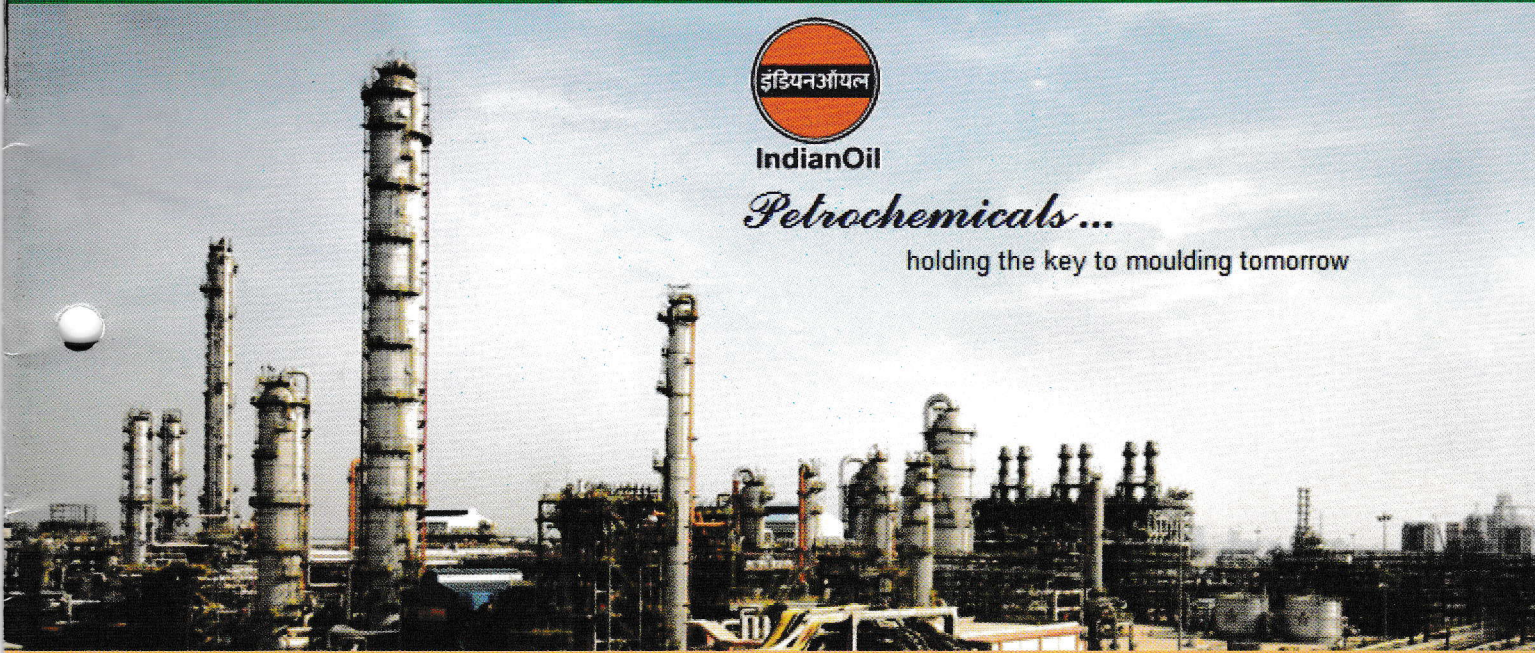




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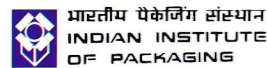
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Editorial



Dear Members,

Good day!

The countdown to our prestigious and much awaited 'INDPLAS'12 exhibition has begun.

This issue of 'PLASTICS INDIA' has the dual role of being a curtain raiser for the Exhibition.

Indplas exhibitions have risen slowly but surely to become the largest plastic exhibitions in Eastern India. This is the result of our conscious effort to constantly increase the facilities and improve the overall experience of our customers.

The success of any exhibition depends on the participation by the exhibitor. At Indplas'12 we are providing a platform of business opportunities in the field of polymers to the plastic processing community as well as the consuming community to bring together on a platform, the processors, machinery manufacturers, additive manufacturers, service providers and other plastics industry associations.

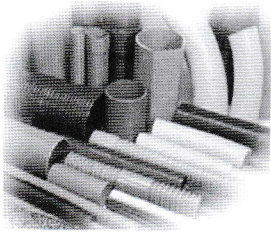
Indian Plastics Federation is also committed to Knowledge enhancement, and is in the process of setting up a Knowledge Centre near Kolkata. The work has already started. The finances for the Knowledge Centre will be partially met by the surplus of the exhibition. Hence it is my earnest request to all our members to come forward and participate in Indplas'12 either as a Sponsor or an Exhibitor.

Dear members, we have been missing you for quite sometime. We want you to be with us during Indplas. Please make it convenient to spare your valuable time, at least during the last 10 days till Indplas is over.

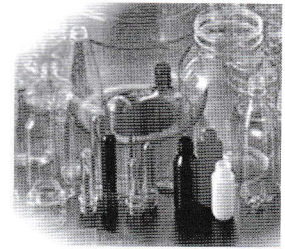
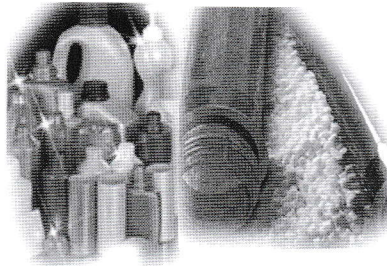
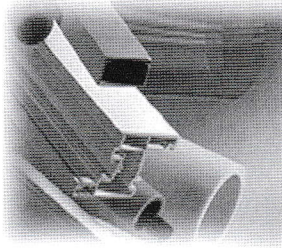
I invite all of you to come in large numbers with your business colleagues and explore the opportunities for growth and business that Indplas'12 presents. Let's work in unison to make Indplas'12 a tremendous success.

Yours truly,

Pradip Nayyar
Editor



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PRESIDENTIAL ADDRESS



Dear Members,

Greetings

Countdown for the **INDPLAS'12** Exhibition has begun. I am happy to see lot of members are coming forward and devoting time for success of **INDPLAS'12**.

Team **INDPLAS** under the Chairmanship of Mr. Amar Seth is working day & night to see **INDPLAS'12** sets new records. Special emphasis is being given to the comfort of the exhibitors. We expect visitors from all across the country. Teams from Assam, Gujarat, Madhya Pradesh, Mumbai have already confirmed their participation.

Members, you are requested to please come forward and lend your hand for the success of **INDPLAS'12**.

With warm regards

A handwritten signature in black ink, appearing to read 'Rajesh Mohta'.

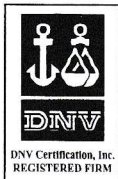
Rajesh Mohta

President

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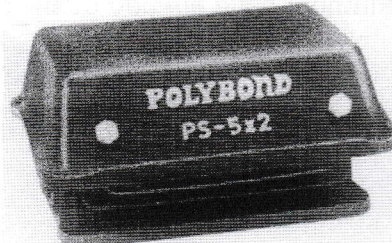
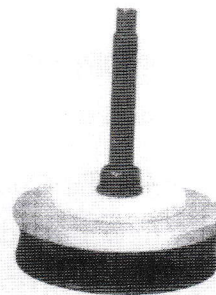
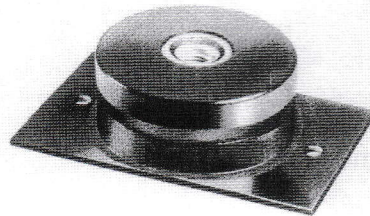
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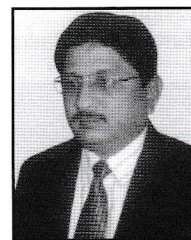
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SECRETARIAL REPORT



Dear Members

After a period of less rainfall in Kolkata and its suburbs a change of weather has taken place and the city has been getting good rain for a few days bringing down the rainfall deficit in the State. Our exhibition Indplas'12 is less than a month away and we hope that during this period Kolkata will be spared of rains that can spoil the effort of the organisers and exhibitors who have been putting in all their effort for many months for the success of the exhibition.

Members will be pleased to know that NSIC has informed IPF that units registered with SSI/MSME may apply for subsidy on stall rent in Indplas'12 under the market support scheme of NSIC. Verbally they have informed that the subsidy will be 60% and those owned by SC/ST 95% subject to budget approval of their Head Office. Members who have kept themselves away from renting stall in Indplas'12 because of the cost involved in participation may rethink of their earlier decision and participate in the exhibition.

A spot and site advertisement booklet has been printed. This booklet illustrates the various position in the exhibition venue where advertisement space is available. A limited number of such booklets have been printed and those desirous of advertising may contact IPF office for knowing the positions still vacant.

The Federation jointly with IPI (Kolkata Chapter) had organised a technical lecture on "Trends and Developments in Polypropylene Packaging" on 11th September '12 at its Conference Hall. The speaker was Shri U. K. Saroop, Vice President – Reliance Industries Ltd. The lecture was well attended.

A Seminar on "Countdown to Indplas'12 – Propelling Growth Thru Plastics" was held at Bengal Club on 13th September '12. The Chief Guest in the Seminar was Shri Manas R. Bhunia, Hon'ble MIC Micro & Small Scale Enterprises & Textiles.

Indplas'12 is a four day mega event commencing on 5th October at 10 am and concluding on 8th October at 4.00 pm. The inauguration of the exhibition will take place in the Mini Auditorium of Science City at 3.30 pm. Efforts are being made to bring some senior official from the Government to Inaugurate the exhibition. All our members are very cordially invited to join the inaugural function and also pay a visit to the exhibition. On line visitor registration can be done directly from our website www.indplas.in Pre-registration will help the visitor in reducing the registration time at the gate.

With best wishes,



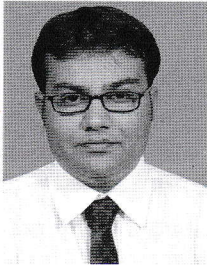
Pradip Nayyar
Hony. Secretary

Injection Moulding Machine Selection Based on Performance

Hardik Patel

Design Dept.

Ferromatik Milacron India Pvt. Ltd.



Abstract

While choosing an Injection Moulding Machine, a buyer would be concerned about lot of factors like cost, productivity, after-sales-support, brand etc. But now a days one more factor which has attracted much attention is ENERGY CONSUMPTION of the Machine. Industrial motor-driven systems consume more than 60% of global manufacturing electricity annually which offer one of the biggest opportunities for energy savings. The International Energy Agencies estimate that up to 7% of global electricity demand could be saved by more energy-efficient motors and motor systems. At present, both markets and policy makers tend to focus exclusively on individual system components, such as motors or pumps. Industry has significantly improved its energy efficiency in recent decades. But industry's total energy use continues to grow as a result of continuing large increases in the volume of production. As a result, modest energy efficiency improvement rates will not be sufficient to stabilise or decrease the sector's energy demand in absolute terms. In order to make significant reductions, ambitious energy saving measures need to be implemented.

Europe's Association for Plastics and Rubber Machinery Manufacturers (EUROMAP) has developed certain standards which defines the energy efficiency & performance level of Injection Moulding Machines to provide transparency to both manufacturers & buyers for the purpose of comparison analysis and later to choose the suitable Machine.

Introduction

Among all the standards defined, Euromap 4, 6 and 60 are the most demanding now a days for performance based selection. You will find the comparison based on these three standards among the different varieties of Injection Moulding Machines which run on the concepts of Hydraulic, Hybrid and All electric technologies in this article.

Euromap 60 recommendation helps the manufacturers of Injection moulding Machines to determine the **Energy consumption** of their Machines under defined conditions. For this purpose, three different test cycles were defined, covering typical applications of Injection moulding Machines.

Euromap 6 defines the **Drycycle time** of the Machine under specified conditions. A buyer can judge the Machine's production capacity based on this standard.

Euromap 4 provides the actual **Injection efficiency** of the Machine. This standard defines the Machine's Injection capabilities for the comparison purpose.

Apart from these the article also include **various analyses done to obtain the benefits of all electric and hybrid servo Machines over conventional hydraulic Machines.**

Euromap Comparison

Chart 1 determines the comparison of energy consumption based on Euromap 60 among the different varieties of Injection Moulding Machines by means of motor/pump technology. From the analyses it was observed that the energy consumption of an all electric Machine was 65% less compared to conventional hydraulic Machine with fix delivery pump driven by induction motor, 34% less compared to the hydraulic toggle Machine with electronic variable delivery pump driven by induction motor, 13% less compared to a hydraulic ram type servo Machine and only 7% less compared a servo Machine with the toggle mechanism along with Injection on linear motion guideway which has created a little tough competitive environment for all electric Machines where Machine cost and energy consumption are the prime concerns for a buyer.

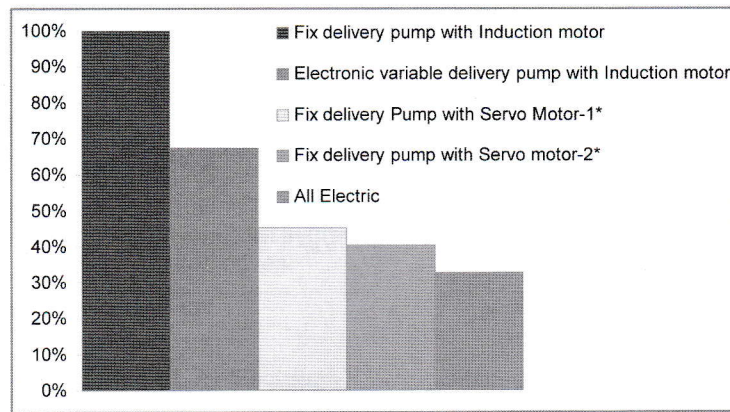


Chart 1 - Euromap 60 energy consumption

* 1 is a Hydraulic ram type Machine with Injection on guide rods.
2 is a Toggle Machine with Injection on linear motion guideway.

Chart 2 provides the comparison of Euromap 6 drycycle times. From the chart it can be concluded that if fast cycling is the first priority, all electric Machines are there for the buyers. All electric have 10% faster Euromap 6 cycle time compared to Hydro mechanical toggle Machine and 35% faster than hydraulic ram Machines.

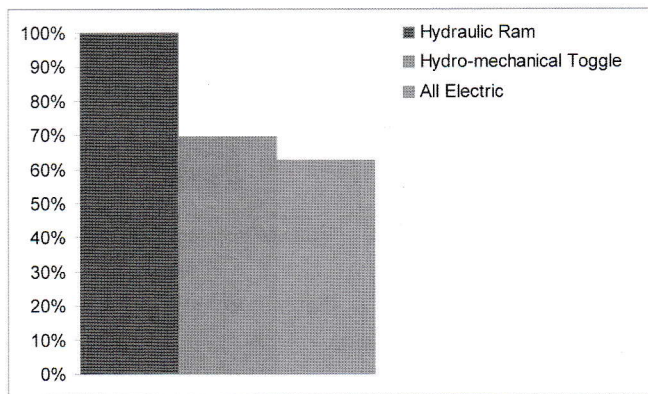


Chart 2 - Euromap 6 drycycle time

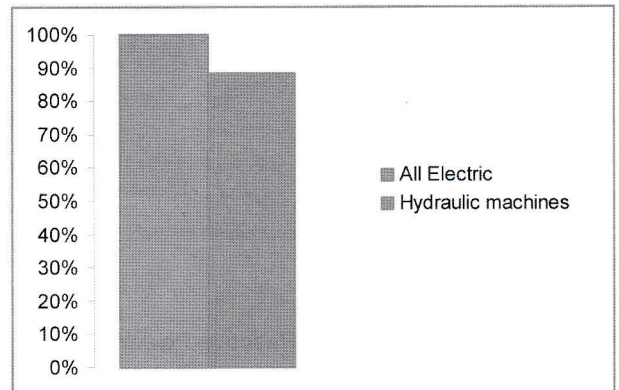


Chart 3 - Euromap 4 Injection efficiency

Chart 3 describes the losses-capabilities of the system based on the Euromap 4 comparison done among the different Machines. From the chart it can be easily understood that all electric Machines provide highest level of Injection efficiency compared to rest of the Machines. The co-efficient of Injection efficiency for all electric Machines remains higher by 10% to 20% compared to hydraulic & hybrid servo Machines. This indicates that when it is about least losses or highest capabilities required in the system, all electrics stand first.

Functional Consistency

The previous topics described that all electric Machine has an edge over hydraulic and hybrid Machines in the areas of energy consumption, production rate and system capabilities/losses. Apart from this they also provide best consistency in the major functions compared to its rivals. Chart 4(a) & (b) describes the consistency of cycle time in all electric and hydraulic Machines respectively. It can be seen that all electric showed 0.0% inconsistency in cycle time and the same for a hydraulic Machine was 0.8%. The same superior consistency is maintained in all electric Machines for rest of the functions like timings of mold closing-opening, Injection, ejection etc.

Positional Accuracy

Not only the functional consistency but the positional accuracy is also at the highest level in all electric among all Machines. Chart 5(a) & (b) shows the Injection shot size accuracy in all electric and hydraulic Machines respectively. All electric had 0.0% inaccuracy in the Injection shot size where as for a hydraulic Machine it was 3.5%. The same difference can be observed in the mold opening and ejector positions.

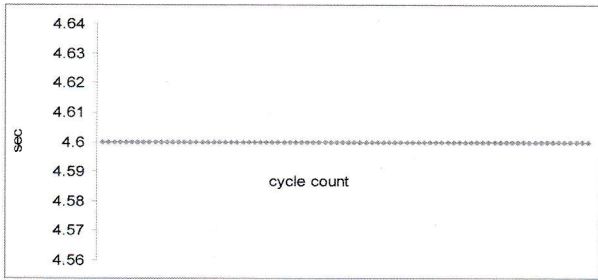


Chart 4 (a) - cycle time consistency in all electric

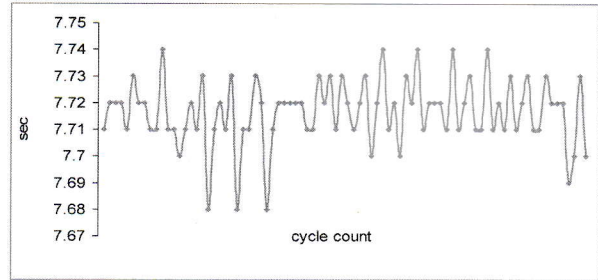


Chart 4 (b) - cycle time consistency in hydraulic

Both the functional consistency and position accuracy have direct effect on product. Poorer these two factors, poor will be product mass consistency. Hence the above analyses prove that all electric have best consistency in product mass also.

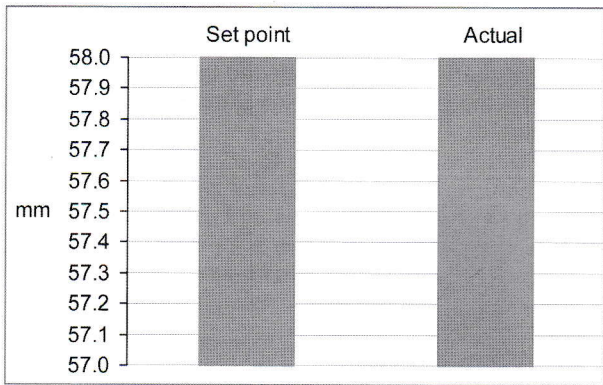


Chart 5 (a) - Positional accuracy in all electric

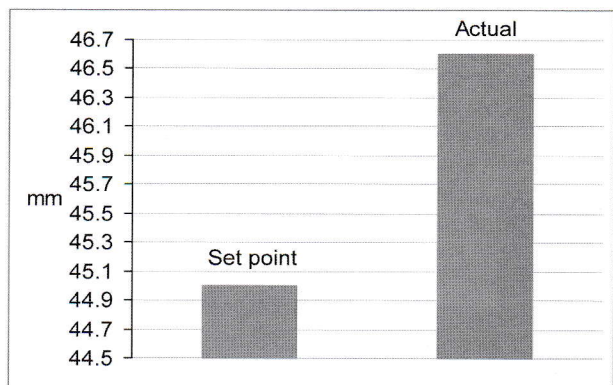


Chart 5 (b) - Positional accuracy in hydraulic

Power Factor, Generation of Reactive Power & Life of Electrical/Electronic Components

As it's well known that induction motors are one of the biggest reasons for making power factor poor and generating high amount of reactive power (kVAR) which in turn increases the current demand and results in reduced life of electrical & electronic components. Due to this disadvantage they also demand higher amount of Apparent power (kVA). In all electric and hydraulic Machines driven by Servo motors and drives which themselves correct the power factor, reduces the generation of kVAR and hence lowers the current & kVA demand. Chart 6 shows the kVAR generation for a complete cycle in a hydraulic Machine driven by induction motor and a servo Machine. It was observed that a servo Machine generates approx 90-95% less reactive power & have approx 30-35% higher power factor compared to an induction motored Machine. Hence a buyer can survive from the penalties of poor power factor & exceeding demand loads as well as can reduce the capital cost of load demand significantly with the servo driven Machines.

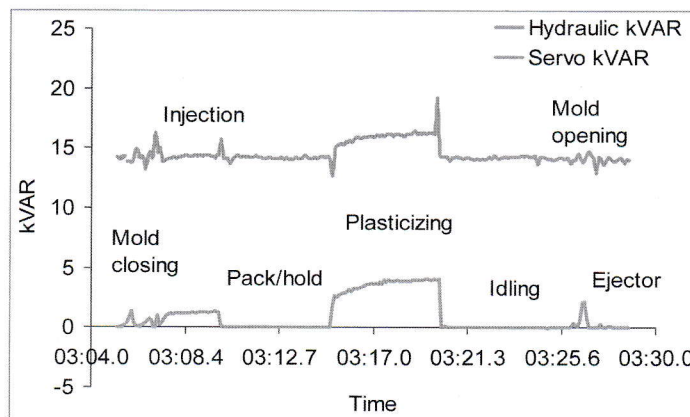


Chart 6 - Reactive power (kVAR) generation

Summary

To conclude, Hydraulic Servo & All Electric Injection Moulding Machines are superior to the Conventional Hydraulic Injection Moulding Machines. Pollution Reduction is the additional benefit of Servos and All Electrics to Environment (Reduction of 1kWh results in less emission of 0.4-0.9kg of CO₂).

Although the factor, a buyer would be concerned about these two types of machines is cost. Though the hydraulic servo machines have become closer to the conventional hydraulic machines in terms of cost, all electrics still have a scope for reducing their cost to compete down its alternatives.

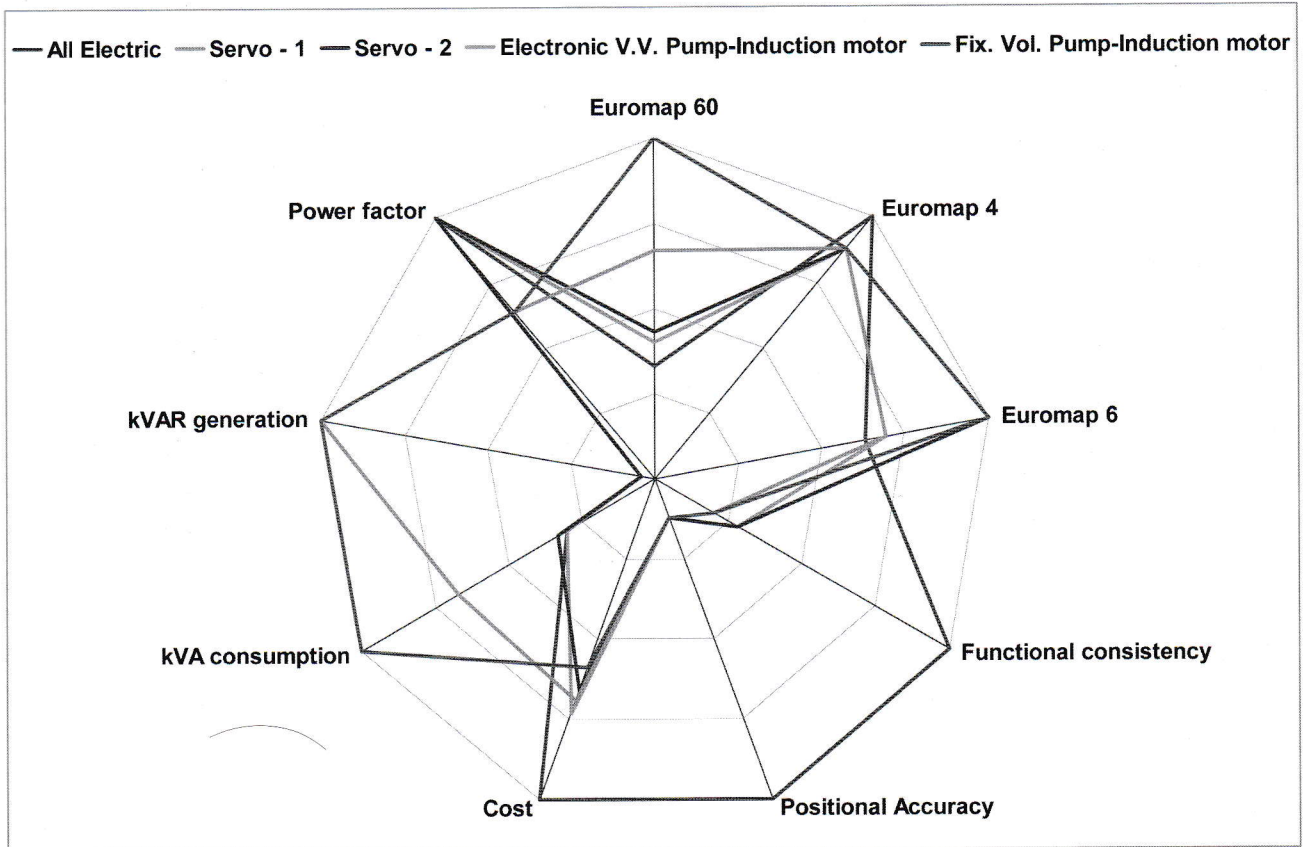


Chart 7 - Radar Chart

*Servo-1 is a servo driven Toggle Machine with Injection on linear motion guideway.
 Servo-2 is a servo driven Hydraulic ram Machine with Injection on guide rods.*

Apart from the benefits described above, the all electric machines have few more advantages like no oil consumption and oil maintenance, suitable for clean room applications-specifically for medical applications, least start-up times because no oil means no need to wait for oil preheating, less heat radiation, utility saving like cooling water, chillers, oil filtration units and hence an important benefit - least environment impact.

The **Radar Chart** in Chart 7 explains a summarised analysis which clears the standing of each type of Machines. This chart can be one of the important references for a buyer to choose the right Injection Moulding Machine.

ENVIRONMENT / BIO-PLASTICS / RECYCLING

Recycling of Non-Bottle Rigid Plastics Soars 72 Percent in Single Year



Recycling of non-bottle rigid plastics soars 72 percent in single year

The American Chemistry Council (ACC) has released a new report showing a significant increase in the collection and recycling of non-bottle rigid plastics in the United States. Prepared by Moore Recycling Associates Inc., the report found that, in 2010, nearly 820 million pounds of post-consumer rigid plastics were collected for recycling nationwide, an increase of 72 percent from 2009 and 154 percent since 2007.

The category "non-bottle rigid plastics" includes nondurable items (or packaging), such as dairy and deli tubs, lids, yogurt cups and similar food containers, and durable items, such as pallets, crates, carts, 5-gallon buckets and electronic housings. The collection and recycling of non-bottle rigid plastics is relatively new and calculated separately from plastic bottles, which have been widely recycled in the United States for decades.

"We are thrilled to see a rapid increase in the recycling of rigid plastics," says Steve Russell, vp of plastics for ACC, "and given the strong trends in commercial

participation, consumer access and simplified collection practices, we are very optimistic about continued growth."

Of the 100 largest U.S. cities, the number of cities collecting rigid plastics in addition to plastic bottles doubled in just three years growing from 29 in 2008 to 59 in 2011. This means far more consumers have convenient access to recycle their rigid plastics. In addition, many communities are shifting to "single-stream collection," whereby residents are able to place all of their recyclables in the same bin. Simplifying the process has been shown to greatly increase consumer participation in recycling programs.

The report also notes that robust growth in the recycling of rigid plastics in the commercial sector and strong pricing and demand for recycled plastic materials have helped to spur growth in this category. According to the research, among the five major types of recyclable materials, plastic scrap has the highest economic value per ton with the single exception of non-ferrous metals.

The plastics collected in the "non-bottle rigid" category comprise primarily polypropylene (PP) and high-density polyethylene (HDPE) as well as lesser amounts of other/mixed resins, polyethylene terephthalate (PET) and low-density polyethylene (LDPE).

"Recycling is a clear example of success inspiring success. The more often consumers recycle their plastics, the better our chances of helping people to see used plastics as a valuable resource that should be recycled whenever possible." Russell adds.

Source: www.packagingdigest.com

Greener Bottle Made from 20 Per Cent Sugarcane Waste

Volvic Natural Mineral Water has launched a new Greener bottle made partially from sugarcane waste. It is a 100 per cent recyclable Polyethylene Terephthalate (PET) plastic, which uses renewable plant material.



The new Volvic 50-cl Greener bottle contains 20 per cent plant material, reducing the amount of non-renewable material needed to create bottle. It will have 38 per cent lower packaging carbon footprint and 16 per cent lower total lifecycle footprint.

This reduction is achieved by using 25 per cent recycled plastics from previously used bottles and new plant-based plastics-BioPET. BioPET is created by combining PET with fermented and dehydrated sugarcane waste product derived from production of sugar from sugarcane.

Danone Bags Bioplastics Award 2011

The sixth Bioplastics Award 2011 for the first time was awarded exclusively by the unique industry organ Bioplastics MAGAZINE to Danone GmbH during the sixth European Bioplastics Conference in Berlin.



The annual Bioplastics Award was established in 2006 by the English trade publication European Plastics News. It recognises the special role played by a brand owner or single individual and acknowledges the contribution made by companies, products or services to further development of bioplastics by way of specific innovation or imaginative marketing concepts.

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is the first ever Biaxially-Oriented Polypropylene (BOPP) film with tactile properties that endow printed matter with a unique finish and sharper images than ever before.

Soft Touch® metalized provides printed matter with a metalized finish that gives a textured visual effect and even a holographic sensation combined with the smooth and velvety *Soft Touch*® feel. Its success lies in the fact that end customers are able to differentiate their products from those of their competitors because they supply graphic supports that are pleasing to touch and visually unique.

Anti-Scratch (also BOPP) provides products with effective protection because of its excellent scuff resistance and exceptional Ultraviolet (UV) ink adhesion and hot stamping properties. Due to the special treatment that it undergoes, the final result can be cold stamped and considered as a valuable alternative to matte acetate.

All products are available in an oxo-biodegradable version that breaks down within a period of less than 18 months due to the action of the air, temperature and UV light. All products include a version capable of adhering to liquid products or incorporate a thermo-lamination layer.

EU May Go in for Plastic Bag Bans

MORE than 70 percent of people surveyed in the European Union support a ban on plastic bags.

The survey was done to explore options to reduce the use of plastic bags and how to improve the requirements of biodegradability under EU law, according to a news release.

More than 15,500 responses were gathered by the European Commission, which represents the general interest of the EU and proposes, implements and enforces legislation.

Tide turns against bags in Europe

By Henry Leineweber, Resource Recycling

The verdict is in most Europeans hate plastic bags. At least, that's what the findings of a six-month survey conducted by the European Commission suggest.

Approximately 15,000 Europeans responded to the EC's request for comment on how to best reduce the 500 plastic bags consumed by the average EU citizen over the course of a year. Over 3.7 million tons of plastic bags were produced in Europe in 2008, the most recent year that data is available.

By a wide margin, Europeans favor some type of regulation for plastic bags. Approximately 78 percent of those surveyed favor implementing regulation at the EU level. As to what form those regulations should take, 71 percent would support an outright ban on plastic bags and approximately 62 percent say pricing measures (fees or taxes) would be effective in reducing the number of plastic bags consumed.

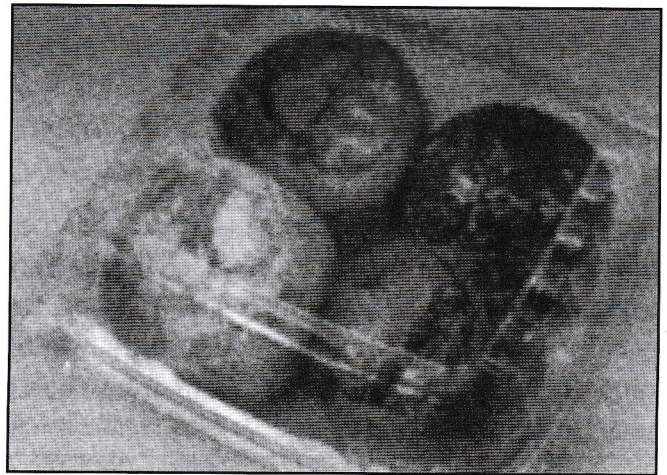
The European Commission is considering an EU-wide ban in response to uncertainty over whether individual bans by member states are permitted under EU law. Italy's 2011 ban on non-biodegradable plastic bags was challenged on these grounds by the plastic bag industry in Europe.

Elsewhere, attempts to address plastic bags have been scattered, with some countries levying taxes on bags and others imposing fees that go to cover the cost of plastic bag collection and recovery. In most countries, plastic bags are unregulated, but the strong popular opinion against them is prompting many countries to consider regulation.

Before that happens, the EC will release its recommendations this spring. Early indications are that some form of regulation and fee is likely, although any Europe-wide proposal would still have to clear several public-comment and legislative hurdles, delaying the implementation of any action in the near-term

Masterbatch Boosts PLA Melt Strength

Teknor Apex has introduced a new melt-strength enhancer in masterbatch form to increase the pull force that can be applied to polylactic Acid (PLA) by 300-500 per cent over a wide range of drawdown ratios. Thus, higher throughputs in extrusion and



thermoforming become possible, while scrap rates are reduced.

Terraloy MB-90001 A1 melt strength enhancer broadens the processing window of PLA in cast film and sheet for clear end products like clamshell containers used in product packaging, food service takeout etc.

In thermoforming clamshell containers, some force is needed to force a hot sheet of plastics into a mould, and the deeper the mould cavity and the sharper the corners, the greater will be the force needed to fully shape the sheet into a finished container.

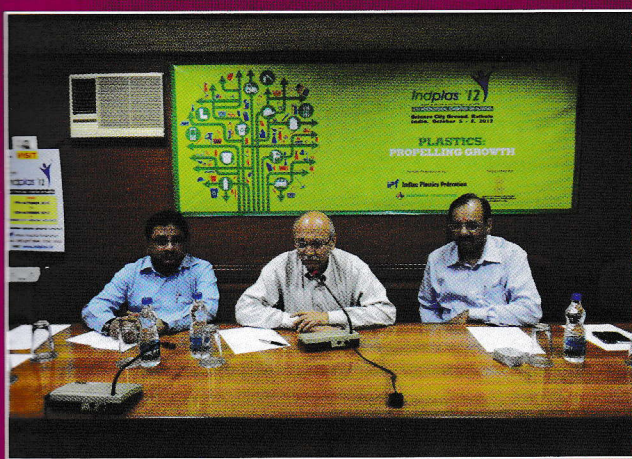
Coca Cola Invests in Three Bio-Based Companies

Coca-Cola Co has invested in three bio-based companies in an effort to accelerate the development of a PlantBottle made entirely from plants. The three companies include Virent Inc, which makes bio-based feedstock, i.e., Bio-Form X for paraxylene; Gevo Inc, which has developed a 100 per cent renewable iso-butanol – a building block for paraxylene; and Avantium Research and Technology whose YXY chemical catalytic technology has led to the development of a new bio based plastic i.e., Poly-Ethylene Furanoate (PEF) to make 100 per cent bio-based bottles that could be a replacement for today's Polyethylene Terephthalate (PET) bottles.

Contd. to Page 23

GLIMPSES

AN INTERACTIVE SESSION



An interactive session with Mr. Kamal P Nanavaty of Reliance Industries Ltd. was held on 27th August, 2012 at IPF Conference Hall along with members of the federation. The session was grand success.



PRESS CONFERENCE AND INDUSTRY MEET

A Press Conference and Industry Meet was held at Patna on 3rd September '12 where representatives from all major newspapers and electronic media attended. The event was very nicely covered in the local media. In the morning on the same day an investors meet was organised by Indian Oil Corporation Ltd wherein our Past President Shri K. K. Seksaria along with Hony. Secretary Shri Pradip Nayyar and Shri Kamlesh Barai represented the Federation. The Chief Guest in the meet was the Hon'ble Deputy Chief Minister of Bihar Shri Sushil Modi.



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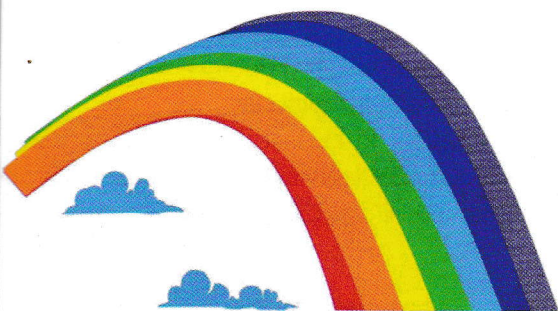
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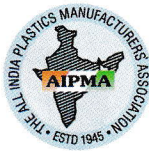

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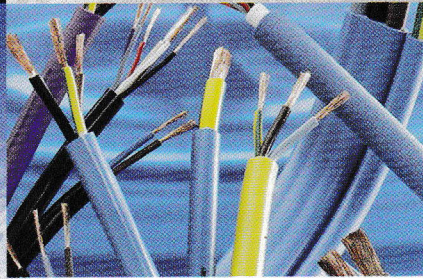
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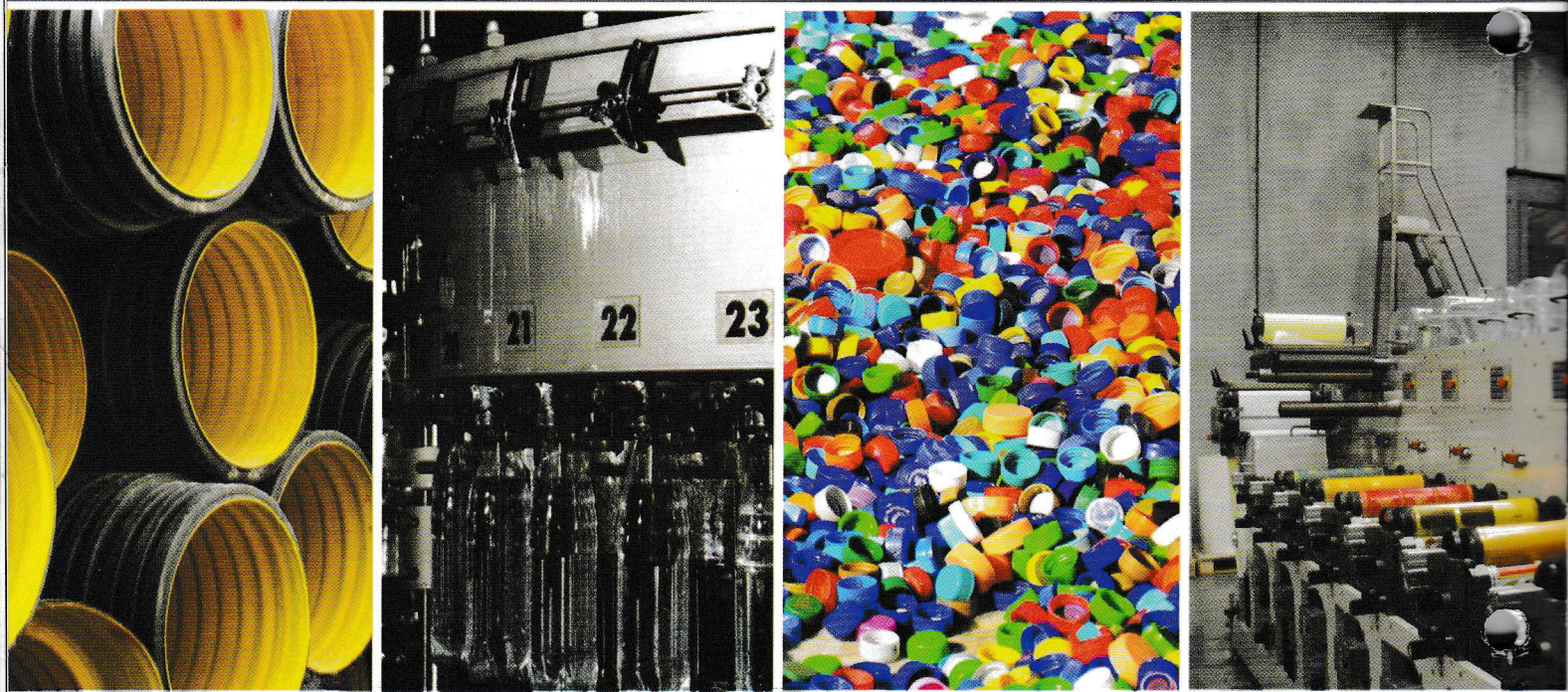
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RAW MATERIALS / NEW APPLICATIONS

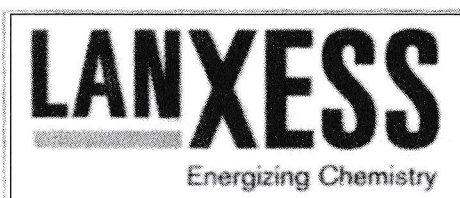
Global LLDPE Demand is Moving Steadily Forward

The polyethylene linear low density (LLDPE) demand on the global market is moving steadily forward-its growth is driven largely by the developing LLDPE industries in the countries of Asia-Pacific and Eastern Europe, as per Merchant Research & Consulting Ltd. The application share of LLDPE that belongs to the Asian region makes up approximately 42% and is forecast to lead the demand, while the mature markets of North America and Europe experience rather limited LLDPE demand increase and they are reported to have reached the market saturation levels. Therefore LLDPE capacity additions are restricted on these markets. The global consumption volume of LLDPE is projected to increase by 4-4.5% annually through 2017. Large input in the demand rise belongs to the packaging and construction industries. Moreover lucrative capacity additions scheduled for the developing markets are sure to further drive the LLDPE industry growth.

Lanxess Quarter Results Exceed Expectations

LANXESS achieved a record third quarter in 2011 due to ongoing strong demand, especially for its synthetic rubber and high-tech plastics. The German Specialty chemicals company also reiterated its full-year outlook for EBITDA pre-exceptional to grow about 20 per cent year-on-year, and exceed the one billion Euro mark for the first time in the company's history.

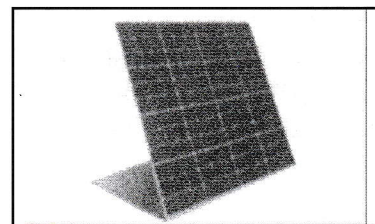
In India, LANXESS achieved sales of about € 65 million in



the third quarter, registering a growth of 52 per cent year-on-year. India is a key pillar of the BRICS (Brazil, Russia, India, China and South Africa) strategy that LANXESS pursues and has been performing consistently.

SABIC's Lexan* EXL Copolymer Boosts Design Freedom for Miniature Photovoltaics

SABIC's Innovative Plastics has launched a new, high-performance Lexan* EXL copolymer resin that addresses the trend to miniaturization of



photovoltaic (PV) connectors and junction boxes. The enhanced electrical and flame-retardant performance of new Lexan EXL resin grade enables designers to miniaturize the entire system by creating thin-walled parts, moving conductors closer together and integrating junction box systems-reducing solar energy costs and increase efficiency. New Lexan EXL resin helps customers strengthen their competitive footing by contributing significantly to benefits of PV systems and accelerating the move to solar energy.

Teijin Materials Chosen for Largest Composite Building in the World

The new facade of the Stedelijk Museum is becoming more noticeable by the day. A large part of the panels are already in place in what will eventually become known as "The Bathtub". After coating, the white and seemingly floating construction, with its sleek finish and without any seams or details, will be the counterpart of the adjacent historic brick building from the 1895. The Japanese fibre manufacturer Teijin produced and donated the Twaron (aramid fibre) and Tenax (carbon fibre) for the composite used to create the facade.

An analysis provided by the engineering firm Solico showed that an optimal solution would consist of a sandwich construction. The construction consists of an inner skin and outer skin of a composite laminate of resin, strengthened by Twaron and Tenax fibres. Where the resin expands as the temperature rises, both Twaron and Tenax fibres, due to their negative longitudinal thermal expansion coefficient, behave

oppositely. The result is a composite panel with minimal thermal expansion.

The composite for the seamless façade of 100 meters expands by only 1 mm per degree Celsius temperature rise. The same facade based on a fiberglass composite or aluminum would expand almost two and a half times as much.

For the production of the panels, Teijin provided Twaron and Tenax fibres to Holland Composites. A unidirectional fabric was produced from the fibres as an intermediate product.

Teijin

Tel: +81 33506 4055

Email: pr@tweijin.co.jp

Web: www.teijin.co.jp

VDMA Raises its 2011 Plastics and Rubber Machinery Growth Forecast Further

The recovery that began in the last quarter of 2009 was sustained in 2011. The growth in incoming orders for German plastics and rubber machinery continued into the third quarter. On that basis, VDMA is raising the sales forecast for the current year from 18 to 22%. As a result German manufacturers' sales are set to rise to a new all-time high of just under € 6 billion euro in 2011. Between January and September, new orders increased by 15%. Orders from customers in Germany rose by 13% year on year, while those from abroad recorded a 16% increase over the same period. However, based on last year's very high level, the rates of growth in incoming orders have slowed down.

German exports to India during the period January to September 2011 amounted to € 125.3 million, which is an increase of 44.8% compared to the same period of the previous year. India ranks 4th behind China, the USA and Russia in the list of most important destinations for German plastics and rubber machinery. The worldwide exports of plastics and rubber machines to India in 2010 reached a total of € 565.3 million which is an increase of 16.6% compared to the previous year. As in preceding years, Germany remains No. 1 of the most important suppliers to plastics and rubber processors in India with a share of 25% of total exports, followed by China (21.2%) and Taiwan (11.7%).

BOROUGE INNOVATION CENTRE

Labotek Chosen as Materials Handling Supplier for Borouge UAE Innovation Centre

Borouge has ordered a complete Labotek materials handling system for the pipe extrusion department in its new Innovation Centre in Abu Dhabi, United Arab Emirates.

The Labotek system comprises material debagging containers, drying systems, material conveying systems, mezzanine constructions and turnkey installation and training.

The system has been tailored in close collaboration with the Borouge technical team and the design allows for flexible handling of raw materials to be used on the three extrusion lines, covering both mono layer and co-extrusion in HDPE, LDPE, PPHM or PPR materials from leading suppliers in the field. The system will be used in the development laboratory in Abu Dhabi for different tests and development projects.

Labotek is one of Europe's leading producers of ancillary equipment and centralised systems for the plastics industry.

Labotek A/S

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Ray-Ran: Supplying Equipment for Borouge Innovation Centre

UK-based Ray-Ran Test Equipment is working with a Korean company for supplying equipment to the Borouge Innovation Centre project in the UAE.

Ray-Ran can offer a wider portfolio than most other test equipment manufacturers worldwide.

Ray-Ran's product range starts with instruments to test raw materials in pellet, flake or fibre form for bulk density testing using density balances or columns and the testing on the MFI or MVR of materials using the 6 MPCA melt flow tester.

Sample preparation is another area where Ray-Ran excels by manufacturing a range of equipment to prepare samples from either the raw material or sheet form like the small injection molding apparatus, which

will mould small samples like dumbbells etc. from pellets and flakes, or the cutting presses, which will cut samples from sheet materials. For thicker sheets over 10 mm thick or pipes up to 100 mm thick, the group offers CNC milling machines.

Finally, Ray-Ran also manufactures a range of machines to test the samples and finished products, such as the Izod or Charpy impact tester, static and dynamic friction for films and foils, tensile tester for elongation or compression, and softening point and heat deflection with the HDT/Vicat equipment to name but a few.

Ray-Ran Test Equipment Ltd.

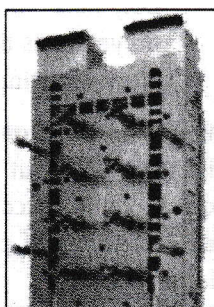
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New Ultra Sidegate Hot Runner by Husky

Husky Injection Molding Systems has introduced new Ultra SideGate™ hot runner technology. It is designed and optimized for deep draw parts, e.g., pipettes, syringe barrels and other small parts. It allows customers to direct gate parts that would otherwise require gating with a cold runner, making this new technology particularly valuable in manufacture of parts where quality and gate vestige are critical.



Ultra Side Gate allows for high-cavitation moulds with a small footprint, while providing outstanding gate quality and offering mould makers add design flexibility. By direct gating parts with Ultra Side Gate, moulders can achieve resin savings, faster cycle times and better performance across a wide temperature range. It offers exceptional gate quality leaving virtually no vestige on finished parts (~0.05 mm. vestige).

Engel Leads the Way in Middle Eastern Caps and Closures Market

With the e-cap machine, injection molding specialist Engel is setting completely new standards in the production of closure caps. The newly developed machine is positively geared to peak performance

and maximum output, although it is extremely economical in terms of energy and cooling water. It adeptly bridges this gap thanks to fully electric drive technology combined with a series of sophisticated features, such as the latest powerful, premium quality injection unit and fast closing drive.

The new Engel e-cap works in the name of efficiency. It produces nearly 130,000 closure caps per hour – with 96 cavities and a cycle time of 2.7 seconds. The fully electric machine also has a firm grip on running costs.

The Engel e-cap is the only fully electric solution for closure cap production on the market.

Engel

Tel: +43 50 620 3870

Email: andreas.leitner@engel.at

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Friul Filiere with Foam Fibre Composite Technology

Friul Filiere S.p.a. of Italy has been a leader in plastics for more than 30 years. Known as the only Italian company able to supply complete lines and toolings for the extrusion of Special Thermoplastic materials, the group offers technical competence and professionalism, which is combined with research and experimentation, as well as Italian design to offer a unique product. Friul Filiere's core business is the design and the realisation of complete plants for the extrusion of Special thermoplastic materials, accompanying customers throughout the development of personalised projects, from the initial request to the delivery of a turnkey project. Friul Filiere S.p.a. does the feasibility tests, plans the project, creates the material formulations, develops the extrusion technology, builds the machines and the toolings and carries out the final test, all inside its own factory.

At Friul Filiere, a team of experts design, build and test innovative toolings.

One of the group's latest developments is FFCTM (foam fibre composite) technology. FFCTM is a composite material consisting of the mixture of thermoplastic material with vegetable fibres and lightened with close cell expansion. It is "ultra -light" and it has excellent physical and mechanical characteristics,

which make it ideal for many applications in different areas, especially in furniture and furnishings or building and constructions fields.

In 2010, friul filiere s.p.a. patented the complete technology for the production of the ultralight composite material named FFCTM.

The innovative potential of FFCTM is the possibility to recycle not only the waste of plant fibres (jute, hemp, sugarcane, rice husk, etc.) but, most of all; thermosetting plastic materials scraps classified as special waste (rubber, urea, melamine materials, phenolic materials, MDF, varnishes, etc.).

Friul Filiere

Tel: +39 0432 961 811

Email: luna.artico@friulfiliera.it

Web: www.friulfiliera.it

Refrigerated Thermoforming

EUROCHILLER, based in Castello d'Agogna (Pavia, Italy), has been working for a number of years now with OEM's who use air cooling systems as a complement to their thermoforming lines for production of appliance components. The result is an assessment of the true value of the ABF direct expansion system and production increases of over 5%.

As an example, the application of these cooling systems in combination with a thermoforming machine for 2,000 × 1,000 mm. refrigerator cells has produced an increase in output from 92 to 97 parts / hour on all 3 work shifts.

The positive outcome in industrial applications demonstrates that use of refrigerated, dehumidified air at a controlled temperature ($\pm 0.20\text{C}$) can bring significant benefits also in the production of thermoformed packaging.

www.eurochiller.com

Plastics In Electronics

The universal insulator for the electrical and electronics industries, plastic materials can also be semi-insulating, semiconducting, and even fully electrically conducting. Leading edge examples INCLUDE:

- Electro active polymers (EAPs) change shape on the application of voltage.

- "Intelligent," Stimuli-responsive polymers can create an electrical circuit and act as electrodynamic sensors to detect and measure ambient conditions or work as actuators to produce required outputs.
- Flexible electronics (also known as "flex circuits") technology can be used for assembling electronic circuits by mounting electronic devices on flexible plastic substrates.
- Thin film transistors (TFT's) made from polythiophene, an organic semiconductor, are attractive candidates for sensor arrays because they can be easily arrayed with deposition methods like inkjet printing, and they have a rich chemistry that can be exploited to tune their sensor behavior.
- Polymer LEDs (sometimes called "light-emitting polymers" or "polyLEDs") technology utilizes polymers as the semiconductor material in LEDs (light-emitting diodes).

Polymers, the largest revenue segment of the chemical industry at about 33 percent of the basic chemicals dollar value (according to BCC Research), includes all categories of plastics and man-made fibers. The largest-volume polymer product, polyethylene (PE), is used mainly in packaging films and other markets within the US\$379 billion (in shipments) U.S. plastics industry. Conductive polymers and plastics are increasingly desired for a growing number of sophisticated end-uses.

Polymethyl methacrylate (PMMA), a transparent thermoplastic familiar to hockey fans as shatter-resistant Plexiglas barriers surrounding ice rinks, is also a nanotechnology tool used in the semiconductor industry as a resist in the electron beam lithography process.

Polyphenylene vinylene (PPV) is the only conducting polymer that has so far been successfully processed into a highly ordered crystalline thin film, which makes it a candidate in many electronic applications such as LEDs and photovoltaic devices.

Polyaniline is among a family of conductive polymers with properties similar to some metals. A unique type of polymer because it is a semiconductor, polyaniline

can be used in applications ranging from intelligent windows to computer chips.

Demand for polymers and conductive polymers in the electronics industry is on track to grow from an estimated \$1.9 billion in 2010 to about \$5.9 billion in 2015, reports BCC Research. Most of the projected growth is attributable to conductive polymers.

Digital Transfer

The digital transfer decoration technology for plastics developed by GMC, headquartered in Modena (Italy),

is suitable for sealing cartridges, small packages and felt-tip pens.

Recently, the German company Ritter has adopted the digital transfer technology with dry polymeric toner to launch products with enhanced look on the market thanks to high definition multi-color images, also available in large sizes, while keeping production costs competitive. Specifically, the GMC system comprises a Digitron 6520 printing machine for digital toner printing on non-stick surfaces, and the Applitron 800 applicator, which transfers the images onto white or transparent PP, PE, and HDPE.

PACKAGING AND ENVIRONMENTAL IMPACT

Author: Christian Aigner, Marketing Manager Brückner Maschinenbau, Germany

The initiative "Save Food" estimates that per year approximately 50 % of the produced food for human consumption goes bad before it reaches the consumer. This intolerable situation can easily be improved by using proper packaging. Especially in third world nations the food protection against contamination could be drastically improved by using basic packaging made from glass, paper, aluminium or plastic.

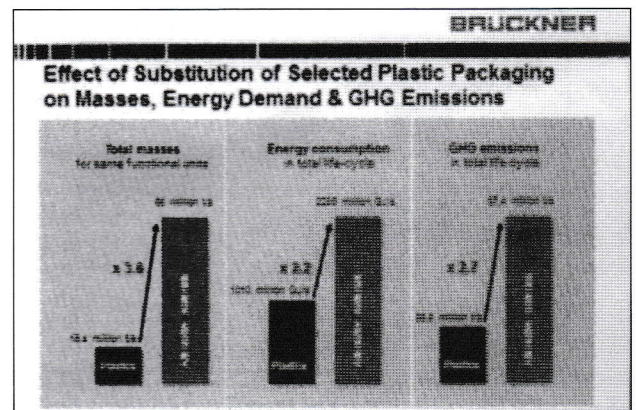
In highly developed countries but also in emerging markets the requirements are different. Due to the demographic changes and the increasing living standards, packaging must implement more functions than just protecting the goods. The packaging materials have to meet various other demands, e.g. for marketing (packaging design as a tool for differentiation) or convenience (easy to open, re-closable, microwavable). To fulfil this challenging requirements, flexible plastics packaging is one of the preferred materials.

It is characterised by excellent mechanical properties, impermeability to moisture and gas, high resistance to oils, fats and solvents as well as to heat and cold, dimensional stability, scratch resistance, attractive glossy appearance, high transparency and excellent convertibility and printability. But there is one more thing. Over the last five years, the sensitive topic "Sustainable Use of Resources" has become more and more important all over the world.

Compared to other packaging materials, plastic films can also score in this field. Much attention has

been given to a study from "denkstatt" (one of the largest consulting firms in the field of sustainable development in Middle and Eastern Europe), finding out that if plastic packaging would be substituted by other materials, the respective packaging mass would on average increase by a factor 3.6. Life-cycle energy demand would increase by a factor 2.2 or by 1,240 million GJ per year, which is equivalent 27 Mt of crude oil in 106 VLCC tankers or comparable to 20 million heated homes.

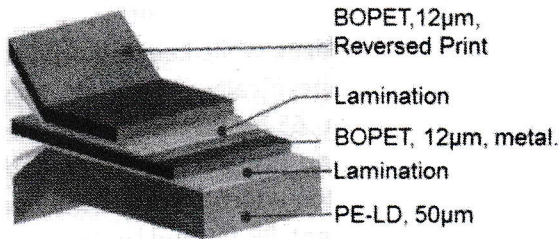
GHG emissions would increase by a factor 2.7 or by 61 million tonnes of CO₂-equivalents per year, comparable to 21 million cars on the road or equivalent to the CO₂-emissions of Denmark (Source: denkstatt, 2011).



Source: denkstatt, Product Sustainability, The impact of plastic packaging on life cycle energy consumption and greenhouse gas emissions in Europe, 07/2011

Today, packaging applications often consist of more than one layer. Additional material and energy

are needed to create such a flexible packaging compound. Reducing the complexity of these packaging applications is one of the major targets for film producers, converters and brand owners. In this context "functional film" is one of the key terms.

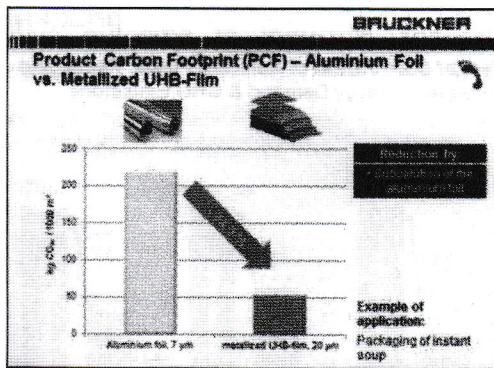


Example of a flexible packaging structure

Functional Films

At the technology center of Brückner Maschinenbau, the German world market leader for film stretching technology, raw material suppliers, film manufacturers and renowned institutes and universities are developing such functional films. One example for these R&D efforts is the UHB film (ultra high barrier). The target for the development of this metalized BOPP film was the substitution of aluminium foil in packaging applications with special barrier demand.

The main reason to replace thin aluminium foil with metalized BOPP ultra high barrier films: Thin foils have a thickness of 7 µm, whereas the aluminium coatings on BOPP films are in a thickness range of 40-60 nm. Considering the production process of aluminium foil a reduction of the carbon footprint by almost 75 % can be achieved.



Example: Ultra-High Barrier Metalized BOPP UHB Film

Main characteristics of this UHB-film: A very thin 0.5-0.8 µm surface layer of a so called "high surface energy polymer" results in a very strong bonding of the evaporated aluminium (PCF) to this film surface, among others due to a very high surface energy in the range

52-56 dyn. No surface treatment by e.g. corona or flame is necessary to reach these surface energy values. By using standard optical densities of about 2.3 exceptional OTR values down to 0.15 cm³/ m² d bar have been obtained, the typical WVTR value is 0.2 g/ m² d. As the high surface energy polymer layer can be applied in thicknesses clearly below 1 µm a cost-efficient production is possible.

BRÜCKNER
Speciality BOPP Films: Ultra High Barrier

Substrate	Gauge
Metalized Surface	
High Surface Energy Polymer	0.8 µm
Aluminum Layer	0.8 µm
PP Core Layer	
Oil	2 µm
Capacities	1.2 µm
Total	2.6 µm

Highlights

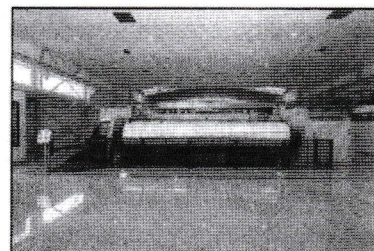
- Exceptional gas and aroma barrier
- OTR: 0.15 [cm³/m²dbar]
- WVTR: 0.2 [g/m²d]
- Excellent optics
- Excellent metal adhesion

Example: Ultra-High Barrier Metalized BOPP UHB Film

Such developments will meet the challenging demands of the packaging industry and the consumers regarding environment protection and sustainability. Ever since the beginning in 1960, Brückner's strategy has been to operate their own technology center for process and technological developments – more and more focussing on effective solutions for an environmentally friendly production of plastics packaging. Besides film developments Brückner has been optimising the potential for energy saving and – compared with 1990 – has achieved a 30 % reduction in energy consumption required for the production of oriented film. And this also means a reduction of CO₂ emissions.



Application – metallized barrier film



State of the art BOPP Production line

Bio-renewable chemicals market to grow at a CAGR of 22.8% in coming years

Increasing environmental awareness on the part of product manufacturers and the desire to reduce dependency on oil are the leading drivers behind the \$2.4 billion global market for biorenewable chemicals (BRC) in 2010. As per SBI Energy, this steadily growing market has experienced a compound annual growth rate (CAGR) of 14.8%, a growth trend that is going to increase as the world resumes a more normal production pace and new bio-based chemicals such as bioethylene come

to market. By 2015 the BRC market will be worth \$6.8 billion, a CAGR of 22.8% between 2010 and 2015. The largest region for BRC sales continues to be the U.S., which captured 21.6% of the BRC market in 2009. The platform biorenewable chemicals (PBC) glycerin and lactic acid make up the bulk of biorenewable chemicals being sold in 2010, accounting for 79.2% of the market. There is a large range in market maturity for PBCs, ranging from mature markets such as lactic acid to nascent markets for chemicals such as

succinic acid. Compared to the platform chemicals market, the intermediate biorenewable chemicals (IBC) market is much more nascent, particularly in relation to its potential. In 2010, IBCs accounted for US\$574.9 mln of the BRC market; however this will grow to US\$2.5 billion in 2015 and account for 37% of biorenewable chemical sales. The strongest growth will be for secondary chemicals such as polylactic acid (PLA), polyhydroxyalkanoate (PHA) and bioethylene that are used to manufacture bio-based plastics.

Danone wins Bioplastics Award

German business has won the Bioplastics Award 2011 for its "exceptional commitment" to the extensive use of bioplastics in the packaging of its dairy brand products. The judges particularly noted Danone GbmH's use of Ingeo polylactic acid in its Activia yogurt cups and Braskem biobased high density polyethylene in its Actimel yogurt drink bottles. Andreas Knaut, Danone's director of corporate communications, said: "We are very pleased about the award. A

highly valued acknowledgement like this is wonderful confirmation of our achievement over years of research, and of our commitment in the field of bioplastics "We must get away from our dependence on petroleum and focus on packaging materials that come from renewable resources. We therefore hope that the award will motivate other companies to select bioplastics. It is only in this way that we will be able to establish a full recycling system, for example for PLA, and make full use of the material's potential."

ONGC's petrochem subsidiary to plan US\$250 mln 7 year loan

According to reports from Bloomberg ONGC Mangalore Petrochemicals Ltd., a unit of India's biggest exploration company Oil & Natural Gas

Corporation has planned to borrow US\$250 mln in a seven-year loan. And if market sources are to be believed perhaps State Bank of India, is arranging the loan.

BP and IOC sign an MOU for 50:50 JV in Gujarat

UK-based British Petroleum (BP) and Indian Oil Corporation have signed a memorandum of understanding (MOU) to set up a 50:50 joint venture for a 1 mln tpa acetic plant in Gujarat. The plant will come up with associated gassification facilities for production of synthesis gas. The two companies await results of the feasibility report to confirm the exact details of the project, which is expected to be commissioned in 2015. The joint venture, will derive its technical prowess from the latest Cativa XP from BP while petroleum coke feedstock will be used from Indian Oil.

Elastogran Kanoo Polyurethane Systems changes to BASF Kanoo Polyurethanes

With effect from December 1, 2011, Elastogran Kanoo Polyurethane Systems LLC has changed its name to BASF Kanoo Polyurethanes LLC. However this will have no effect on the legal identity of the company, nor will it have any effect on existing agreements or contracts. Dr. Uwe Hartwig, Senior Vice President BASF Polyurethanes Europe said, "The name change is an important indicator of BASF's commitment to its European PU business and helps strengthen the BASF brand overall. With this we show clearly, that our

polyurethane System Houses are part of the global BASF Verbund. They enable us to offer our customers and partners all over the world the expertise and problem-solving skills that BASF has established due to its presence in many key industries." BASF Kanoo Polyurethanes LLC has extended its position significantly in the Gulf region since the 2008 joint venture between BASF and Kanoo which included the acquisition of the polyurethane business of Multi Chemical Est. in Abu Dhabi. In 2010 BASF Kanoo Polyurethanes LLC started successfully

the operation of the newly built System House in Dubai Industrial City. Dr. Joerg Schneider, Managing Director of BASF Kanoo Polyurethanes LLC, adds: "A key success factor for the business development is the ability to give our customers access to BASF's polyurethane technologies which are underpinned by more than 40 years' experience. As BASF continues to strengthen its position as the market leader for PU systems, this name change will ensure our professionalism and performance excellence are more closely linked with the BASF brand."

LyondellBasell plans to spend US\$1.5 bln on new plants and expansions

LyondellBasell Industries NV may spend US\$1.5 bln on new plants and expansions to add as much as \$1 billion a year to pretax earnings by 2016. Addressing the company's annual Investor Day in New York this month, CEO Jim Gallogly said that LyondellBasell is well positioned for the future. The company has had successive quarters of record results and delivered US\$5.5 bln of EBITDA over the last 12 months.

"The past 18 months have been a period of significant progress at LyondellBasell," Gallogly said. "We have rebuilt this company from the plant floor up. We have improved our cost structure, strengthened our balance

sheet and enhanced all aspects of our operations. The collective efforts and success of our employees around the world in implementing our back-to-basic strategy is proof we have

what it takes to become the premier commodity petrochemical company. We believe we have now earned the right to grow and are well-positioned for the future," Gallogly said.

Sinopec to invest US\$3.3 bln in a JV with Henan province to make olefins

Sinopec Group plans to invest US\$3.3 bln (21 billion yuan) in a joint venture project in Henan province by the end of 2011 to further tap into the coal-to-chemical sector. Sinopec Group will hold a 51% stake in the methanol-to-

olefins joint venture and the Henan government will hold the balance 49% to produce 1.8 mln tpa. In another similar project Sinopec will hold a 49% stake and the local government will hold 51%.

IRPC earmarks Bt70 bln to invest in various projects for next four years

IRPC has earmarked Bt70 billion to invest in its Phoenix, non-Phoenix and maintenance projects from 2012 to 2016, with revenue contribution from the Phoenix projects targeted to double to 60% from about 30% currently. According to reports the Phoenix Project is aimed to make IRPC a petrochemical leader in Asia by 2014. About Bt60 bln is for Phoenix and non-Phoenix projects and the remaining Bt10 bln is for maintenance. The biggest Phoenix project for IRPC is the expansion of propylene capacity by 420,000 tons to 740,000 tpa from the current 320,000 tons, which needs a budget of US\$990 mln (Bt30.8 bln). The first propylene expansion phase, on which IRPC has already spent about US\$90 mln to increase output

by 100,000 tons, started this year. The new capacity will come on stream in the Q2-12, taking IRPC's propylene production capacity to 420,000 tpa. The company will next invest US\$900 mln to expand propylene capacity by 320,000 tons by 2016. IRPC would allocate nearly Bt20 billion for investment next year. Most of the budget will go to capacity expansion for green ABS. It will also invest in the 2,500-rai Ban Kai Industrial Estate in Rayong, which is the green industrial estate that IRPC will co-develop with the Industrial Estate Authority of Thailand. IRPC will also benefit from the new capacity for propylene and treated distillate aromatic extract, which will be increased to 50,000 tpa from the current 20,000 tpa.

SABIC plans to set up resin engineering plastic compound plants in India and China

Saudi Basic Industries (SABIC) has plans to set up resin and engineering plastic compound plants in India and China. According to the release SABIC is the world's largest chemical producer by market value. Since most of its major markets are led by China and India, the company will save on transport costs and benefit from the lower fixed production costs

in China. In May, SABIC announced a memorandum of understanding with China Petroleum & Chemical Corporation (SINOPEC) to build a polycarbonate production plant with an annual capacity for 260,000 tons, to be operational by 2015. The petrochemicals giant is also looking at opportunities to buy local companies.

Sasol may divest from its operations in Iran

South African petrochemicals group Sasol has entered into talks to potentially divest its stake in Arya Sasol Polymers Company in Iran. Sasol has a 50% stake in Arya Sasol in joint venture with Pars Petrochemical Company of Iran. The venture produces ethylene and polyethylene. Sasol had said in a filing to the U.S Securities and Exchange Commission last month that there was a possible risk that sanctions may be imposed on the company by the United States, the European Union and the United Nations as a result of its investments in Iran.

BPCL to sign JV with LP Chemical

Bharat Petroleum Corporation Ltd (BPCL) is to sign a deal with UK based LP Chemical for its maiden foray into petrochemicals. According to reports negotiations are underway for the JV that plans to set up a petrochemical plant by 2015 at its Kochi refinery in Kerala. BPCL plans to invest about Rs 13,000 crore, while Rs 6,000 crore will be contributed by LP Chemical. Talks are also underway between BPCL and Kerala government for concession on the investment.

Sumitomo Bakelite to make India foray soon

Phenolic resin and molding compounds manufacturer Sumitomo Bakelite Co. Ltd. of Tokyo is firming up plans for a foray into the Indian plastic industry. According to reports the company plans to set up a manufacturing base in India and is open to options for entering into the Indian market. Henny Van Dijk, executive officer of the company's High-Performance Plastics Europe

& India unit, said "It could either be a joint venture with [a] local partner or independent subsidiary," Sumitomo is likely to make an announcement of its plans soon. "We will make the decision either by the end of this year or in the first quarter of next" year, Van Dijk said. Phenolic resin is a key raw material used to make automotive parts for fuel systems, drivetrains, electrical motors and engines.

Wacker launches its Indian technical center in Mumbai

Munich based Wacker has launched its technical center in Mumbai. This center of excellence located in Goregaon, a suburb of Mumbai, includes laboratories, applications technology and test equipment for polymer dispersions for coatings and paint applications. These dispersions are needed for interior and exterior paints in the coatings industry. The expansion not only enables

Wacker to support its Indian customers to develop new and locally adapted formulations, but also encourages the exchange of know-how and promotes internationally recognized quality standards in India. The expansion has focused on dispersions based on vinyl acetate-ethylene copolymers used as binders for interior and exterior paints in the coatings industry.

Qatar and Shell sign agreement to build US\$6.4 bln petrochem plant

Qatar Petroleum and Shell have signed an agreement to build a petrochemical complex in Qatra at an investment outlay of US\$6.4 bln. Qatar Petroleum will hold an 80% equity interest in the project and Shell will hold the balance 20%. A joint feasibility study has been conducted

by the two partners. The scope under consideration includes a world-scale steam cracker, with feedstock coming from natural gas projects in Qatar, a mono-ethylene glycol plant of up to 1.5 mln tpa, 300,000 tpa linear alpha olefins plant and an olefin derivative plant.

Rehau and Active Green to make profiles in India

Germany-based PVC window profile producer Rehau AG + Co. has entered into an agreement with a Hyderabad company, Active Green Windows Solutions, to set up a fabrication unit in Pashamylaram, India. According to Active Green, the plant has one line operating and plans to have a second on line soon. Active Green CEO PSLN Rao said, "We will remain focused on the Andhra Pradesh market [in southern India], with no immediate plans to cater the whole India market."

SABIC's molded automotive applications bags awards at 2011 SPE Automotive Innovation

Two automotive applications molded from SABIC's Innovative Plastics' broad portfolio of thermoplastic materials received top honors at the 2011 Society of Plastics Engineers (SPE®) Automotive Innovation Awards competition – including the coveted Hall of Fame award and the overall Grand Award. Gregory A. Adams, vice president, Automotive, Innovative Plastics said, “Innovative ways to produce parts on cars are an important factor for OEMs to maintain a strong competitive position in the automotive industry and effectively respond to global trends and challenges. We continually strive to deliver differentiated material solutions that meet customers' changing needs.

We are honored to be associated with so many industry leaders who are raising the bar in automotive application design. We are pleased that our materials are delivering added value to our customers and helping to enable innovation and breakthroughs in the industry.” The first all-plastic structural door-hardware module, also known as the SuperPlug®, from Inteva Products, LLC (formerly Delphi Interior & Lighting Systems), was the Hall of Fame winner. It replaced 40 separate metal parts with a single gas-assisted injection-molded part made with SABIC's Xenoy* 30-percent glass-filled polycarbonate/polybutylene terephthalate (PC/PBT) resin. The overall Grand Award winner

– also the Process/Assembly/Enabling Technologies category award winner – is the Ford Escape/Ford Kuga instrument panel made by Faurecia using Trexel MuCell® microcellular foam injection molding technology and SABIC® STAMAX® 20% long glass fiber (LGF) polypropylene (PP). This application reduces weight by 1 lb, reduces cycle time by 15% and lowers cost by about US\$3 per vehicle compared to an instrument panel molded with a standard injection molding process. The MuCell process uses less resin and energy than traditional injection molding, helping to increase the sustainability of the instrument panel.

Specialty packaging firm IntraPac building Indiana plant

Specialty packaging producer IntraPac Group Inc. is relocating its Swedesboro, N.J., plant to Lawrenceburg, Indiana. IntraPac started construction on a 80,000-square-foot facility in September and expects to be operational in the new locale in February 2012. IntraPac CEO Gary Ullman said in a news release “The IntraPac Group initiated a search for a new location for our laminate tubes business with the goal of providing a new first class facility to satisfy the growing needs of our pharmaceutical and personal care customers.” IntraPac is based in Mississauga, Ontario and the company makes bottles,

single- and double-wall jars, closures, laminate tubes, tin tubes, products with fluoropolymer coatings, and specialties for the personal care and pharmaceutical markets. Among its raw materials are PET, polypropylene,

low and high density polyethylene, and plastic laminates. Key technologies are blow molding, injection molding, extrusion, specialty coating, laminate tube production, decorating and assembly.

Harrington Industrial Plastics expands to Guam

Chino (California) based Pipe distribution firm Harrington Industrial Plastics Inc. has opened a 10,000-square-foot facility in Tamuning, Guam. According to a news release, the relocation of U.S. forces from Okinawa is requiring a

major expansion of the military and civilian facilities and infrastructure in Guam, with multi-billion dollar investments. The company expects to support that relocation by supplying corrosion resistant fiberglass, plastic and lined steel piping systems.

Press Clippings

आज, पटना, मंगलवार, ४ सितम्बर, २०१२

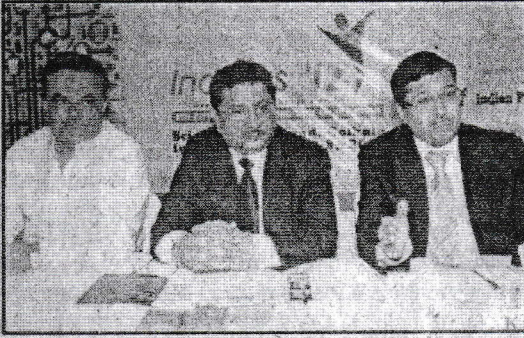
The Times of India, Patna
Tuesday, September 4, 2012

कोलकाता में होगा छठा अन्तर्राष्ट्रीय प्रदर्शनी

कई देशों के प्रतिनिधि भी लेंगे हिस्सा:सकसेरिया

(आज समाचार सेवा)

पटना। पूर्वी क्षेत्र में प्लास्टिक को प्रयोग बढ़ाने हेतु भारतीय प्लास्टिक फेडरेशन आगामी ५ सितम्बर से लेकर ८ से ८ अक्टूबर तक छठा अंतर्राष्ट्रीय प्लास्टिक प्रदर्शनी को आयोजन सायंस सिटी कोलकाता में करने जा रहा है। उक्त बातों की जानकारी आयोजन समिति के चेयरमैन अमर सेठ ने सोमवार को स्थानीय होटल में आयोजित संवाददाता सम्मेलन में दी। श्री सेठ ने बताया कि इस प्रदर्शनी में भारत समेत बांग्लादेश, भूटान, नेपाल, थाईलैंड, चीन, ताईवान, वियतनाम के प्रतिनिधि शिरकत करेंगे। इसमें बिहार के अलावे गुजरात के भी प्रतिनिधि शामिल होंगे। उन्होंने बताया कि देश में प्लास्टिक उद्योग से जुड़े लोगों को अपने उत्पाद की बिक्री बढ़ाने के लिए यह प्रदर्शनी एक बड़ा अवसर साबित होगा। वहीं के.सकसेरिया ने बताया कि पूरे विश्व में प्रति व्यक्ति ३० किलो प्लास्टिक को खपत एक वर्ष में होता है। जबकि भारत में प्रति व्यक्ति ८ किलो प्लास्टिक खपत होता है इसके अलावे पूर्वी भारत में प्रति व्यक्ति द्वारा एक वर्ष में मात्र साढ़े तीन किलो खपत किया जाता है बिहार में इस उद्योग से जुड़े लोगों के लिए यह एक सुनहरा मौका है। इस में ज्यादा से ज्यादा लोगों को हिस्सा लेना चाहिए। उन्होंने बताया कि भारतीय प्लास्टिक फेडरेशन कोलकाता के संकरलि में आईपीएफ नॉलेज पार्क का स्थापना करने जा रही है।



Exhibition on plastic goods: Amar Seth, chairman of the organizing committee of sixth International Exhibition on Plastics at Science City, Kolkata, said on Monday that the number of Bihari entrepreneurs participating at the exhibition, called Indplas '12, had increased substantially since their participation at last exhibition held in 2006. The four-day exhibition would begin on October 5. Visitors from Bangladesh, Bhutan, Nepal, Thailand, China, Taiwan and Vietnam would take part in the exhibition, Seth added.

प्रभात खबर, पटना
मंगलवार, ४ सितम्बर, २०१२

सूबे में प्लास्टिक इंडस्ट्री में अधिक संभावनाएं : प्रदीप

संवाददाता ■ पटना

प्लास्टिक के क्षेत्र में क्या परिवर्तन हो रहा है. इसके उत्पाद के लिए किस तरह का मशीन बाजार में है. इससे कितनी आमदनी हो सकती है. इन सब चीजों की जानकारी एक ही जगहों पर उद्यमियों व आम लोगों को मिलेगी. इसके लिए इंडियन प्लास्टिक्स फेडरेशन एवं प्लास्ट इंडिया फाउंडेशन के संयुक्त तत्वावधान में इंडप्लास 12, छठी इंटरनेशनल एक्जिबिशन का आयोजन किया जा रहा है. यह एक्जिबिशन पांच से आठ अक्टूबर तक कोलकाता स्थित साइंस सिटी में लगाया जायेगा. इसमें बांग्लादेश, भूटान, नेपाल, थाईलैंड, चीन, ताईवान, वियतनाम आदि देशों के प्रतिनिधि शामिल होंगे.



इंडियन प्लास्टिक फेडरेशन के सचिव प्रदीप नायर ने बताया कि बिहार में नये प्लास्टिक इंडस्ट्री की काफी संभावनाएं हैं. प्लास्टिक के वेस्ट का प्रयोग पावर जेनरेशन, फ्यूल, सीमेंट प्लांट में किया जा रहा है. कोलकाता के कल्याणी में बिटुमिन के साथ प्लास्टिक के वेस्ट का प्रयोग कर एक किमी सड़क बनाया गया. तीन साल बीतने के बावजूद यह सड़क पूरी तरह से ठीक है. कर्नाटक में इसका प्रयोग काफी सड़कों पर किया गया.

प्लास्टिक का उपयोग कम

विकसित देशों में जहां प्लास्टिक का प्रयोग कम है, वहीं भारत में यह औसतन 26 किलो है. भारत में यह आठ किलो है, जबकि पूर्वी भारत में तीन किलो है. वहीं, बिहार में यह मात्र दो किलो है. बिहार में इसका काफी स्कोप है. मोकै पर प्लास्ट इंडिया फाउंडेशन के कोषाध्यक्ष केके सेकसरिया, कमलेश डी बराइ आदि मौजूद थे.

Qaumi Tazneem, Patna
Tuesday, September 4, 2012


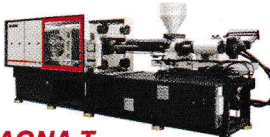

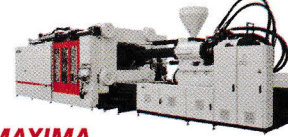

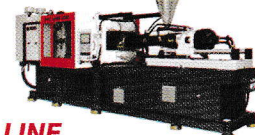
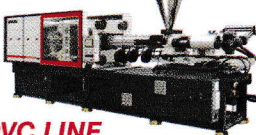
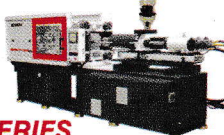
नाقص بجلی سپلائی کو لیکر 6 ستمبر کو نواوہ بند

نواوہ (روی سنہا) ضلع میں ناقص بجلی سپلائی کو لیکر 6 ستمبر کو نواوہ بند کے مد نظر آل پارٹی سنگھرش مورچہ کی ہنگامی میٹنگ طلب کی گئی۔ مورچہ کے بانی سابق وزیر اعلیٰ بلوچ پراساکی صدارت میں منعقدہ میٹنگ میں اس بند کو پورے طور پر کامیاب بنانے پر تبادلہ خیال کیا گیا۔ اس موقع پر انہوں نے کہا کہ نواوہ میں 24 گھنٹے کے دوران صرف ایک باؤ گھنٹے بجلی سپلائی کی جارہی ہے۔ انہوں نے کہا کہ نواوہ سے متصل بھار شریف میں 22 گھنٹے بجلی سپلائی کی جارہی ہے۔ انہوں نے نواوہ کے عوام کے ساتھ مجید بھادڑ سے جانے کا الزام لگایا۔ مورچہ کے سکریٹری دلوجا کے ریاستی نائب صدر انٹل میٹرو نے احتجاجی مارچ کو پراسن طریقے سے منعقد کرنے کے لئے اگلیوں کو مبارک باد دی۔ اس میٹنگ میں بااقتدارانے فیصلہ لیا گیا کہ 6 ستمبر کو نواوہ بند کے ایک دن نکل میں مورچہ کے ذریعہ مشعل جلوس نکالا جائے گا۔ بند کے روز ضلع میں گاڑیوں کی آمدورفت مکمل طور پر رخصت رکھی جائے گی۔ میٹنگ میں شرکت کرنے والوں میں کے دی پراسا، پرنس تناسنت، کار شریکت، عالم نواوہ عالم، ممتاز ملک، محفوظ عالم، جمال رامین، علاء الدین سمیت دیگر افراد کا نام نام ہے۔

Serving the Entire Gamut of Plastics Applications

- ◆ Automotive
 - ◆ House Ware
 - ◆ Furniture
 - ◆ Packaging
 - ◆ Medical
 - ◆ White Goods
 - ◆ Electrical, Electronics & Telecommunication (EET)
 - ◆ Consumer Goods & Industrial Components
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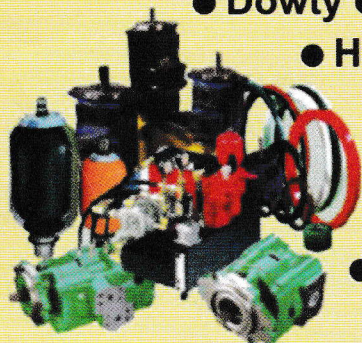


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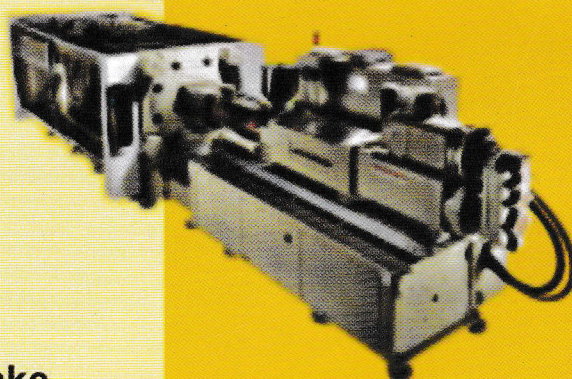
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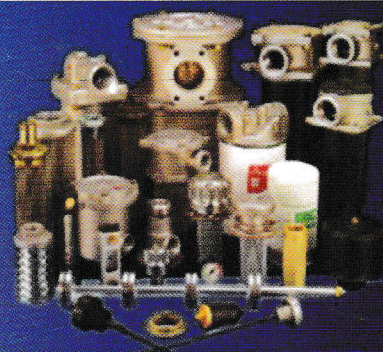
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