claims the new compounds are the most flame retardant PVC on the market not made with halogen flame retardants.

Source : Plastics News

SIPA COLLABORATES ON INNOVATIVE LIGHTWEIGHT PRESSURE VESSEL LINERS MADE FROM PET

When it comes to pressure tanks and cylinders, it's important to get it absolutely right. Which is why, when CTS Composite Technical Systems, an innovative company specialized in the manufacture of pressurized cylinders, needed help with the development of an innovative range of ultralight high-performance compressed gas cylinders, it called in PET preform technology specialist SIPA, to supply the expertise it was lacking.

CTS, headquartered in Udine (Italy), was in the process of designing a new "Type IV" pressure tank, when it ran into difficulty. Type IV pressure vessels offer various advantages, including a lighter weight, less maintenance and a longer service life. Unlike Type II and III tanks, which have a metallic liner over which an overwrap such as carbon fiber or fiberglass is applied in a particular pattern over the liner's cylinder sidewall, Type IV cylinders feature (thermo)plastic liners inside a fully wrapped protective skin made from a continuous carbon fiber reinforced plastics composite. The overwhelming majority of type IV pressure cylinders on the market today have blow-molded liners made of high density polyethylene.

CTS had come up with the idea of using PET, which would not only be lighter, it would also enhance the liner's oxygen barrier properties by as much as 100 times. However, the company lacked the knowhow to create a PET liner that fit the specifications. CTS had developed its own rudimentary injection molding machine, as well as a simple blow molding machine, but was unable to produce liners with tolerances that were anywhere near acceptable: container dimensions could vary by a centimeter or more.

Working in tandem with the CTS team, SIPA's experts created a PET liner that was perfectly matched to

the application. The two companies collaborated closely on container development, prototyping, testing, and production. For SIPA, the project also proved a valuable learning opportunity. "The collaboration with CTS has provided us with extra insight into the capabilities of PET as a packaging material," commented Mold Sales Director Alberto Uliana. "This is the very first time that we have worked on an application where internal pressures so high! We have all gained a lot from the experience."

CTS was delighted with the outcome of the collaboration: a product ready for the market that offers the very highest levels of safety. Production is now underway on a range of the new pressure cylinders, with volumes ranging from two to nine liters. The smallest weighs 0.9 kg, and the largest just 4.0 kg-around 30% lighter than a cylinder with an aluminum liner, and five times lighter than an all-steel one. They can all withstand a service pressure of 300 bar, and CTS gives them an unlimited service life. CTS has patented its new technology for making the PET liner around the world.

The two companies are now experimenting together with various types of plastics for the liners that could provide even higher performance in terms of oxygen barrier properties.

Source : Plastics Today

CLARIANT SHOWCASES LATEST PHARMACEUTICAL PACKAGING TECHNOLOGY TO IOPP

Clariant recently hosted the Drug and Pharmaceutical Committee of the Institute of Packaging Professionals (IoPP) at its production facility in Belen, New Mexico.

As said, Clariant Healthcare Packaging provided the Committee with a comprehensive plant tour showcasing its latest technologies, including its newest high capacity production lines for its Sorb-it desiccant canisters and packets. The group also observed Clariant's manufacturing lines for its container-closure systems, such as its Oxy-Guard barrier bottles.

Included in the visit program was a full briefing on time-of-protection calculations, shelf-life simulation and headspace management, considering active agents, passive barriers and conditions of use.

"We are confident that the visit helped the Committee in their pursuit of further technical understanding of controlled atmosphere packaging technologies and their impact on drug and packaging development," said Andy Walti, Head of Healthcare Packaging at Clariant.

The objective of the Committee is to study the technical advances and problems in the packaging area of the pharmaceutical industry. Membership is composed of individuals from companies in the pharmaceutical industry which are involved in the Research and Development of new chemical/ biological entities and the manufacturing and marketing of human prescription drugs.

The Committee last visited the Belen site in 2007.

Source : Plastics News

ITALY FOOD SUPPLIER ADOPTS PLANTIC ECO PLASTIC ROLL STOCK

Plantic Technologies Ltd, a performance bioplastics supplier based in Australia, announced that its ultra high gas barrier, renewably sourced Plantic eco Plastic roll stock is used by Italy's Valley Fine to package its Three Bridges line of 100% natural chef crafted pasta products.

Plantic eco Plastic roll stock is made predominately from proprietary starch technology which constitutes about 80% of the total package structure. As said, its production uses up to 40% less energy compared with conventional ethylene-based polymers.

The low oxygen transmission rate of eco Plastic, meanwhile, extends the shelf life of fresh foods by 15-40%, depending on the application.

"The environmental benefits of Plantic eco Plastic, combined with its ability to meet our freshness

Contd. Pg-21

DEEPAWALI MEET 2014 OF IPF MEMBERS

A fun filled Deepawali Meet was organised at The Sapphire Banquet, Kolkata wherein members along with their spouses had a very nice gala evening. During the programme our President Shri Pradip Nayyar gave the following awards for their outstanding performance in the term 2013-14:

Shri Manoj Kr. Agarwal (Mittal)	-	Excellence in Organising Seminars
Shri Niraj Ladha	-	Excellence in Organising Sport Activities
Shri Pradeep Kr. Kedia	-	Excellence in Organising Seminar on Taxation
Shri Manoj Kr. Agarwal (Shiva)	-	Excellence in Organising Seminars
Shri Shyamlal Agarwal	-	Excellence in Organising Seminar on Pipes
Shri Ashok Jajodia	-	Excellence in Organising Chinaplas 2014 Tour & IPF Website
Shri Ajay Shroff	-	Excellence in Organising Cultural & Social Programmes
Shri K. K. Seksaria	-	For 100% attendance in E. C. meetings

A very entertaining programme by Shri Raju Das & Party enthralled the members. The programme was followed by cocktail dinner.

GLIMPSES

IPF PARTICIPATION AT VIETNAM PLAS 2014

Shri Pradip Nayyar, President and Shri Ajay Shroff, a committee member represented IPF in the 14th Vietnam International Plastics & Rubber Industry exhibition held from November 5 – 8, 2014 at Ho-Chi-Minh City, Vietnam. IPF was offered a barter stall and we took this opportunity to promote Indplas'15 exhibition. Brochures, Leaflets, pre-booking forms were distributed in every booth in the exhibition.

IPF KNOWLEDGE CENTRE CONSTRUCTION UPDATE TILL 17.07.2014

Construction work of IPF KC is progressing smoothly. IPF KC team is regularly visiting construction site at regular intervals to see the progress. As reported earlier construction of the foundation of IPF KC is complete as on 17/11/2014. We have started working on the types of courses that will be conducted at the centre. A visit of our members to the centre is also being planned so that members can visually see the development of our centre. Latest photographs of site are published in this issue for your reference and to give a view of construction in progress.

Supported by:

सत्यमेव जयते

MINISTRY OF CHEMICALS & FERTILIZERS
DEPT. OF CHEMICALS & PETROCHEMICALS
GOVERNMENT OF INDIA

Indplas® '15

meet • share • exchange • profit

7th INTERNATIONAL EXHIBITION ON PLASTICS

Organised by

INDIAN PLASTICS FEDERATION

Turning Plastics into Wealth

Limitless Opportunities

- East and North East to emerge as fastest growing region of India in Plastics
- A region with 30% of Indian population with plastic consumption of just 6-7% of total Indian consumption
- Untapped market for new entrepreneurs
- Existing and growing demand for finished products presently sourced from outside Eastern India.
- Excellent opportunity for domestic and international exhibitors to participate and reap benefits.
- Tremendous scope for investment in plastic industry in Eastern India

Supported by:

PLASTINDIA FOUNDATION

Dates and Venue:

November 27th - 30th, 2015
Science City Ground, Kolkata, India

FOR PARTICIPATION, PLEASE CONTACT:

INDIAN PLASTICS FEDERATION, 8B, Royd Street, Kolkata 700016, India
Ph.: +91 33 2217-5699/5700/6004 | Fax: +91 33 2217-6005
E-mail : office@ipfindia.org | Website : www.indplas.in /www.ipfindia.org
Ashok Jajodia, Chairman - INDPLAS '15, Organising Committee
Call: + 91 98310 90756 | Email: ashok.jajodia@indplas.in

: www.facebook.com/indianplasticsfederation | : @ipf_india | : www.youtube.com/IPFINDIA

Support Associations:

AIPMA · aiftma · AIPMA · CIPET · GSPMA ISO 9001 : 2008 · IPI INDIAN PLASTICS INSTITUTE · OPP Organization Of Plastics Processors Of India · PLEXCONCIL · PMMAI We Shape Plastics... · ATPMA

studiored.co.in

THE PAIN... THE AGONY... THE ECSTASY...

GETS REWARDED

PLASTINDIA 2015
EXPANDING HORIZONS

CATEGORIES OF AWARDS

India Innovative Awards

- Award For Innovative Finished Product/process(National)
- Award For Innovative Plastics Processing Machinery & Ancillary Equipment (National)
- Award For Excellence In Contribution To Agriculture award For Excellence In Creative Packaging
- Award For Innovation In Recycling Technology
- Award For Innovation Or Promotion In Conservation Of Energy, Material & Ecology (Green Initiative)
- Award For Innovative Dies & Moulds (National)
- Award For Innovative Plastics Product Design
- Award For Innovative Raw Material (National)
- Award For Innovative Use Of Polymer
- In Infrastructure award For Use Of Plastics In Healthcare /Personal Care

International Innovative Awards

- Award For Innovative Dies & Moulds (International) *
- Award For Innovative Finished Product / process (International)*
- Award For Innovative Plastics Processing Machinery & Ancillary Equipment (International) *
- Award For Innovative Raw Material (International)*

* Categories Participation is limited to only Non-Indian companies

Entrepreneur Awards

- Award For Best Entrepreneurship
- Award For Best Performing Enterprise (Turn Over Rs. 25 Crores And Above)
- Award For Best Performing Enterprise (Turn Over Up To Rs. 25 Crores)
- Award For Fastest Growing Enterprise - Plastic Processing Machinery & Ancillarie
- Award For Fastest Growing Enterprise - Processing (Commodity Plastics)
- Award For Fastest Growing Enterprise - Processing (Engineering Polymers)
- Award For Outstanding Export

Educational Awards

- Award For Best Educational Institution Contributing To Plastics
- Award For Best Performing Students (Polymer Sciences, Technology & Engineering)

Outstanding Contribution Awards

- Award For Outstanding Contribution (Individual)

Call for Entries

7th Plasticon
Awards 2015
RECOGNISING EXCELLENCE

5th February 2015, Gandhinagar, Gujarat.

25 award categories. 4 international innovative awards. Expert panel of judges.

Send in your entries for Plasticon 2015 to http://www.plasticonawards.org before 31st Dec, 2014

Organised by: PLASTINDIA FOUNDATION

Sponsored by: FinOlex Pipes, Jain Irrigation Inc, Reliance Industries Limited, Supreme

VENTURES

life demands provide a package which truly fits our belief in creating healthy foods in a healthy way," stated Tyler Brown, Product Development Manager of Three Bridges.

"Plantic eco Plastic sets a new standard for barrier packaging performance," said Tom Black, President of International Business for Plantic Technologies. "We are able to be cost competitive with traditional barrier films and, combined with functional performance, this forms the cornerstone of our value proposition. The ability to improve food freshness and be good stewards of the environment is a great outcome for both Plantic and Valley Fine Foods."

Source : Plastics News

BAYER HIGHLIGHTS NEW MATERIAL COMBINATION FOR WOUND DRESSINGS AT COMPAMED 2014

The new product comprises Baymedix A adhesives and Platilon films made from polyurethane (PU). The adjustable adhesive strength means it can be easily removed from the skin without sticking to hair.

The wound dressing is also breathable, skin-friendly, non-allergenic and formulated without solvents, according to Bayer.

"Our developments are aimed primarily at the treatment of chronic wounds," said Martin Httner, Marketing Expert for Medical Applications. "The products should be well compatible, but also efficient to manufacture."

Using Bayer's PU technology, laminating steps can be eliminated from the converting process. Furthermore, the breathability of the combination products eliminates the need for the punching process often used today.

The Baymedix product line also includes a series of raw materials for wound dressings that support the healing process and offer numerous design possibilities. These are used to manufacture such products as absorbent foams with Baymedix FP and the waterborne PU Baymedix FD and CD for stretchable backing films as well as for barrier films produced via the dipping process.

Source : China Plastics and Rubber

NOVA-INSTITUT INTRODUCES NEW METHODOLOGY FOR TECHNO-ECONOMIC EVALUATIONS OF INNOVATIVE INDUSTRIAL PROCESSES

The latest nova-paper from nova-Institut presents a newly developed model for a techno-economic evaluation of industrial processes in a situation of limited data availability, especially where no equipment sizing is possible.

The economic evaluation of an investment project for an industrial process includes the estimation of capital expenditures (CAPEX), annual operating expenditures (OPEX), revenues, profits, and further indicators of economic sustainability, e.g. the internal rate of return (IRR).

According to nova-Institut, the paper first describes the methodologies developed for estimating CAPEX and OPEX before briefly touching upon indicators of evaluating the economic viability of an investment project.

The model was applied in the framework of the European research project BIOCORE (Biocommodity Refinery), which conceptualized an industrial-scale lignocellulosic biorefinery.

The company stated that this model could equally well be applied to other industrial processes, achieving reasonably good and coherent results, notwithstanding the limited data available.

The results from the BIOCORE project showed that especially those scenarios that produce high-value chemicals could come close to profitability with limited support mechanisms or Green Premium. Conversely, scenarios with a focus on lignocellulosic ethanol production and energy use of lignin fare much poorer.

Source : China Plastics and Rubber

PCC INTRODUCES MIBATCH ANTI-COUNTERFEITING TECHNOLOGY FOR PLASTICS PACKAGING

Plastics Color Corporation (PCC), a US supplier of color concentrates, functional additives, and custom polymer masterbatches for the plastics industry, has introduced the MiBatch anti-counterfeiting resins for the packaging sector. "MiBatch was developed as an extremely cost-effective anti-counterfeiting measure enabling manufacturers and retailers to protect brand identity and ensure supply chain integrity," explained Tim Workman, Vice President of Business Development for PCC.

Counterfeiting is a multi-billion-dollar threat to consumers and businesses worldwide and compromises brand value and poses serious safety risks, according to the company.

MiBatch technology uses covert chemical or visual markers called taggants to provide a unique "fingerprint" to the packaging or product, protecting OEM or brand owners from costly recalls, repairs, and even litigation by providing proof of the product's authenticity.

"Since MiBatch is an anti-counterfeiting taggant that is placed in the material itself - whether in the plastic packaging or the plastic product - authentication can be done at every level of the supply chain," explained Mr Workman.

These markers are created through spray pyrolysis during the manufacturing process. The patented process produces spherical particles over a wide range of compositions so that there is homogeneous composition control. They are easy to authenticate but difficult to detect and replicate.

According to PCC, taggants in MiBatch are compatible with a wide variety of resins, and function under wide-ranging environmental conditions without affecting product performance.

Taggants are added to plastic masterbatches during the compounding process. XRF (X-ray fluorescence) and laser detection equipment (handheld or inline) is employed to "read" the embedded taggant signature and verify authenticity of the polymer, product, or component. The detection systems are tuned to look for specific elements and combinations for the unique taggant.

PCC introduced the MiBatch solution at Pack Expo 2015, held from November 2-5 in Chicago, the US.

Source : China Plastics and Rubber

GLOBAL CONFERENCE ON BARRIER PACKAGING FOR PHARMACEUTICALS FOCUSING ON MARKET TRENDS AND TECHNOLOGY

AMI's international conference on polymers in Barrier Pharma Packaging 2014 took place October 14-15, 2014 at the Hyatt Regency Princeton Hotel, in Princeton, NJ, the heart of one of the top pharmaceutical manufacturing regions of North America. This event focused on polymers in drug and pharmaco-biologics packaging including blister, stick, strip and bottles.

The pharmaceutical industry is facing ever increasing demands on drug packaging as safety requirements specify child resistant (CR) and senior friendly (SF) formats. In addition, the medical profession wants patient compliance to improve for prescription medication and this can be achieved with formats like blister packaging imprinted with days of the week over each tablet and inbuilt monitoring electronics. Generic over the counter (OTC) medications have other requirements, mainly being sold in bulk containers and in this case cost is a primary driver in material selection.

There is big issue with fake pharmaceuticals entering the market

and this is being combatted by the introduction of traceability and inbuilt anti-counterfeit measures in packaging.

Many patients find oral solid medication hard to swallow, so there are innovations in the drug formats including tablets (ODT) and films (ODF) that are placed into packaging in a liquid or gel format and then evaporated to give a quick dissolve solid. This presents a challenge for the packaging materials, which have to withstand the drying process and provide the highest level of water barrier (WVTR) due to the high moisture sensitivity of these products.

There is growth in biologics in the market and these require a re-think in terms of packaging and protein interactions.

Barrier Pharma Packaging 2014 brought together pharmaceutical experts and polymer suppliers, and aims to cover all aspects from innovative pharmaceuticals and how to package them, to packaging standards. Experts in pharmaceutical packaging specification, design, manufacture and testing along with polymer producers and machinery suppliers were invited to network and debate the latest developments in markets, technical and regulatory issues, economics and production technology.

Source : China Plastics and Rubber

HOW WILL THE GLOBAL LDPE MARKET PERFORM UNTIL 2021?

According to a new study published by the market research institute Ceresana, low density polyethylene (LDPE) worth almost US$33 billion was sold worldwide in 2013. Global sales of LDPE are expected to rise by 1.5% per annum (p.a.) until 2021.

Asia-Pacific single-handedly processed about 7.1 million tons of LDPE in 2013. About 58% of this amount was consumed in China. Asian countries, China and India in particular, and the Middle East will remain the largest growth markets for LDPE.

Due to strong competition by other types of polyethylene, Ceresana said future growth rates for LDPE demand are likely to fall short of overall economic development.

Meanwhile, the LDPE markets in Western Europe and North America are largely saturated already and will grow only slightly.

Several world regions are rapidly increasing their production capacities for LDPE, for example the Middle East, which is projected to grow by 5% per year. New large-scale petrochemical complexes, often owned by Joint Ventures (JV) of large international companies and regional enterprises, will commence production in upcoming years.

Various larger productions sites are to be constructed in North America and Asia Pacific as well. Western Europe, on the other hand, will see the closure of LDPE plants.

According to the study, about 63% of total LDPE demand stem from film production, especially packaging films as well as bags and sacks. Other important applications are rigid packaging and construction products, which can profit from new investments in infrastructure around the globe.

In Asia, on the other hand, it is especially films, LDPE packaging films in particular, that offer the largest growth potential, since Asian countries are increasingly adapting to Western standards for packaged food.

In a global comparison, film extrusion is the most common technology for processing LDPE. Other technologies, namely extrusion coating, injection molding, and other processes like blow molding and rotomolding, account for a market share of only 37%.

The various world regions show only minor differences in regard to processing technologies. For example, extrusion coating is disproportionally often used in North America, while Eastern European countries use large amounts of LDPE not only in film extrusion, but also injection molding.

Source : China Plastics and Rubber

OPTIMIZED MATERIAL INPUT FOR AUTOMOTIVE INDUSTRY

For the automotive industry, there is no compromise on quality. As auto makers use plastics to replace traditional materials for lightweight construction, the question is how to ensure the quality in plastics processing. Purchasing an expensive core machine is only part of the answer. Optimizing relevant auxiliary equipment to maintain material quality is just as important.

Due to the steady growth in demand in the Chinese automotive industry for high quality thermoplastic elastomer based on olefin (TPO), Benecke Changshun Auto Trim has practically built its own new factory for the production of interior films.

The company is a joint venture (JV) between Benecke-Kaliko in Germany and China's Jiangsu Changshun Group.

Available as compact films and foam sheets, the films have various applications that include instrument panels, door paneling and center consoles.

Source : China Plastics and Rubber

SOMOS GRAMIX S9 ALLOWS TPO REGRINDS

With its dynamic weighing electronics built into the system, additive volumes as small as 200g/h, equivalent to around 3g/m, can be dosed with an accuracy of +/-1%. In case of higher throughputs, the accuracy can be improved to +/-0.5%.

To correct quickly intermittent fluctuations in the throughput, fast weighing processes and short weighing intervals is needed. It allows the extruder to start up with low material losses while reducing overall production waste.

The dosing system has a touch-screen display for convenient operation. The Gramix controller automatically detects the dosing screws used in the individual dosing stations.

If a screw is changed, for example, to increase the throughput, it will automatically correct the dosing values in a few seconds to avoid mistakes in the composition of the mixture.

Source : China Plastics and Rubber

PROTEC POLYMER PROCESSING CHOOSES THE RIGHT DOSING AND MIXING SYSTEM

ProTec Polymer Processing was responsible for the design and implementation of all the material supplier equipment for this film extrusion line.

In addition to supplying virgin product as specified in the recipe, this system also creates value by returning regrind from the continuous edge trimming that is inevitably created during production.

Since the TPO interior films are up to 50% lighter than the conventional polyvinyl chloride (PVC) films and because the rubbery material tends to stick together, TPO regrind exhibits significantly impaired flow characteristics.

As a result, the regrind conveyor had to be equipped with special process controls and plant technology. Besides specifically designed conveyance routes, ProTec Polymer Processing adopted its SOMOS Gramix S9 gravimetric dosing and mixing system for regulating throughput of the extruder.

SOMOS Gramix S9 gravimetric dosing and mixing system is suitable for supplying extruders operating in overfeeding or underfeeding mode, continuous production processes used in co-extrusion or blow molding applications with a longitudinally homogeneous material mixture and at throughputs of up to 2,400kg/h.

If an extruder is operated with a throughput of up to 800kg/h, the regrind proportion can be up to 50%, said the company.

The system can handle up to nine components (primary and secondary components in different ratios depending on the recipe). Two of these can be regrind components, which are separated for light and dark regrind types.

Source : China Plastics and Rubber

The Right to be a Philistine

Dr. Devdutt Pattanaik

Bollywood demands the right to be Philistine and I wonder why many resist granting them that right.

Time and time again, shortly after a star-studded mega masala movie has been released, I find people at parties rolling their eyes at how horrible the film is, friends at coffee shops discussing how low the standards are, critics on television and print struggling to lower their standards, and still be honest, without upsetting the megastars who control all party passes at Bollywood, and of course read jokes on facebook about the superstar whose once famous heart has now become his abdomen while one of his rivals bares his torso and other is determined to bare it all… Then, the next day, a full page newspaper ad tells everyone that very same film has made a 100 crores… no 200 crores… no 300 crores….so, it must be good, we are forced to admit. Take that, you intellectual! Take that, you critic who can never afford a BMW, or get that girl, or be invited to that party. Take that, you loser! It's a pattern that is so repetitive that you realize it has become a trap – for both those who mock and those who celebrate philistinism.

This is what Wikipedia has to say about Philistinism: In the fields of philosophy and æsthetics, the term philistinism describes the social attitude of anti-intellectualism that undervalues and despises art, beauty, and intellect; 'the manners, habits, and character, or mode of thinking of a philistine'. A philistine person is the man or woman who is smugly narrow of mind and of conventional morality whose materialistic views and tastes indicate a lack of and indifference to cultural and æsthetic values.

The word 'philistine' originated in 17th century Germany to distinguish the uncultured townsfolk with the students of the university. It can be traced to the Old Testament of the Bible where Philistines were one of the people who opposed the People of the Book from settling in the Promised Land. They were the ones whose attack the famous Biblical hero, Samson, has to fend of.

In ancient India, the varna hierarchy was used to speak of philistinism. He who is able to appreciate art was said to be of brahmana-varna (not the caste, but the state of mind, a state of expanded sensitivity and refined taste), while he who was unable to do so was of shudra-varna. Those of vaishya-varna saw art only in terms of commerce. Those of kshatriya-varna saw art only in terms of propaganda and power. The point of art was to uplift people towards brahmana-varna. Not everyone would rise; but that had to be goal.

Those who did not rise were not mocked; for each one can only rise to the level of guna. Those of tamas-guna would forever be in a state of inertia, afraid of letting go and trying something new. Those of rajas-guna would forever be in a state of denial and rebellion, determined to mock and deride anyone who challenges their worldview. Those of sattva-guna will at least have the lucidity and openness to look beyond their comfort zone, a willingness to grow up, mature and transform.

It takes a lot of courage to let people be philistines. In fact, when you oppose a philistine, you end up encouraging them to further dig their heels. So for their own sake, let them be. If you can, try being their cheerleaders as they march towards the 1000-crore film, even if they accuse you of being 'patronising'. Keep in mind: mediocrity is not evil. In fact, it is rather comforting and extremely popular.

IPF NEW MEMBERS

IPF WELCOMES NEW MEMBERS TO ITS FAMILY APPROVED IN THE EXECUTIVE COMMITTEE MEETING HELD ON 15/10/2014

Name of the Company	Class of Membership	Membership No.
M/s Techno Plast	Life Manufacturer member	LM-339
M/s Soma Enterprise	Life Manufacturer member	LM-340
M/s Manav Polymers (P) Ltd.	Life Manufacturer member	LM-341
M/s SMVD Polypack (P) Ltd.	Life Manufacturer member	LM-342
M/s P. B. Holotech (I) Pvt. Ltd.	Life Manufacturer member	LM-343
M/s Aum Packaging	Life Manufacturer member	LM-344
M/s Chirag Industries	Life Dealer member	LD-096
M/s Goyel Chemical Corporation	Life Dealer member	LD-097

ERRATA

To

All Members of the Federation

Dear Members,

Please refer to Page 11 of monthly magazine PLASTICS INDIA October 2014 issue containing the list of Committee Members and co-opted members. In the list of co-opted members, the name of Shri Pawan Kumar Newar of M/s Prabhu Polycolor Pvt. Ltd. has been erroneously put under the said list instead of putting the same under Producer Member seat. Please read his name as a Producer Member. The mistake has been committed inadvertently and is, therefore, sincerely regretted.

Thanking you

Yours faithfully

For INDIAN PLASTICS FEDERATION
Sd/-

Manish Kr. Bhaia, Editor, Plastics India

Plastics-
Use wisely...Dispose responsibily

IPF IS ON SOCIAL NETWORKING SITES :

Like us on facebook :
www.facebook.com / indianplasticsfederation

Follow us on Twitter :
@ipf_india

See us on, You Tube :
www.youtube.com/IPFINDIA

Like us, Follow us and remain connected with us.

INDIAN PLASTICS FEDERATION

VISIT,EXPLORE AND GET BENEFITTED WITH THE IPF WEBSITE

www.ipfindia.org

HOME | ABOUT US | NEWS | ADVERTISE IN JOURNAL | IPF JOURNAL | PHOTO GALLERY | IMPORTANT LINKS | POLY INFO | ENQUIRY

ACTIVITIES | PAST PRESIDENTS | PRESIDENT MESSAGE | EXE COMMITTEE | MEMBERS DIRECTORY | EXHIBITION DETAILS | PLASTICS N ENVIRONMENT

Highlights of IPF Website :

- Latest Price List of Major Indian Polymer Producers under “Polyinfo” link
- Read IPF Monthly Journal “Plastics India” under “IPF Journal” link
- Find details of IPF members in “Members Directory” with search engine option to find a member by Membership No, Membership type, Company name, product and person name.
- Latest national & international news relating to Plastics.
- Link to IPF’s Twitter, Face book and YouTube accounts.
- Details of Forthcoming Plastics Exhibition worldwide under “Exhibition details” link.
- Links of important websites related to business and plastics.
- Detail of the current Executive committee Members.
- Detail of Past Presidents.
- Current WTI Brent Oil prices on dashboard And lots more.

You can benefit by advertising on IPF Website :

Advertise your company of IPF Website with link to your own website. We will also mass e-mail your company’s flyer once in a year to all the IPF members

The Banner Advertisement Tariff	
Rs.20,000/- Yearly	Rs.6,000/- Quarterly

Our current advertisers on websites :

CIRCULAR

TO ALL MEMBERS OF THE FEDERATION

MEMBERS ARE REQUESTED TO SEND THEIR GRIEVANCES / PROBLEMS FACED ON VAT / CST / ENTRY TAX ETC. IN DETAILS ALONGWITH SUPPORTING DOCUMENTS TO THE IPF SECRETARIAT SO THAT WE CAN PUT THE SAME TO THE CONCERNED AUTHORITY.

PLEASE SEND THE SAME TO THE HONY. SECRETARY, INDIAN PLASTICS FEDERATION

8B, ROYD STREET, 1ST FLOOR, KOLKATA – 700 016.

E-MAIL: office@ipfindia.org, FAX : 22176005

FREE CONSULTANCY OFFER TO IPF MEMBERS

MEMBERS WANT TO SET UP NEW PLASTIC INDUSTRY AND TO AVAIL SUBSIDY AND OTHER GOVERNMENT BENEFITS AVAILABLE FOR MSMES' MAY CONSULT WITH MR. PINAKI SINHA ROY, EX-PROJECT MANAGER, DIC AT IPF SECRETARIAT, 8B, ROYD STREET, 1ST FLOOR, KOLKATA – 700 016 ON EVERY WEDNESDAY FROM 3.00 P.M. TO 5.00 P.M. WITH PRIOR APPOINTMENT. INTERESTED MEMBERS MAY CONTACT DIRECTLY WITH THE IPF SECRETARIAT AND FIX AN APPOINTMENT AT LEAST 2 DAYS BEFORE THE SCHEDULED MEETING. MR. ROY WILL PROVIDE THE KNOWLEDGE REQUIRED FOR SETTING UP PLASTIC INDUSTRY UNDER MSME POLICY 2013 ISSUED BY DEPT. OF MSSE & TEXTILE, GOVT. OF WEST BENGAL.

PLEASE FIX AN APPOINTMENT AT

2217 5699 / 5700 / 6004; FAX: 033-2217 6005, E-MAIL : office@ipfindia.org

ADVERTISEMENT TARIFF FOR 'PLASTICS INDIA' JOURNAL (Per Insertions)

Front Cover (Colour)	**:**	**Rs.**	**15,000/-**
Inside Front Cover (Colour)	**:**	**Rs.**	**11,500/-**
Back Cover (Colour)	**:**	**Rs.**	**12,500/-**
Inside Back Cover (Colour)	**:**	**Rs.**	**11,500/-**
Colour Full Page	**:**	**Rs.**	**6,000/-**
Bi-Colour (2 Colours) Full Page	**:**	**Rs.**	**4,000/-**

MECHANICAL DATA

Overall Size of the Journal	**:**	**28.5 cm X 22.0 cm**
Front Cover [Print Area]	**:**	**20.0 cm X 18.0 cm**
Full Page [Print Area]	**:**	**23.5 cm X 18.0 cm**

Note : 15% discount will be allowed on 12 insertions
10% discount on 6 insertions to DIRECT ADVERTISERS

Do You Have Any Interesting Info?

Send articles with photograph, Latest Innovations, Research & Technical Articles

Address to :
The Editor, Indian Plastics Federation
8B, Royd Street, 1st Floor,
Kolkata - 700 016
Ph : 033-22175699/5700/6004
E-mail : office@ipfindia.org

CIRCULAR

CIRCULAR NO. : 28/2014 : **20th November 2014**

Sub : Membership of the Federation

The Federation has received the following applications for membership of the Federation :

1.	a)	Name & Address of the Applicant Firm	: **M/S. ARUNIL POLYCRAFT PVT. LTD.** 302, Jaisalmer Apartment, 6, Ashoka Road, Alipore Kolkata – 700 027.
	b)	Class of membership	: **Life Manufacturer member**
	c)	Proposed by	: M/s Shree Krishna Industries
	d)	Seconded by	: M/s Prakrit Impex Pvt. Ltd.
	e)	Name of Representatives	: 1. Mr. Abhinav Arunil – Director 2. Mr. Vineet Kajaria - Director
	f)	Items of manufacture	: Manufacturer of Polymer Compounds.
2.	a)	Name & Address of the Applicant Firm	: **M/S. TRANSWORLD BUSINESS CORPN.** 5B, Clive Ghat Street, 4th Floor Kolkata – 700 001.
	b)	Class of membership	: **Life Manufacturer member**
	c)	Proposed by	: M/s Prakrit Impex Pvt. Ltd.
	d)	Seconded by	: M/s Endurra Polymers Pvt. Ltd.
	e)	Name of Representative	: Mr. Sanjay Chowdhary – Proprietor
	f)	Items of manufacture	: Manufacturer of Plastic Granules and Importers of Plastic Raw Materials.
3.	a)	Name & Address of the Applicant Firm	: **M/S. OM PLASTIC INDUSTRIES** 6/1B, Dilarjung Road,Cossipore Road Kolkata – 700 002.
	b)	Class of membership	: **Life Manufacturer member**
	c)	Proposed by	: M/s Endurra Polymers Pvt. Ltd.
	d)	Seconded by	: M/s Prakrit Impex Pvt. Ltd.
	e)	Name of Representative	: Mr. Gaurav Daga– Proprietor
	f)	Items of manufacture	: Manufacturer of Plastic goods.
4.	a)	Name & Address of the Applicant Firm	: **M/S. RAJLUXMI POLYMERS** 35A/3, Biplabi Barin Ghosh Sarani Near Ultadanga Main Road Kolkata – 700 067.
	b)	Class of membership	: **Life Manufacturer member**
	c)	Proposed by	: M/s Prakrit Impex Pvt. Ltd.
	d)	Seconded by	: M/s Uma Cosmoplastics Pvt. Ltd.
	e)	Name of Representatives	: 1. Mr. Prasanta Kr. Saha – Proprietor 2. Mr. Prabal Kr. Saha - Son
	f)	Items of manufacture	: Manufacturer of HM-HDPE Containers.
5.	a)	Name & Address of the Applicant Firm	: **M/S. MB DAGA PACKAGING PVT. LTD.** 6B & 6F, Tara Chand Ganguly Street Ward No. 24, Bally Municipality, Belurmath Howrah – 711 202.
	b)	Class of membership	: **Life Manufacturer member**
	c)	Proposed by	: M/s Endurra Polymers Pvt. Ltd.
	d)	Seconded by	: M/s Prakrit Impex Pvt. Ltd.
	e)	Name of Representatives	: 1. Mr. Anil Daga - Director 2. Mr. Ashok Kr. Daga - Director
	f)	Items of manufacture	: Manufacturer of Plastic Goods.

CIRCULAR

6.	a)	Name & Address of the Applicant Firm	:	**M/S. SINHA MULTILEVEL MARKETING PVT.LTD.** J. C. Chakraborty Road Duillya, Andul Howrah – 711 302.
	b)	Class of membership	:	**Conversion from Manufacturer to Life Manufacturer member**
	c)	Proposed by	:	M/s Ever Bright Plastic (P) Ltd.
	d)	Seconded by	:	M/s Ever Bright Plastic Works
	e)	Name of Representative	:	Mr. Shantanu Sinha – Managing Director
	f)	Items of manufacture	:	Manufacturer of Plastic Containers & LID for Battery.
7.	a)	Name & Address of the Applicant Firm	:	**M/S. NEPCO COMMERCIAL PVT. LTD.** P-16, Sahitya Parishad Street Kolkata – 700 006.
	b)	Class of membership	:	**Manufacturer member**
	c)	Proposed by	:	M/s Prakrit Impex Pvt. Ltd.
	d)	Seconded by	:	M/s Shree Krishna Industries
	e)	Name of Representative	:	Mr. Pankaj Bajaj - Director
	f)	Items of manufacture	:	Manufacturer of Plastic Injection Moulding Machine and Accessories.
8.	a)	Name & Address of the Applicant Firm	:	**M/S. BISHWANATH POLYPACK PVT. LTD.** 27, B T M Sarani (Formerly Brabourne Road) Room No. 208 Kolkata – 700 001.
	b)	Class of membership	:	**Life Dealer member**
	c)	Proposed by	:	M/s Sanchar Poly Tubes
	d)	Seconded by	:	M/s Endurra Polymers Pvt. Ltd.
	e)	Name of Representatives	:	1. Mr. Nand Lal Yadav – Director 2. Mr. Sanjay Yadav - Director
	f)	Items dealt in	:	Importer & Traders of all kinds of Polymers.
9.	a)	Name & Address of the Applicant Firm	:	**M/S BRIGHT TRADING CO.** 62, Phears Lane (Ground Floor) Kolkata - 700 073
	b)	Class of membership	:	**Life Dealer Member**
	c)	Proposed by	:	M/s Z. A. Polymers Pvt. Ltd.
	d)	Seconded by	:	M/s Prakrit Impex Pvt. Ltd.
	e)	Name of representatives	:	1) Mr. Imran Javed - Manager 2) Mr. Munir Ahmed - Proprietor
	f)	Items dealt in	:	Dealer of EVA/ LDPE/ PVC / Other Polymers & Chemicals

(Circulated in terms of Article 15 of the Articles of Association of the Federation)

INDIAN PLASTICS FEDERATION

Indplas® '15
meet • share • exchange • profit
7th INTERNATIONAL EXHIBITION ON PLASTICS

KEEP INDIA CLEAN

स्वच्छ भारत

AN APPEAL TO ALL IPF MEMBERS AND MEMBERS OF THE PLASTIC FRATERNITY

IPF takes an initiative to be a part of the Swachh Bharat Abhiyan under
" Plastic Social Responsibility "
as being the pioneer plastic association of India.
Let us all come forward and contribute to the initiatives of
the Hon'able Prime Minister of India for a Clean India!

FOLLOW THE 3R THEORY : RE USE , RECYCLE AND RECOVER

DO NOT THROW PLASTIC BAGS ANYWHERE. DISPOSE IT PROPERLY

PLEASE DO NOT LITTER. THROW GARBAGE IN PROPER DUSTBINS

INDIAN PLASTICS FEDERATION, 8B, Royd Street, Kolkata 700016, India
Ph.: +91 33 2217-5699/5700/6004 | Fax: +91 33 2217-6005
E-mail : office@ipfindia.org | Website : www.indplas.in /www.ipfindia.org
: www.facebook.com/indianplasticsfederation | : @ipf_india | : www.youtube.com/IPFINDIA

A Promise to Commitment & Growing Satisfaction ®

GOLD COIN

Make Moulding So Simple

Leo Series

TOTAL MOULDING SOLUTION!

An ISO 9001- 2008 CERTIFIED COMPANY

polymechplast

POLYMECHPLAST MACHINES LTD.

www. polymechplast.com

- Reg. Office : "GOLDCOIN"House, 775, GIDC, Makarpura, Vadodara- 390010, Gujarat, INDIA
  - Tel.: + 91-265-2632210
  - E-mail: goldcoin@polymechplast.com
- Mumbai : • Ph.: + 91- 22- 28460878, 28858190, Email: pmlmum@polymechplast.com
- Pune : • Ph.: + 91- 9890524568 / 9890655644 Telefax: + 91-2135 -660122
- Kolkata : • Ph.: + 91- 33 -22298400, Email: pmlcal@polymechplast.com
- Delhi : • Ph.: + 91-11 - 65170869, 27028101, Email: pmldil@polymechplast.com
- Bangalore : • Ph.: + 91- 80- 23467177 , Email: pmlsouth@polymecplast.com
- Chennai : • Mob.: +91-9600145737, E-mail: pmlchennai@polymechplast.com

Proudly Made In India

HM Series
Injection Molding Machines

(Servo Toggle & Hydro Mechanical)

160T to 880T

SPECIAL PRE-PLAST INDIA 2015 OFFER

Limited Stocks
First Come - First Serve Basis.

- Robust, Reliable, Precise & Consistent Fully loaded machines with superior technology & unbeatable performance.
- User friendly operation.
- Large Tiebar spacing and generous specifications.
- State-of-the-art quality through Strict quality control with all processes inhouse.
- Competitive pricing advantage as we are the only company in india with all inhouse facilities including design, foundry, machine shop & fabrication.
- FEA analysis of all critical components under extreme loads as well as fatigue loads to ensure a life of minimum 1 million cycles.
- A green concept with low water & energy consumption.

FURNITURE


AUTO PARTS


HOUSEHOLD


MEDICAL


ELECTRICAL & ELECTRONICS


RPVC / CPVC


WRITING INSTRUMENT


PET

PASL

CIN No. U65910GJ1997PTC031672

PASL WINDTECH (P) LTD.

REGD. OFF: 37/B, Phase-I, G.I.D.C., Vatva, Ahmedabad-382 445. | **ADMIN. OFF:** 34-35, Phase-I, G.I.D.C., Vatva, Ahmedabad-382 445.

T +9179 40264747 M +91 9879923461 F +91 79 40264676 E sales@pwsl.in W www.paslgroup.com

Ahmedabad +91-9099013660 • **Delhi** +91 9711081600 • **Mumbai** +91-9820180338, 9820828240 • **Hyderabad** +91-9849593387
Bangalore +91-9845022493 • **Chennai** +91-9840085095 • **Pune** +91-9405009710 • **Kolkatta** +91-9903866025

Export: +91 9824077885

We Cast Relationship in Steel | *Harnessing Happiness*

TOSHIBA MACHINE
BEST PARTNER OF LEADING INDUSTRIES | INDIA

One stop shop for injection molding

Machine & Auxiliary Equipment

www.toshiba-machine.co.jp

De-Tech Series - Hydraulic Machine

EC-S Series -All Electric machine

Toshiba Machine (Chennai) Pvt Ltd.
5, Chennai Bangalore Highway, Chembarambakkam, Chennai 600 123, India | Ph: +91-44-26812000

Toshiba Machine (India) Pvt Ltd.
6A, 6th Floor, Uppal's Plaza, M-6, Jasola District Centre, New Delhi 110 025, India | Ph: +91-11-43291111

Regional Sales office:
Mumbai: 93231 51850 | New Delhi: 98990 20315
Kolkata: 98300 25608 | Chennai: 98410 01914

Its all about Performance!

The fact that we, Ferromatik Mialcron India, make a High Quality Injection Moulding Machine is very meaningful and it means a lot to our success.

The launch of Nova Servo has been the most successful Machine Launch and is well accepted by Plastics Industry. It is a combination of Efficiency & Effectiveness and a Strong Brand. It has got the Tremendous Success and is due to partnering a Quality Product with Energy Efficiency and Competitive Price. Enhanced Specifications & Features with Higher Performance & Productivity are all part of the Nova Servo Package.

Nova Servo is altogether a Newly Designed-New Generation-Energy Efficient-High Performance Toggle Injection Moulding Machine having Engineering Excellence.

FERROMATIK MILACRON India

TOGGLE INJECTION MOULDING MACHINE

NOVASERVO

The Most Successful Machine Launch

Highest Value Propositions

- Energy Efficient
- Compact Foot Print
- High Performance Machine
- High Repeatability & Precision
- Generous Specifications & Features
- Wide Combination of Injection Unit with Clamp

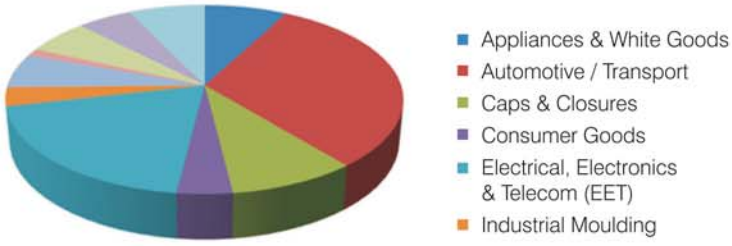
Key Application Segments

- Medical
- Packaging
- Automotive
- Caps & Closures
- Writing Instruments
- Electrical, Electronics & Telecommunications (EET)

& many more…

More than 150 machines running successfully since its launch in Oct' 12

Nova Servo IMM
Application Segment Presence (%)



Ferromatik Milacron India Pvt. Ltd.
(Formerly known as Cincinnati Milacron Ltd.)
93/2 & 94/1, Phase-I, G.I.D.C. Vatva, Ahmedabad - 382 445, India.

Tel : +91-79-2589 0081, 2589 0133, 2583 0063
Fax : +91-79-2583 0125 E-mail : salesfmi@milacron.com
Web : www.milacronindia.com

AHMEDABAD +91-79-2589 0133, 2589 0081 **NEW DELHI** +91-11-4630 1114/15/16 **MUMBAI** +91-22-4005 5459/60/61/62/66 **CHENNAI** +91-44-2378 3648/3318
KOLKATA +91-33-2282 2593/2909 **HYDERABAD** +91-40-2340 2159/60 **BANGALORE** +91-80-2340 8984/85 **CHANDIGARH** +91-172-508 6633
PUNE +91-20-3049 0990/91 **VAPI** +91-260-246 5150 **COIMBATORE** +91-89398 88192 **KERALA** +91-94477 21221

RNI No. : WBENG/2011/37860

K K PolyColor Asia Ltd
The Masterbatch Company
An **ISO 9001: 2008** Certified Company

One Life,
Many Colours

- Manufacturer of plastic compounds & Masterbatches
- State of the art production facility
- Customized and tailor-made solution

405, Ajit Sen Bhawan,
13, Crooked Lane,
Kolkata ,
India - 700 069.
Tel: +9133-3028 0119/0122/0492
Fax: +9133-22101379
E-mail: info@kkpc.in | Web: www.kkpc.in

kkpc.kolkata

Owner Indian Plastics Federation, Printer and Publisher Sri Ashok Jajodia, Published from 8B, Royd Street, 1st Floor, Kolkata 700 016 and Printed from **CDC Printers (P) Ltd.**, Plot No. 5,6,16 &17, Tangra Industrial Estate - II, 45, Radha Nath Chowdhury Road, Kolkata - 700015, E-mail : cdc@cdcprinters.com, Editor : **Manish Kr Bhaia**