



Quality level with the plus

Laser from Koenig & Bauer Coding marks top product in medical technology

In the medical sector, the high-quality precision parts for *medical devices* must be manufactured with extremely close tolerances in order to guarantee functionality and the required dosing accuracy at all time.

Projects, starting with engineering and development up to the production of high precision parts and the resulting assemblies made of plastic and metal, in medical technology are demanding and require the highest quality.

Trusting cooperation with competent partners is indispensable for the innovative development of new products and optimized solutions. The realization of such a project depends on the decisive factors «high quality standards» and «economic efficiency».

Maximum quality and competence

The **Röchling Group** has been shaping industry. Worldwide. For nearly 200 years. Röchling transform the lives of people every day with customized plastics: they reduce the weight of cars, make medication packaging more secure and improve industrial applications. The workforce of around 11,000 people is located in the places where the customers are – in 90 locations in 25 countries. The Group's three divisions generated joint annual sales of 2.140 billion euros in 2018.

More information about Röchling:
<https://www.roechling-medical.com/>

The **Medical** division offers customers a wide range of high-quality, customized components and assemblies, right through to end-to-end OEM products. The product portfolio also includes standard plastic products, with special expertise in the fields of diagnostics, fluid management, pharma, surgery and interventional. These areas of competence are complemented by an enhanced range of services for development and regulatory affairs, right through to approval of end-to-end medical products.

„Nuances determine the quality level while manufacturing our high-quality plastic products for the medical sector. Also our partners must understand and live this awareness.“

Ralf Suffel, Project Manager,
Röchling Medical, Brensbach



More information about Symfyny®:
<https://symfyny.com/>



01 The analysis

The newly developed and patented medical delivery system is composed of three different components. These are made of various polymers and color pigments (white, blue and transparent). These parts must be given a durable and resistant marking.

The filigree typeface of the scale must be reliably and easy to read. A constant quality is essential. At once, marking must be done as quickly as possible with a maximum of 5 seconds per component.

For an alternative solution, the cost-intensive use of two lasers would be necessary.



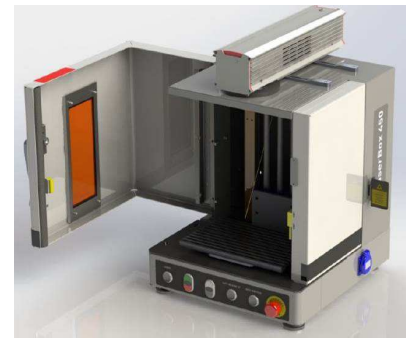
02 A recommendation with potential

The recommendation of a pigments supplier initiated the contact between Röchling Medical and Koenig & Bauer Coding.

An ideal combination of pigmentation, basic material and laser system was evaluated within the shortest possible time in close cooperation of all project participants.

The best results for the high-contrast marking, both on the transparent and on the opaque plastic components, were delivered by a solid-state laser from the wide-ranging laser portfolio.

Until the final series production is completed, an iLASERBOX 450 as a stand-alone solution was installed. It marks the components with only one laser in an ISO-certified clean room. The special laser lens for large working areas and the sophisticated workpiece holder have reduced the marking time to approx. 2 seconds per component.



03 The result exceeds wishful thinking

Certified according laser protection class 1, the all-in-one solution, including manual workstation, laser, fume extraction and 21CFR Part 11- software for tracking the production steps has been optimally combined from standard components to meet Röchlings' requirements.

Should the shape of the individual product solution be modified before series production begins, the workpiece holder in the iLASERBOX can be changed quickly. Everything tailored to the requirements of the customer.

For series production the laser can easily be integrated into the production line.

*Ralf Suffel
Project Manager*

„We are enthusiastic about the laser competence at Koenig and Bauer Coding. Both, the sampling for identifying of perfect plastic polymers combination and also the future-oriented and perfect realization of our marking requirements convinced us.“

Laser

In addition to precise marking for product identification and decoration, lasers offer a very high level of reliability and cost savings in everyday production.

Our portfolio offers models to meet the needs in every application to fulfil individual coding requirements.

For more information: coding.koenig-bauer.com

