



Plast

## Innovative foreign object inspection: examining raw materials for adhesive tapes at the highest level

Product: RAYCON D+

Our client in northern Germany employs around 600 people and produces single and double-sided adhesive tapes on production facilities that are among the most advanced worldwide.

These specialized products and adhesive solutions are an integral part of industrial manufacturing processes, especially in high-performance industries such as the automotive, electronics, paper, printing, construction supply, healthcare, and pharmaceutical industries. They are distributed globally, mainly to Europe, Asia, and America.

The production of adhesive tapes requires considerable experience, expertise, and commitment. Moreover, production must meet the high standards of various industrial suppliers. The plant in northern Germany is certified according to the environmental standard ISO 14001 and the quality standards ISO/TS 16949 and ISO 9001.

## The problem: the smallest metal contaminations in raw materials

Raw materials for adhesive tape production can contain tiny metal particles. Even the smallest foreign object that enters production poses a significant risk.

Essentially, the smaller the detected and removed particles, the better the protection against damage to processing machines and consumer complaints.



Even during incoming goods inspection, plastic processors can check raw materials for quality by using foreign object detection systems. If foreign objects are detected and removed at the point of entry, value-added losses can be avoided, and the quality of the final products can be ensured.

## The solution: optimal metal detection using X-ray technology

In the plastics industry, the use of inductive metal detectors is often common and sufficient. However, our client aimed for the highest possible sensitivity in metal detection. Initial tests were conducted with the most accurate metal detector available, but the results did not meet the client's high expectations, who always strives for maximum quality. Thanks to Sesotec's broad product portfolio, X-ray technology could also be tested – this turned out to be the desired solution.

Deciding whether metal detection technology or X-ray technology is the best choice was part of a comprehensive consultation process that Sesotec accompanied as a competent partner. Due to the desire for the highest detection accuracy, the client chose X-ray technology.

The RAYCON X-ray system from Sesotec is a highly efficient device that detects all foreign objects that absorb X-rays better than the surrounding product due to their density, chemical composition, or mechanical dimensions – in short, foreign objects denser than the actual product.

Compared to conventional metal detectors, these systems offer the advantage of detecting a variety of dense foreign materials and working with a much higher detection resolution.



### The customer benefit: a customized solution for the client

With the RAYCON, the client achieved the desired sensitivity. Metal particles that may be present in the raw material bags are reliably removed from the process, ensuring top-level quality.

This solution was only possible thanks to the support of a partner like Sesotec, who is interested in the specific conditions of their client and works on it until the client is satisfied. When standard solutions do not suffice, Sesotec finds individual ways. Thanks to many years of experience in various application industries, Sesotec has the know-how to quickly understand the client's processes and offer solutions with inductive metal detection technology or X-ray technology that integrate perfectly into any production line – from goods receipt to goods issue, in any conveying type.

Sesotec offers a comprehensive product range „Made in Germany“ and works intensively with customers until the optimal solution is found.

“With the RAYCON D+, we are on the safe side in terms of quality. Although the investment was higher than for a metal detector, the certainty that we will not have quality problems makes the investment worth it,” says the operations manager of our client.

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#### Sesotec - an overview

The Sesotec group is one of the leading manufacturers of machines and systems for contaminant detection and material sorting. Product sales primarily focus on the food, plastics, and recycling industries.



Metal detection systems



X-ray inspection systems



Sorting systems



Magnet systems