



STORY FROM GROUND:

PAPER-BASED PACKAGING GETS BETTER AT TAKING DIFFERENT SHAPES

Metsä Spring's Muoto is a prime example of how paper packaging has caught up to fossil-based materials in terms of versatility and function.

Pure, safe, sustainable, easy to use and recyclable. That is what the plastic-free Muoto 3D fibre packaging, developed by Metsä Group and originating in northern forests and set to revolutionise packaging, is all about.

"Plastic is everywhere, and while it will continue to play a role in the future, there are countless end uses in which we can use a renewable and recyclable bioproduct instead of plastic," says Tarja Heikkilä, Product Manager at Metsä Group's innovation company Metsä Spring.

The many shapes of Muoto

Renewable and sustainably grown Finnish wood is the main raw material of the Muoto 3D fibre packaging. The packaging is made of wet wood-fibre pulp in Äänekoski, at Metsä Group's and Valmet's joint demo plant.

"Muoto 3D fibre packages can be shaped in many ways: they are pressed into their final form using new 3D technology that enables the production of rounded, complex shapes familiar from the plastics industry. It is also suitable for creating lightweight yet stiff packaging structures offering good protective properties," says Heikkilä.

The end result is pure and safe Muoto 3D fibre packaging solution of various sizes and shapes, tailored to the end use and offering a sustainable alternative to different types of packages.

Collaborating for better packaging

"The Excellence Centre in Äänekoski organises workshops where we can investigate, innovate and test future material and packaging solutions based on renewable fresh fibre jointly with customers," says Iiro Numminen, Packaging Designer at Metsä Board.

Joint workshops enable the participants to harness the best competence of each expert, survey the customers' needs and collaboratively create innovative solutions that support the circular economy and address all the needs related to the life-cycle of packaging.

Metsä Group is now conducting a pre-study related to the construction of a first commercial mill for producing Muoto packaging products on its Rauma mill site, in Finland.