walki

GAME CHANGER!

WALKI® 4E Antenna Technology -

Sustainability meets profitability for RFID inlay and tag manufacturers

Walki® 4E RFID Pantennas are manufactured using the proprietary laser based Walki® 4E technology. It is the first feasible alternative to the traditional way of producing antennas by a wet etching process. The technology brings new dimensions of substrate material choises, exactness, cost efficiency and sustainability to the growing RFID and IoT markets.

Game changer - Competitive advantage by paper antennas

Walki® 4E antennas enable RFID inlay manufacturers to introduce a game changer product in their product offering. By having inlayless RFID tags based on Walki® 4E paper based antennas, the RFID inlay manufacturers are able to improve the profitability of their products by lower component costs and improved efficiencies. At the same time they are able to introduce true sustainability to the RFID market. Pure aluminium layer on the Walki® 4E's paper substrates enables superior RF-performance compared to current printed antennas. Paper antennas enable eliminating the expensive and non-sustainable etched PET antennas from the manufacturing process. The end result is a sustainable end product with lower total tagging costs.

New tag materials and market areas for the RFID industry

Walki® 4E technology is a dry process based on laser patterning. This allows unprecedented flexibility in the choice of base substrates, ranging from various paper grades to different plastics and non-woven materials. For example, it is now possible to manufacture soft care label -type of RFID antennas in Walki's high volume manufacturing process.

Truly ecological solution- responsibility is a part of the pattern -

No matter what the final product is Walki® 4E makes it 100% recyclable. The demand for full recyclability of consumer products is constantly increasing. No matter this is achieved through the unique, dry production process, which allows for paper or some other monomaterial being used as the substrate and makes aluminium process residue fully recyclable. When the final product has come to the end of its life cycle, aluminium is easily sorted out by metal detectors in the recycling process.

Walki® Pantenna is manufactured using the unique Walki® 4E Technology

E FOR ECOLOGY

- Absence of liquid chemicals
- 100% recyclable aluminium process residue
- Monomaterial converting = fully recyclable end product matching the needs for electronics recycling

E FOR EFFICIENCY

- The dry process and the speed of laser technology provides up to 10 times faster production speed than in etching
- Computer to antenna production gives flexibility and speed to new antenna development

E FOR EXACTNESS

- Laser technology enables extreme accuracy and reliable repeatability of patterns
- Allows for smaller ICs in high volume production for lower IC cost

E FOR ECONOMY

- Lower total cost
- Can be used in traditional converting workflows – lower investment cost

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Certification
ISO 9001:2000 | ISO 14001:2005 | OHSAS 18001

RAIN RFID