



An unbreakable barrier

With a depth of expertise and a long heritage in high quality speciality papermaking, Mitsubishi HiTec Paper Europe is continuing to follow its path of innovation and investment with the Barricote range. Here, we talk to Dr Dieter Becker about the new product line.

Mitsubishi HiTec Paper Europe has an enviable reputation for quality, consistency, customer service and care for the environment.

It has now brought its expertise to the packaging market, where it offers Barricote, an innovative and environmentally friendly barrier paper approved for food packaging and food contact. The totally paper based products combine sustainability – essential in today's market – with effective barrier protection against water, grease and mineral oil migration, offering a genuine alternative to plastic based packaging.

We asked Dr Dieter Becker, director of CSR and new business development at Mitsubishi HiTec Paper Europe, why the company saw the need for a solution such as Barricote.

'The demand for flexible packaging materials is very high and will continue to rise drastically,' he said. 'In parallel to this market development, public pressure is growing: avoiding migrating contaminants, for example, with mineral oil components or plasticisers is just as desirable and meaningful as a significant reduction of plastic films or laminate composites. This is a great growth opportunity for the paper industry. Our goal is to develop alternative, highly sustainable products for this market while still providing our best barrier capabilities.'

Reducing waste

Dieter continued, 'Our new barrier papers meet the demands for reduction of unnecessary packaging waste and use of environmentally friendly materials. Barricote papers are based on the renewable and biodegradable raw material pulp. In production we only use fresh fibres. The effective barriers are achieved by aqueous coatings, which protect against mineral oils, water and water vapour, grease and oils, oxygen and aroma – and can even be combined. All this without the use of plastic films, aluminium, extruded polymers, varnishes or laminates – and of course without fluorocarbons.'

Mitsubishi HiTec Paper has long been known as a pioneering company that brings to market papers that really answer the needs of the industry, with innovative ranges such as the respected and trusted giroform carbonless papers, jetscript inkjet papers and thermoscript thermal papers. This experience proves invaluable when it comes to new products.

'As a speciality paper manufacturer, our core competence is the coating of paper and everything that goes with it: production of the base paper, pre coatings, functional and protective coatings etc. We can choose from a total of six different coating technologies at our two German locations in Bielefeld and Flensburg,' said Dieter.

'For the Barricote papers in particular, the efficient 'Curtain Coater' technology is decisive. It derives its name from a curtain, because similar to a curtain, absolutely defect free coatings are applied evenly to the paper. The highest level of uniformity in the coating is indispensable for barriers in the food and non food sectors.'

So this means that Barricote can be used safely as food packaging? 'Yes, all Barricote products are approved for direct food contact,' said Dieter.

'We work with well known manufacturers and already deliver our Barricote products to a number of international name brand customers in the food industry and we see strong interest in all our Barricote products.'

Green packing

Right now, and undoubtedly, the hot topic is the environment, so we have to ask – how does Barricote measure up when it comes to its production and the environment? Is it made sustainably? And are Barricote papers recyclable?

'First of all, the whole production is certified in accordance with a combined management system (environment, energy, quality) as well as being hygiene certified. Secondly, Barricote is made from renewable and biodegradable fibres. Thirdly, our barrier papers are coated with aqueous dispersions of various components, including a very large proportion of renewable raw materials.'

'And yes, all our Barricote products are fully recyclable according to the PTS method PTS-RH 021/97. This means they can be fed into the normal waste paper cycle in good conscience. In addition, they are available FSC or PEFC certified,' Dieter stated.

Heat sealability

Barricote also offers heat sealability. 'The heat sealability is an important feature for the production of inner bags or stand up pouches without the use of extrusion coated materials,' said Dieter. 'Knowing this, we have developed and offer several heat sealable Barricote products.'

Mitsubishi HiTec Paper Europe understands the needs of today's – and the future – packaging market very well. This is why it brings to market new products such as Barricote, which answer those requirements.

'Too much packaging waste, plastic waste in the oceans, micro-plastics in animals and humans, migration of mineral oil in food-stuff – these issues move consumers as well as the trade and packaging industry,' commented Dieter. 'That is why the packaging market is seeing a change to sustainable concepts and materials, especially in the food sector. 'Packaging cannot always be avoided; often packaging has important functions. But nowadays it is about more than protection of the packaged goods. It is about protecting the consumer and protecting the environment. With Barricote we perfectly meet all those demands.' **PS.**



Dr Dieter Becker.

The Barricote portfolio is completely sustainable, comprising paper products made from virgin fibres and water based barrier coatings. With a total absence of plastic films, aluminium, extruded polymers, varnishes, laminates and fluorocarbons, Barricote is FSC Mix and PEFC certified and recyclable.

There are currently five products.

- **Wrap WG**, a wrapping paper with a combined barrier against grease and oil and water vapour, which is also an ideal laminating solution for flexible packaging purposes without the use of plastic films or extruded PP or PE coatings.
- **Wrap WG UNI**, also with a combined barrier as wrapping paper and as heat sealable paper for bag packaging.
- **Liner MG** with high quality mineral oil barrier and barrier against grease and oil as liner paper for recycled cardboard and corrugated board.
- **Bag WG** is suitable for heat sealable bags and **Bag WGOM** with a multifunctional barrier against grease and oil, water vapour, oxygen and mineral oils has been developed especially for industrial applications where only the best heat sealability will do.

'Of course we are working hard on further innovative and especially environmentally friendly new developments,' said Dieter. 'But we are also working on further improvements of existing products, especially with regard to the use of materials based on renewable raw materials. For example, the compostable portion of our Barricote papers is already around 90%. In our laboratories we are constantly working to improve this value even further.'

