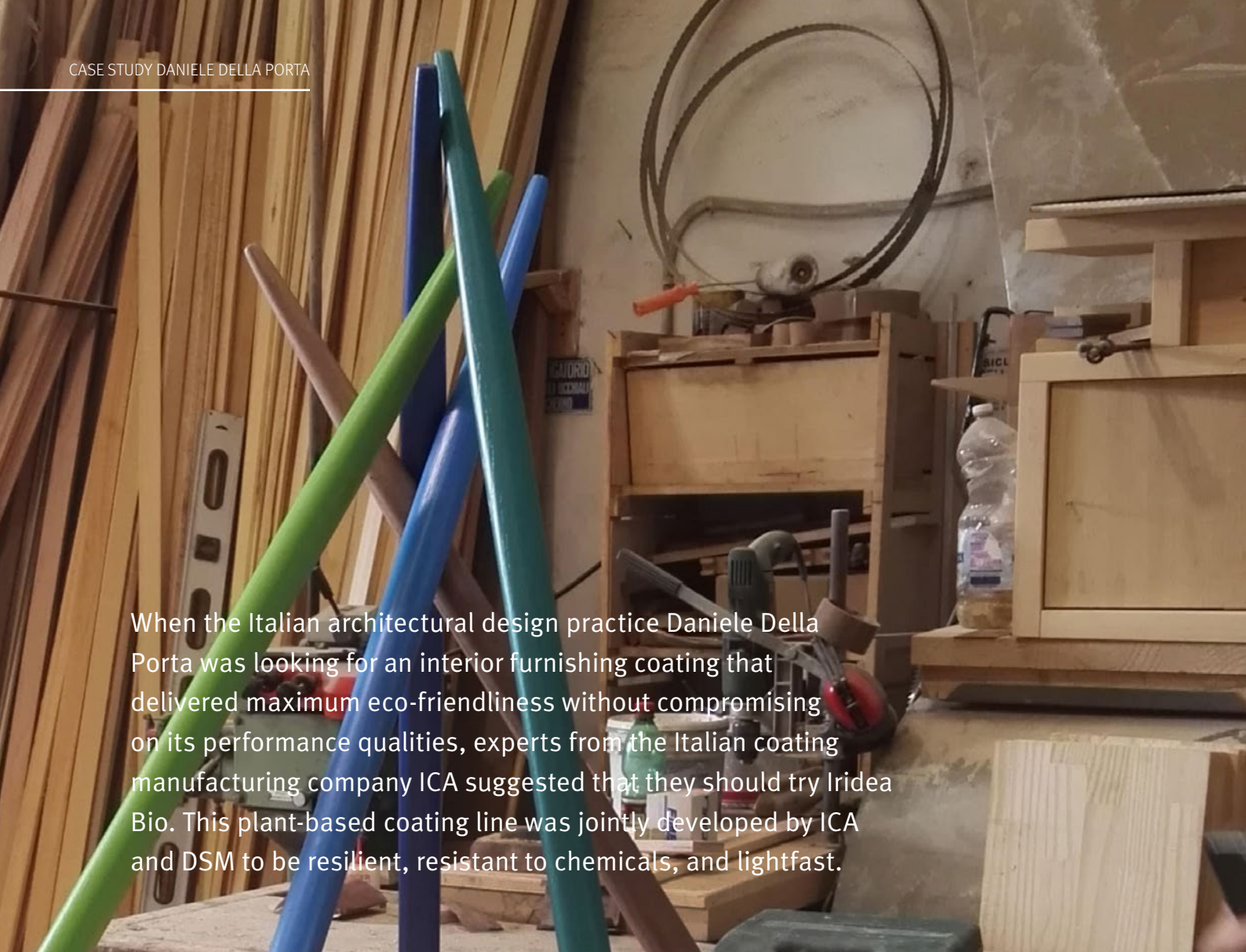




CASE STUDY

A new horizon for sustainable coatings for interior wood

Based on Decovery[®] technology, Iridea Bio paint combines high-performance standards with sustainability



When the Italian architectural design practice Daniele Della Porta was looking for an interior furnishing coating that delivered maximum eco-friendliness without compromising on its performance qualities, experts from the Italian coating manufacturing company ICA suggested that they should try Iridea Bio. This plant-based coating line was jointly developed by ICA and DSM to be resilient, resistant to chemicals, and lightfast.

A new horizon for sustainable interior coatings

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Sustainability as the key concern

Based in Italy, Daniele Della Porta is a well-established architect and designer, whose practice – also called Daniele Della Porta – has won important prizes, such as the Young & Design award at the Saloni del Mobile di Milano. The practice has had its work featured in many international magazines and exhibitions. Many of Della Porta's designs, such as door frames, stairs, furniture and skirtings, incorporate wood as its primary material, both because of its aesthetic qualities and environmental friendliness.

“Sustainability is becoming an increasingly important issue in the worlds of architecture and design,” says Daniele Della Porta. “In our own designs, we want to use materials that do not have a negative impact on the environment or on human

health. We therefore pick our materials carefully. We were very happy to discover the plant-based Iridea Bio paint to protect and color the wood in our designs, since it not only fits with our sustainability philosophy, but it also performs very well.”

Superior eco-friendliness

Iridea Bio paints are formulated with plant-based resins. Compared to other products on the market made with alkyd resins from renewable sources, they are quicker drying, harder and possess greater non-yellowing properties. In addition, Iridea Bio monocomponent and bicomponent coats are easier to sand and more resistant when subsequent coats are applied, meaning they can be used in intensive industrial processing cycles.



“Sustainability is becoming an increasingly important issue in the worlds of architecture and design.”

Daniele Della Porta

“There are really no downsides to using Iridea Bio,” comments Daniele Della Porta. “Its performance is on the same level as products made from oil-based derivatives, but unlike those coatings, it’s completely free of harmful chemicals. Iridea Bio fully respects the environment.”

Mikado sculpture to showcase color qualities

The Iridea Bio products are available in a very wide range of colors, as well as with a transparent finish, and offer superior colorfastness, even over extended periods of time. The finishing of the coatings can be “warm” or “cold”, according to the desired effect sought by the designer. “As an architect and designer, I was very impressed by the aesthetic nature of this product,” says Daniele Della Porta. “It reflects light in a very attractive way, and can be easily integrated into my designs.”

“I was asked to design a small sculpture that will be exhibited at different roadshows and fairs to showcase the aesthetic properties of this new plant-based coating. I designed a sculpture based on the Chinese game Mikado, where different colored pieces of wood form a self-sustaining structure. This object proves the excellent light-reflecting properties of Iridea Bio across different colors.”

A jointly developed product

“As the Technical Manager at ICA Group, it’s my job to address the technical needs of our customers through innovative technology. So I’m very pleased to present Iridea Bio, the first range of mono- and bi-component acrylic coatings from renewable sources that is that cannot made into food for human use, as it fulfills our customers’ desire to have ecological and functional coatings for protecting wood. The development of a product of this quality does not happen by chance. Throughout the development process, we had the support of our academic and technical partner DSM Coating Resins, which firmly believed in our company and considered it the world’s best choice to channel this extraordinary innovation. Iridea Bio is a great example of the success that can be achieved by leveraging common areas of interest and expertise.” – Lorenzo Paniccia, Technical Manager at ICA Group.



“I’m very pleased to be integrating Iridea Bio, since it respects both the environment and the health of the end-user.”

Daniele Della Porta

Scaling up implementation

Daniele Della Porta is now designing a new line of furnishings that use Iridea Bio, which will be manufactured by the Naples-based company Felamegnaria Rubinacci. They will be available on the market in early 2018. The new line, called Made in Italy, features both innovative designs and innovative materials, across a diverse range of pieces, including tables, wooden boxes, trays and mirrors.

“I’m excited that such an innovative line will soon be reaching the general public,” says Daniele Della Porta. “The line is ahead of the curve in many different ways. I’m very pleased to be integrating Iridea Bio, since it respects both the environment and the health of the end-user. I will surely be using this product in future designs!”



Discovery® technology from DSM

DSM Coating Resins is a global leader in resin solutions and with an ongoing focus on innovation. Discovery® is DSM’s novel plant-based resin technology platform for long lasting paints that enables us to change our environment without impacting it and which is not harmful for our health.

DSM believes that non-renewable fossil feedstocks, like crude oil, will become increasingly scarce in the decades to come and we need to use renewable alternatives to fight climate change. The use of sustainable biomass not only offers an alternative to fossil feedstock, but also has environmental benefits in reducing the ecological footprint. DSM has a growing involvement in the use of biomass that is complementary to the food supply chain.

We will achieve this by developing resins for paints that are based on safe, renewable non-toxic ingredients and that do not emit harmful VOCs.

It is DSM’s mission is to shape a sustainable coatings future, together with our paint manufacturer partners.

Shaping a Sustainable Coatings Future. Together.

DSM Coating Resins

Sluisweg 12
PO Box 123
5140 AC Waalwijk
The Netherlands
Phone: +31 (0)38 750 25 30
E-mail: coating.resins@dsm.com
www.dsmdiscovery.com

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