

Basell

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Patricia Vangheluwe

Basell Dimensions' new editor is Patricia Vangheluwe, Basell's recently appointed Head of Corporate & eBusiness Communications.

Patricia has extensive experience in Basell, ranging from technology, marketing, strategy and international operations to new ventures. Prior to her current responsibilities, Patricia was senior vice president in Basell's International division.

Looking east

This edition of Basell Dimensions highlights one of Basell's important strategic objectives – continued expansion to the East with the aim of serving our customers in the fast growing markets of central Europe and Asia.

As an international supplier of polyolefins and polyolefin technologies, Basell has always had a licensing and manufacturing presence in these regions. Its manufacturing operations cover 20 countries (see article on page 4) and it is the leading licensor of polyolefin process technologies in Asia.

Some very important recent developments have taken place on the sales and distribution front as Basell has also responded from an organisational point of view to meet the rapidly growing demand from these dynamic new economies.

Following the opening of the office in Moscow earlier this year, Basell's innovative online business channel, *Alastian* can

now be used by customers in Poland, Russia and other CIS countries to order Basell products over the Internet (see page 15).

At the same time, Basell is supplying Russia's largest piping manufacturer with resins to meet the needs of the region's many planned infrastructural projects (see page 8) and Basell's *Spherizone* technology has been selected for a large new Russian polypropylene plant.

In the Asia-Pacific region, Basell's expanding sales and service network has been further reinforced with the opening of an office in Malaysia (see page 18) while the choice of the *Spherizone* technology for a new plant in China confirms the widespread adoption of Basell's process technologies around the world.

Also in this issue are a number of examples of applications benefiting from Basell's commitment to continuous innovation in properties of resins to support new applications in sectors from

automotive to packaging. We also report on two recent recognitions from the automotive industry: Basell is the first polyolefin supplier to receive the FIAT Qualitas award (see page 17) and was the winner in the automotive interiors category at the 36th annual SPE automotive innovation awards (see page 14).

Behind all of these success stories is the policy of excellence in Basell's manufacturing operations that is the subject of this edition's Focus article on page 4.

I hope you will find it interesting and informative.

On behalf of everyone at Basell, I wish all our readers and their families a Happy New Year.

Patricia Vangheluwe

Chief Editor, Basell Dimensions

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Service customers through excellence in manufacturing

Manufacturing is at the center of Basell's business activities. Dimensions asked Manfred Dressel, the leader of global Manufacturing, to provide an insider's perspective on how Basell's plants in 20 countries around the world stay on top of customers' diverse – and often complex – requirements.



About Manfred Dressel

Manfred Dressel joined Basell's Management Team when he became executive vice president of Manufacturing & Services and head of the Supervisory Board of Basell Polyolefine GmbH on January 1, 2006.

A mechanical engineering graduate, Manfred joined BASF in 1974 and gained wide international experience in engineering and maintenance management posts. In 1990, he joined the BASF-Shell ROW joint venture in Wesseling, Germany as vice president Utilities and Services, becoming site manager in 1999. When Basell was formed in 2000, Manfred was appointed senior vice president for Manufacturing in Europe and CEO of Basell Polyolefine GmbH.

In 2002 (until end of 2005) he added the additional responsibility of Basell country representative for Germany.

Can you describe the manufacturing function in Basell and outline its "mission"?

I like to start with our people. They are the ones that make our assets work for us and ensure that Basell's businesses get the products they need to supply our customers. With over 3,800 people working at 22 production sites, Manufacturing accounts for over 55% of Basell's total workforce. There are more than 15 other manufacturing sites outside Europe and North America supporting into our International Business but which are also part of Basell's manufacturing community. They all can be proud of their contribution to the group's success.

Manufacturing's stated mission is to "be highly responsive to the needs of our customers by applying our manufacturing resources in a safe, environmentally responsible and cost effective manner." Put simply, our job is to make the best use of our manufacturing plants by ensuring we get the right products to the right place at the right time at the best possible cost and do that while operating reliably, safely and in a sustainable manner.

The key to doing that is having the right people with the right training operating in the right organizational structure. We put a great deal of emphasis on training our employees. In a large manufacturing operation with so many people it is vital to maintain consistency and minimize mistakes and our employees are trained to follow carefully defined processes and procedures. That's not to say there is no room for creativity. Improvements and problems alike often need creative solutions, but always ones which respect our absolute HSEQ require-

ments. I'm pleased that our manufacturing performance – which is outstanding and often best-in-class – is more and more living up to our expectations.

How does Manufacturing fit into Basell's business strategy?

Basell's three main businesses – Polyolefins (which is comprised of our polypropylene and polyethylene activities), Advanced Polyolefins and Technology – are integrated in a way that reminds me of a gear box. A gear box is a place where all the cogs have to mesh smoothly and effectively together if you are going to transmit any power. Manufacturing is one of the important cogs in keeping Basell the global leader in polyolefin production, technology and marketing.

In addition to interfacing with the businesses, our manufacturing organization also has an important interface with monomer management – and monomers represent a significant portion of the cost of our manufacturing activities. So Basell's skill in managing monomers has a major impact on the company's performance.

But the bottom line is that Manufacturing is a service provider to Basell's main businesses which, in turn, interact directly with our customers. We work very closely with the businesses and monomer management to define what we need to deliver and when to ensure that there is full alignment when it comes to executing production schedules.

How is Basell's manufacturing organization structured?

About 60% of our manufacturing employees are in Europe, and two thirds



Wesseling site, Germany

of these are at our biggest site, which is in Wesseling, Germany. In Europe and North America, manufacturing is organized in regional clusters. We have one person who is responsible for all manufacturing activities in North America, and two in Europe – one who is site manager for both Wesseling and Knapsack (Germany), and another who is responsible for all other European sites. There is also a head of Manufacturing for our APO sites and another who is coordinating manufacturing activities in the International region, which includes operations in Asia, Asia Pacific, South America and Middle East.

We also have a new Manufacturing Excellence group that concentrates on product quality, plant reliability and plant loading.

How do you keep Manufacturing focused on delivering excellence?

Most importantly, we must produce what the customer needs. Benchmarking helps a great deal in this regard, and we work hard to measure our performance against the industry as a whole. Benchmarking enables us to drill down into the details of our manufacturing activities – from operations and maintenance to supply chain management, health, safety and environment and

quality. This generates a lot of information that we can use to define improvement programmes or in making strategic decisions such as new capital investments.

Our plants are very complex. A new polymer plant today costs €150-250 million, and a cracker costs about €700 million. With these high levels of investment, we always want to make sure we get the best from our assets in terms of design, process efficiency, and safety – all which require a great deal of training to ensure.

What role does Manufacturing play when it comes to having direct contact with Basell's customers?

Whenever Manufacturing can add value to the Basell-customer relationship, the businesses invite us to become involved directly with customers. For example, it can be very useful if we give customers insight into how we manage operations or issues such as reliability. We aren't perfect and sometimes there can be interruptions to supply. I believe customers feel reassured by talking to us. Making visible the care and attention we give to optimizing manufacturing activities will often enhance our customers' confidence in Basell as a reliable supplier.



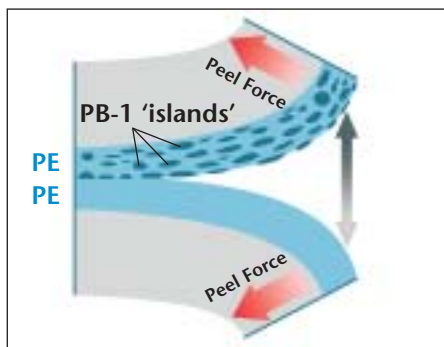
Spherizone process plant in Brindisi, Italy

The easy route to easy-open

Calibrated seal-peel performance without blending is made possible by a ready-to-use grade based on polybutene-1.

End users of seal-peel packaging know the problem: a lot of force is needed to start the opening process, but then it yields suddenly with the risk of damaging the pack or spilling the contents on the floor.

'Easy open' solutions have been available for some time using a PE sealing layer incorporating small 'islands' of polybutene-1 (PB-1).

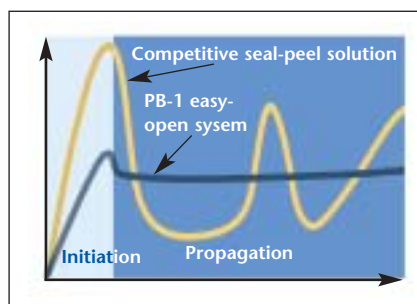


The low adhesion between PB-1 areas and the lower PE layer allows the sealing film to be peeled away with a steady force. The degree of force required can be precisely controlled by varying the composition of the sealing layer.

PB-1 comprises typically only 2-4% by weight of the polymer film structure, making the grade very competitive. The PB-1 component is usually incorporated by dry blending and can be processed on conventional equipment without modification.

Today, Basell has two new seal-peel "ready-to-use" grades – SP 2000 B and SP 2001 B – allowing packaging manufacturers to build in easy-open performance without blending.

"There was a demand for a drop-in grade for easy-open packaging," said Inge Roucourt, Basell's customer project manager. "Something customers could use without going through the blending phase."



SP 2000 B and SP 2001 B are supplied as ready-to-use grades in which the PB-1 component has already been incorporated at the correct dispersion level.

"Customers can use it at 100% as a sealing layer," said Inge, "and it can be processed on conventional equipment without modification."

Metocene delivers new clarity and toughness in TWIM

A new copolymer produced with a unique combination of transparency and stiffness/impact balance using from Basell's metallocene-catalysed technology.



"There's no trade-off between transparency and impact behaviour with this grade," explained Bernd Schütz, customer project manager for Basell's Metocene business unit.

"Especially at low temperatures. That makes it an interesting alternative to materials like conventionally-catalysed random copolymers for TWIM (Thin Wall Injection Moulding) containers such as ice-cream packaging or freezer storage boxes."

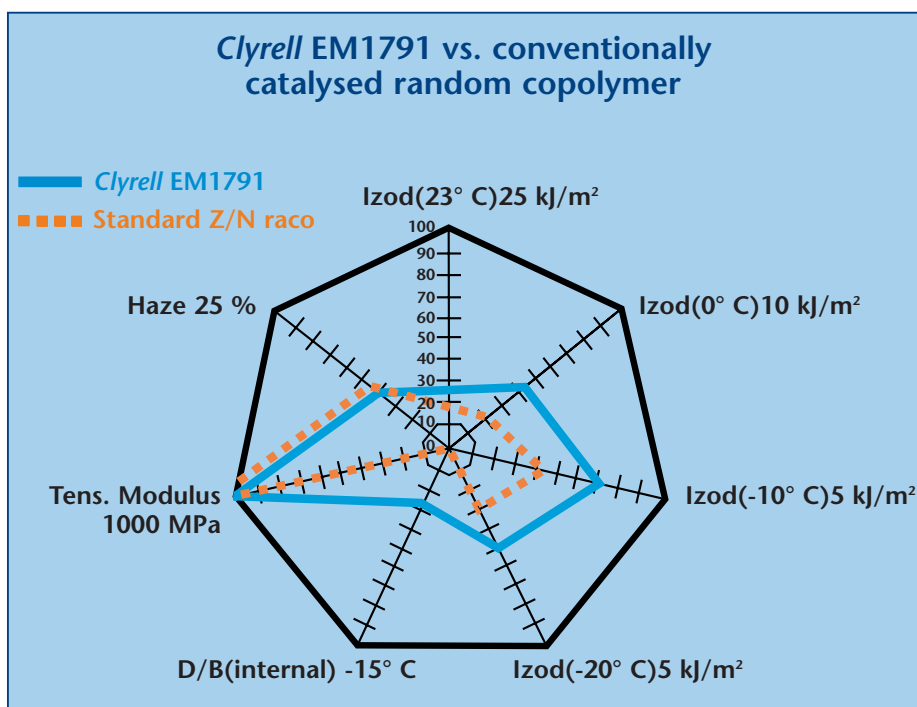
The new grade – Clyrell EM1791 – is the latest addition to the Clyrell family of high-clarity impact resins. It is produced using Basell's innovative metallocene-based Metocene process technology.

As well as its superior mechanical strength, this new copolymer also has a number of characteristics making it very suitable for food applications.

"Metocene is an exceptionally clean technology," continued Bernd. "It creates extremely low levels of volatiles and oligomer residues. No peroxide additives are used. That makes the products more suitable in terms of organoleptic and food-contact properties."

Clyrell EM1791 grade is easy to process with an MFR of up to 75 g/10 min, allowing cycle times to be reduced with respect to conventional RACO grades. Warpage is low and the resin can easily be coloured to translucent tints. "This new grade offers excellent opportunities to pro-

ducers of TWIM packaging and containers," concluded Bernd. "It's already in production and under evaluation by several manufacturers who are using it for a huge variety of TWIM rigid packaging containers, caps and ice cream boxes."





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PE pipe demand takes off in Russia

Basell is supplying polyethylene to Russia's leading PE pipe producer to meet the massive demand for new and replacement piping systems in the region.

BELORUSSIA

UKRAINE

R U S S I A

"We estimate that over 300,000 kilometres of piping is needed just to renovate existing installations in the RUB (Russia, Ukraine and Belorussia) region," said Miron Gorilovskiy, president of the Polyplastic group (Russia). "In addition, new installations will require another 30,000 kilometres a year."

This massive investment will include piping for drinking water and gas distribution, sewage pipes and district heating systems. Currently PE products account for less than 10% of the market, with conventional steel piping still being widely used. But the characteristics of PE – corrosion resistance, ease of installation and jointing, long service life – are drivers of a significant growth in this share with demand for PE piping materials more than doubling each year.

In addition to existing applications, PEX will be widely used for pipes in district heating, pre-insulated pipe production and in the new 'under-street heating' systems planned for many Russian cities. First introduced in Scandinavia, the latter consist of a network of pipes beneath the road surface carrying hot water to keep streets free of ice and snow during the winter.

Basell is currently supplying Polyplastic with *Lupolen* cross-linked PE pipe grades for heating and plumbing applications and *Hostalen* CRP100 black – a PE100 resin for drinking water, gas and pressurised sewage piping.

The Polyplastic portfolio includes a specially developed range of pipes for sewage applications consisting of a two-layer PE pipe with diameters ranging from 110 to 1200 mm. For district heating and similar applications Polyplastic supplies a range of PEX-a pipes available in diameters from 16 to 200 mm.

Gorilovskiy commented: "The variety of PE grades we are sourcing from Basell seems to be ideal for meeting the demand for quality piping products in the CIS markets."

The Polyplastic group

The Polyplastic Group, which has united the Polyplastic-Technopol Joint Company and the Eurotrubplast group of companies, celebrated its 15th anniversary in August 2006.

Polyplastic employs over 3,000 people and operates seven production sites in Russia, plus two in the Ukraine and Byelorussia. It currently has a total capacity of 150 kt per year of PE pipes and fittings and 30 kt of composite materials. The Klimovsk facility near Moscow is Europe's largest PE pipe and fitting plant.

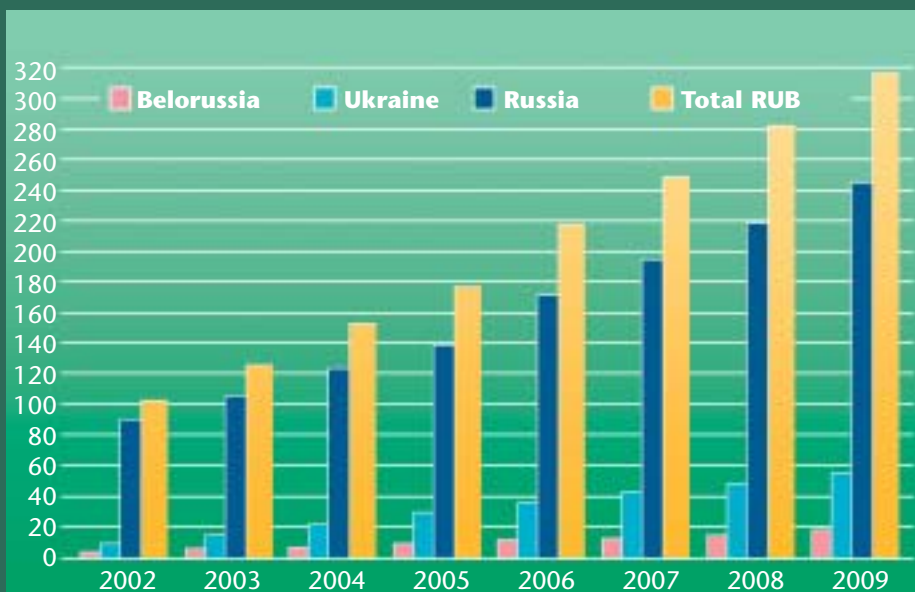
The group's product portfolio includes standard gas and water pipes, innovative insulated flexible piping for district heating systems and two-layer corrugated pipes up to 1200 mm in diameter. New products are developed and tested by experienced scientific staff at the group's R&D centre.

The Polyplastic group plans an extension of its product range and growth in production to 250–300 kt by the year 2010.



Klimovsk pipe plant

© Eurotrubplast



Development of PE pipe market in RUB for 2002-2005 and forecast for 2006-2009 (Source: Eurotrubplast)

Moplen blow-moulding grade gets a UV barrier

Basell's successful random copolymer grade extends its application range with a built-in UV barrier.



Moplen RP241 H UV grade

Melt flow rate 230/2.16	1.8 g/10 min
Tensile Modulus	1050 MPa
Heat deflection temp	70 °C
Haze (injection moulded disk)	7 %
Charpy impact strength unnotched, 23°C	NB
Charpy impact strength unnotched, 0°C	NB
Charpy impact strength notched, 23°C	16 kJ/m ²
Charpy impact strength notched, 0°C	3.5 kJ/m ²

Excellent stiffness/impact balance, combined with transparency has made Basell's random copolymer grade Moplen 241H a widely-used choice for manufacturers of packaging liquid products such as detergents and cosmetics.

But for UV-sensitive liquids like fabric softeners or general purpose cleaners, users needed to add a barrier masterbatch to the base resin to protect the contents from the degrading effects of UV radiation.

A new grade is now available with a built-in UV barrier that is more effective and economical than masterbatch solutions.

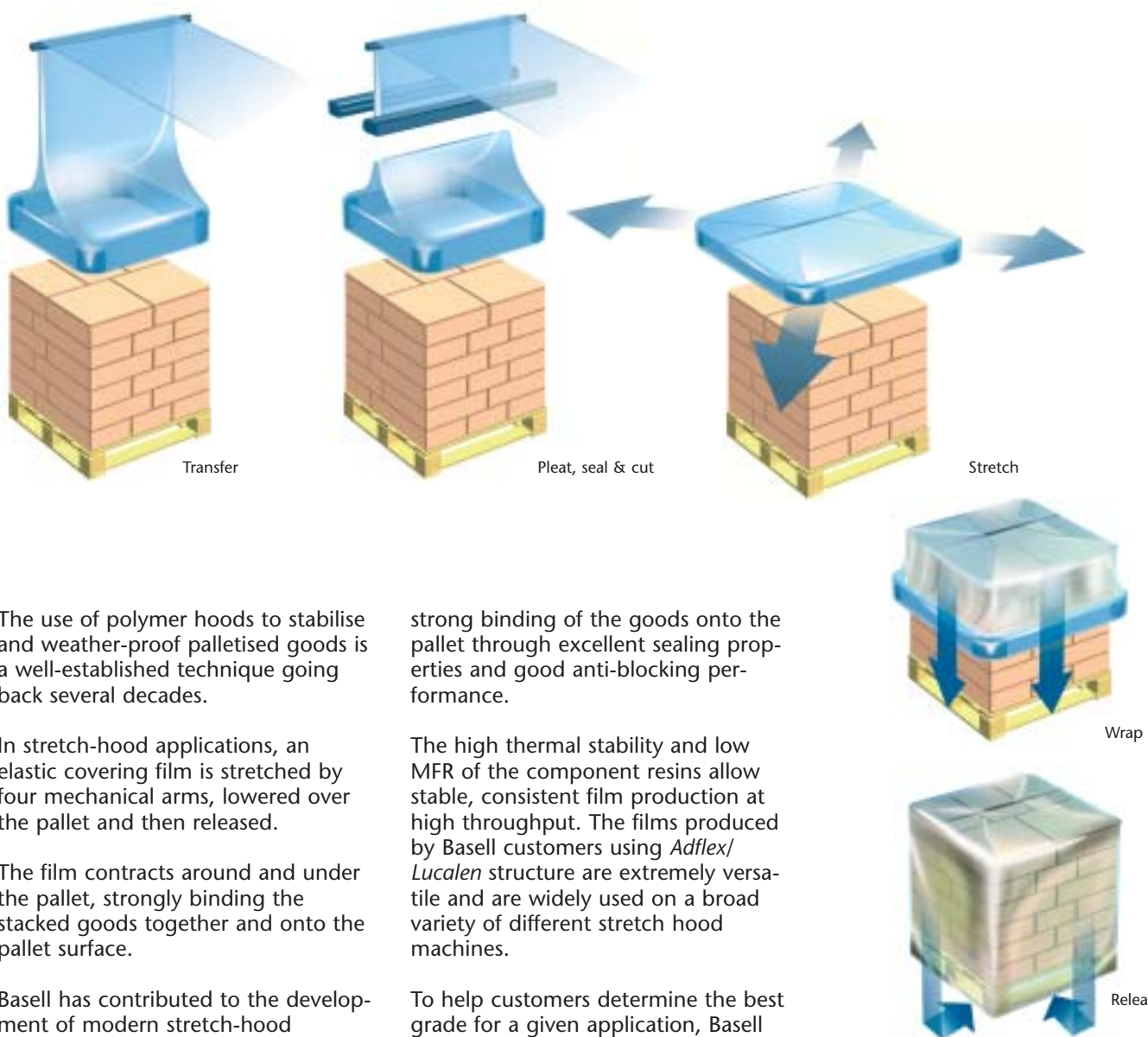
"This ready-formulated grade achieves better dispersion of the barrier additives," commented Rainer Sattel, Basell's technical service manager for blow-moulding applications. "It's also more economical, and eliminates a processing step for the customer."

The UV-resistant grade retains all of the properties of the base Moplen grade – excellent impact/stiffness balance and good transparency – and can be processed using existing machine settings.

Customer trials indicate that, in a typical blow-moulding application, the resin blocks 95% of UV A, B and C radiation, maintaining product colour in accelerated stress and weathering tests.

Online tools and resources for stretch-hood developers

The Basell portal (www.basell.com) now includes a section dedicated to the needs of the stretch-hood segment with grade selectors, testing methods and calculator applets.



The use of polymer hoods to stabilise and weather-proof palletised goods is a well-established technique going back several decades.

In stretch-hood applications, an elastic covering film is stretched by four mechanical arms, lowered over the pallet and then released.

The film contracts around and under the pallet, strongly binding the stacked goods together and onto the pallet surface.

Basell has contributed to the development of modern stretch-hood methodology, notably through its resilient *Adflex* resins, combined with the tenacity of its *Lucalen* copolymers which are today used for film production. The elastic properties, puncture and tear resistance of the structure are provided by an *Adflex-Lucalen* core, while the external layers of *Lucalen* copolymer also provide elasticity, in addition to allowing the

strong binding of the goods onto the pallet through excellent sealing properties and good anti-blocking performance.

The high thermal stability and low MFR of the component resins allow stable, consistent film production at high throughput. The films produced by Basell customers using *Adflex/Lucalen* structure are extremely versatile and are widely used on a broad variety of different stretch hood machines.

To help customers determine the best grade for a given application, Basell has created a special section of its website, www.basell.com, with a range of tools and resources for registered visitors.

"Our aim was to allow stretch-hood developers to identify the right grade for their applications as quickly and easily as possible," said Basell's marketing manager Michael Moeller.

"In addition to detailed technical data on *Adflex* and *Lucalen* materials and examples of film formulations, this section contains information on test procedures and an online calculator to make an estimate of the optimal hood dimension and die diameter for a specific stretch performance."

Flymo cuts costs with tough new PP grade

By adopting an impact-modified PP grade for the deck of its latest hover and roller mowers, Flymo cuts costs and enhanced productivity.



The decks of Flymo lawn mowers are relatively large mouldings with a number of critical features. As well as providing structural rigidity for the body, they must also be tough enough to withstand impacts from stones that may be thrown up by the mower's blade.

Originally moulded in high-impact ABS, these components are now made from a talc-filled polypropylene grade supplied by Basell. This grade has an excellent stiffness/impact balance and allowed Flymo to obtain significant gains in both cost savings and productivity.

"Cycle times are considerably shorter with this material due to its lower processing temperature," said Christoph Dammer, Basell's key account manager.

"At the same time it has reduced material costs for Flymo."

"It was a drop-in grade," Christoph continued. "The new polypropylene grade had exactly the same shrinkage behaviour as the material it replaced, so that Flymo was able to continue using the same moulds."

"We are now also looking at the possibility of supplying polypropylene grades for other mower components."

The superior recyclability of polyolefins furthermore helps compliance with the European directive on waste electrical and electronic equipment (WEEE).

"An all-polypropylene lawn-mower would make it much easier for Flymo to satisfy the requirements of the directive, while at the same time significantly reducing costs," concluded Christoph.



Clyrell grade is clear favourite in FFS

Tough and attractive, this high clarity resin is a competitive replacement in thermoformed fresh food packaging.

Basell's *Clyrell* grades denote a family of polyolefins whose optical properties – in particular low haze and high gloss – are significantly superior to those of conventional polypropylene.

One of the latest additions to the family is the *Clyrell* RC514L grade. In addition to its excellent clarity and mechanical



Form-fill-seal line for sliced meat in production

performance this resin has a wide processing window, making it suitable for thermoforming and form-fill-seal (FFS) applications in the fresh packaging industry.

In many such applications *Clyrell* RC514L grade allows weight and cost savings in comparison to currently used polymers, and give the shelf appeal of high-transparency packaging and rigidity to enable stacking and top-loading.

"This resin is increasingly being used by customers as a replacement for other polymers in FFS packaging of chilled foods like fish, meat and fresh pasta, where it can match the optical and mechanical qualities of conventional FFS materials," said Cees Besems, Basell's project manager for innovation and new business.

Cost and weight savings

"The current price differential between PP resins and other polymers makes this



a particularly competitive alternative at the moment," he continued. "Especially if you consider the weight saving that can be achieved using the *Clyrell* resin."

"In a trial of a machine manufacturer on an existing FFS line a 25% weight saving was achieved compared to a competing material. The same line configuration was used with a single contact sandwich heater and no plunger assist."

Heat resistance

The heat resistance of the *Clyrell* resin also allows it to be used for fridge-to-microwave applications such as chilled ready-meals and other reheatable products.

Basell innovations drive new automotive applications

Basell's leadership position in advanced polyolefins for automotive applications was strongly reinforced in the Detroit area this past October at the Society of Plastics Engineers 8th Annual Automotive Global TPO Conference.



Basell's senior vice president Steve Dwyer (on the right) and Bruce Carman, purchasing manager of Intertec Systems.

Basell presented several technical papers, conducted press meetings and hosted a reception where major North American applications using Basell Polyolefins were on display, including the Daimler Chrysler Dodge Nitro Structural Duct, selected as the Interiors Category Winner at the 36th Annual SPE Automotive Innovation Awards just one month later.

Two other innovative applications using Basell polyolefins were finalists for awards, and a complete rundown of the award-winning applications will be featured in the next issue of Basell Dimensions.

A conference highlight was Basell's senior vice president Steve Dwyer's keynote presentation where he dis-

cussed the role of innovation as a means to create and sustain value for automotive manufacturers, identified many of the success factors that drive innovation, and punctuated his remarks by describing key application areas for polypropylene-based materials going forward.

Dwyer stressed the importance of polypropylene as the industry's most cost-effective polymer for automotive engineers noting, depending upon the car segment, up to about 60 kg of polypropylene is used per vehicle. Of that, compounded polypropylene and reactor TPO materials represent about 45 kg per car. This is a testimonial to the versatility of the material and its cost effectiveness, and this volume could even reach 55 kg per car going forward.

"Even with existing applications however, there are opportunities," said Dwyer. Bumper fascias can be integrated with car body surfaces, reducing weight and/or eliminating another component.

"In the interior," he said, "an example would be the further use of polypropylene-based products to replace engineering materials in instrument panel applications, an area not fully exploited yet. New interior air bag systems are also providing opportunities for the use of reactor TPO products," he said.

"Another key area is body panels. With new high stiffness, lower thermal expansion polypropylene materials, it's possible to replace PPO/PA or PC/PBT alloys. In particular, for tailgates both the outer and inner panels can be made from polypropylene-based products.

"On the roof," noted Dwyer, "new polypropylene-based products can be used to replace ASA polymers in roof rail applications. Inner door modules are another good opportunity as their functionality and side impact requirements continue to evolve. Short glass reinforced PP materials can be used to reduce component weight and costs. With the improvements in short glass PP-based products, it is also possible to consider their use in front end modules."

In a time where many automotive OEMs and their key suppliers face challenging times, Dwyer reminded attendees that, "I see a lot of opportunity – especially for the use of polypropylene-based materials to help solve some of the industry's challenges."

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завода-производителя



Werner Breuers, president Polyolefins Europe, addressing an audience of potential customers in Alushta, Crimea at the launch of Basell's *Alastian* business channel in Russia.

Now in its third year of successful operations, Basell's *Alastian* business channel has provided users of PE and PP resins in Europe with a new approach to purchasing polyolefins.

At *Alastian's* online portal (www.alastian.com) customers can check prices, place orders and track deliveries at any time of the day and night. By offering a range of widely used grades and allowing customers to choose and pay for services as extras, *Alastian* has built up a large customer base among experienced users of polyolefin resins.

Interest from the East

"There has always been a lot of interest in the *Alastian* way of doing business from users in eastern Europe," commented Just In't Velt, head of *Alastian* business development and marketing. "Now we are able to offer customers in Russia and Poland the same business channel and benefits as our customers in western Europe."

Alastian goes East

Basell's innovative polyolefin business channel has now extended its operations to Russia and other CIS countries, as well as to Poland.

Alastian is now on line for new customers in Russia through the Russian version of the portal at www.alastian.com or www.alastian.ru

Launch on the Black Sea

To mark *Alastian's* entry into these new markets, a conference was held in the second week of October at the attractive Russian resort of Alushta on the Black Sea coast.

An enthusiastic audience of converters and end-users from the Russian market were keen to discover how Basell's new e-business channel worked.

In his opening address, Werner Breuers, president of Basell Europe, emphasised that *Alastian's* novel approach to selling polyolefins was an expression of Basell's commitment to innovation. "Our leadership depends on our capacity to innovate – both in the way we do business and in our product development."

A strategic market

Werner also stressed the strategic importance of the Russian market to Basell's future plans. "Demand for polyolefins is growing rapidly," he said. "We believe that the markets in this region have enormous potential. We have just signed a memorandum of understanding with SAT&Co and KazMunaiGaz EP in Kazakhstan for the development of polyolefin facilities using local feedstocks. These will

allow us to supply high-quality polyolefins to markets in Russia and neighbouring countries even more effectively."

Filip Van de Vliet, *Alastian's* managing director then explained the pricing structure and benefits to customers of the online business channel. "The clarity and simplicity of the *Alastian* way of doing business is a powerful aid to users in managing resin costs in this increasingly volatile market. Coupled with the quality and consistency of Basell products, we believe that the *Alastian* model represents a real step forward for polyolefin purchasers in this region."

In fact, response to the new channel was enthusiastic: "We signed up our first new customer at the conference itself," commented *Alastian* sales head, Ruediger Klein, "and we received over fifty applications from new customers to register with *Alastian* in the following 48 hours."

Capacity in Poland

On the supply side, Basell has recently seen an expansion of its supply sources in the region through the start-up of large new PE and PP plants in Poland operated by BOP, Basell's joint-venture with regional partner PKN Orlen.

The polyolefins supplied through *Alastian* to its Russian and Polish customers will be partly sourced from these new facilities.

'Hole in one' crowns Basell golf tournament

Basell UK's annual golfing event was the venue for a once-in-a-lifetime shot.



Toshi Ota, manager director of Sansetsu UK

Now in its 19th year, the Basell UK customer golf tournament is held annually at the world-famous Woburn golf club in Bedfordshire.

This year's event, held on September 22nd, brought together 40 keen golfers from among Basell's customers throughout Europe and the United States.

During the afternoon round on the Duke's course – one of the club's three

historic courses – Mr. Toshi Ota, managing director of Sansetsu UK, sank his ball at the 157 yard ninth hole with a single shot from the tee.

"It was an extraordinary performance," said Jon Shelton, Basell's business development manager. "I've never seen a hole in one in many years of playing golf – and I don't think many of our guests had either. It was the crowning event of a really splendid day."

Röchling Engineering Plastics celebrates 90th anniversary

Over 500 guests from all over the world joined the German group's plastics division in celebrating 90 years of activity at a two-day symposium.

Key Basell customer Röchling Engineering Plastics marked its 90th year of operations with a two-day symposium held at Haren and Papenburg in Germany.

The engineering plastics division is part of the international Röchling Group, active through its numerous subsidiaries in Europe, Asia and the USA. Basell supplies the Group with *Hostalen PP*, *Lupolen* and *Hostalen* grades for sheet applications in both its European and Asian operations.

The keynote address on the first day of the symposium was given by Richard Roudeix, Basell's vice president of the pipe & sheet business unit. It was followed by presentations on Röchling's operations throughout the world.

The second day of the symposium was held at Röchling's Haren production site, with addresses from the company's former CEOs and local dignitaries.



Richard Roudeix (on the right) with Ludger Bartels, Röchling's CEO

The Röchling Group

The Röchling Group is an international plastics company based in Mannheim, Germany. With 5,400 employees at 51 locations in 16 countries, Röchling today is a leading international plastics processing enterprise.

The Group's sales revenues last year totalled more than one billion Euros.

First-time FIAT award for Basell

Basell is the first polyolefins supplier to receive the Italian carmaker's Qualitas award.



The Qualitas awards are assigned each year by FIAT in recognition of excellence in product quality and technical support on the part of the company's suppliers.

This year's awards, announced during the FIAT suppliers' convention held in October, honoured Basell as supplier of advanced polyolefin resins for several of the Italian carmaker's recent models –

in particular the highly successful new Punto, for which Basell supplied resins and provided technical assistance for the production of bumpers, instrument panels and door panels.

This is the first time that a polyolefins supplier has received the award.

"We are delighted to have received this recognition," said Maurizio Rossi, Basell's regional sales manager. "The Punto project in particular was an excellent example of teamwork in which Basell worked together with FIAT designers and the moulders to optimise both material performance and component design."

"The FIAT group has identified product quality as a strategic value for its future success and we look forward to continuing our contribution to its achievement."

From left to right: G. Coda, Fiat Auto purchasing director, R. Schwarzwald, Fiat Auto quality director, S. Ketter, Fiat Auto manufacturing director, E. Seron, Basell's Automotive business manager and R. Di Stefano, Fiat Auto chemicals purchasing manager.



ASIA

Basell sells stake in Taiwan joint venture

Basell has sold its 36% share in Taiwan Polypropylene Company Ltd (TPP) to Lee Chang Yung Chemical Industry Corporation of Taiwan.

At the same time Basell has acquired TPP's minority interest in three other Basell joint ventures in the region: SunAllomer in Japan, PolyMirae in South Korea and HMC Polymers Company in Thailand.

CHINA

Spherizone technology for new China plant

Basell's *Spherizone* technology has been selected for a new 450 kt per year polypropylene plant to be built by the Sinopec Tianjin Petrochemical Company at Dagang, Tianjin in the People's Republic of China.

Sinopec was one of the earliest licensees of Basell's *Spheripol* polypropylene technology during the 1980s.

Start-up of the new plant is planned for 2009.

AUSTRALIA

Basell completes PP plant expansion in Australia

Basell has completed the planned expansion of its polypropylene plant located in Geelong, Australia from 60 kt to 130 kt per year.

The extra capacity of the plant will serve growing demand for polypropylene in both the local and regional markets.



RUSSIA

Russian PP plant will use Spherizone technology

CSJC Nizhnekamsk Refinery has selected Basell's advanced *Spherizone* technology for a new polypropylene plant to be built at Nizhnekamsk in Russia. Part of a major refinery and petrochemical complex expansion, the 200 kt plant is scheduled for completion in 2011.

This is the ninth *Spherizone* license Basell has granted since it first offered the technology for license in 2003.

GERMANY

New HDPE plant for Muenchsmuenster site

Basell plans to build a new HDPE facility at its Muenchsmuenster site near Munich, Germany.

Based on Basell's *Hostalen ACP* (Advanced Cascade Process) technology, the new plant is designed for a maximum capacity of 150 kt/a.

It replaces an earlier plant at Muenchsmuenster which was damaged by fire at the end of last year. Start-up of the new plant is planned for the beginning of 2009.

GERMANY

New PE plant for Germany

Basell is to build a new polyethylene plant at its Wesseling site in Germany. The plant, which will use Basell's *Spherilene S* technology, is scheduled for start-up in 2008.

Basell currently operates an 80 kt *Lupotech G* polyethylene plant at Wesseling. This plant will be converted into a new *Spherilene S* plant based on latest generation technology including the installation of a new reactor system.

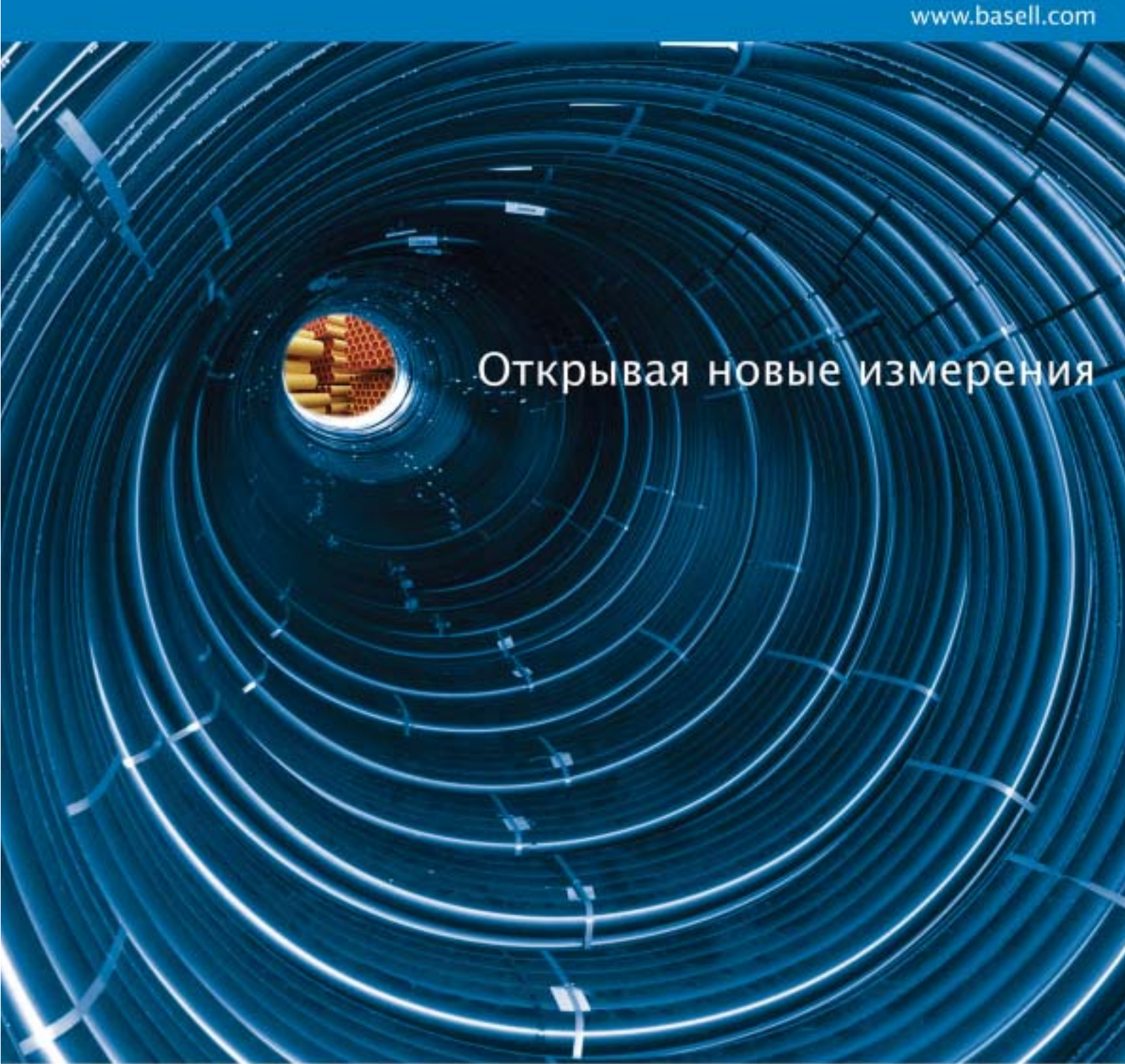
Spherilene S is a single-reactor gas-phase technology that can produce both HDPE and LDPE.

MALAYSIA

Basell opens office in Malaysia

Basell has opened an office in Selangor, Malaysia.

The new office will serve customers in Malaysia and Singapore whose business was previously handled through the local BASF agency.



Открывая новые измерения

Передовые материалы для изготовления труб

Полиолефины зарекомендовали себя как превосходный материал для производства напорных и ненапорных труб. Трубы, изготовленные из полиолефинов, отличаются твердостью и гибкостью, малым весом, устойчивостью к ползучести и коррозии, а также легкостью установки.

Широкий ассортимент марок полиэтилена и полипропилена

а также различных услуг фирмы Basell на протяжении десятилетий помогают клиентам в производстве труб. Портфолио трубных марок компании включает торговые марки: *Hostalen* HDPE, *Lupolen* PE и PEX, *Hostalen* PP и Polybutene-1.

Фирма Basell продолжает заниматься новыми разработками и внедрениями для удовлетворения растущих требований рынка пластиковых труб.

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