

# Use Case - biolitec



Together with the leading international medical devices company biolitec AG from Jena, the only supplier of photo-dynamic therapy worldwide, Enso Detego developed a security solution based on their middleware, in order to make the use of laser devices and the related consumables in the medical field even safer and more efficient in the future.

Biolitec AG, a company listed in the Prime Standard of the German Stock Exchange, develops and sells laser systems, which enable minimally invasive procedures in various different areas of medicine.

Furthermore biolitec AG has all relevant core competences like photosensitizers, laser and optical fibers. To ensure absolute safety for the patient, the laser probes used are changed after each application.

In addition to minimally invasive laser treatments and the oncology segment, biolitec AG has also acquired unique competences in the aesthetics segment.

In order to optimize consumables regarding safety and quality criteria and to eliminate error sources, Enso Detego developed a solution, which is based on **detego® SUITE**, tested and tried in the area of authenticity protection.

The RFID technology with data-on-tag option and electronic signatures was applied.

An electronic signature of the probes provides absolute safety to both the user and the patient as only original probes can be used this way. The attending doctors are supported by the technology insofar as a probe can only be used once due to the signature, thus excluding incorrect use and increased wear and thus bad clinical results.

## Challenge

- ▶ Medical lasers by biolitec AG should use only original-biolitec-sensors
  - Exclusion of abuse
- ▶ Optimizing consumables regarding safety and quality criteria
  - Elimination of error sources
- ▶ Guarantee of higher and better patient safety
- ▶ Investment costs should be reduced, assurance of traceability

- ▶ Use of RFID technology with „data on tag“ option
- ▶ Utilize asymmetric cryptography to avoid usage of consumable material from other producers

## Benefits

- ▶ detego® Admin Suite monitors the smooth operation of the system as a control center
- ▶ Safety standard for the biolitec AG treatment will increase (guarantee against copy of products - no cloning)
- ▶ RFID solution enhances the efficiency of the products, better traceability
- ▶ Reducing investment costs
- ▶ Increased safety for patients

## Solution Approach

- ▶ Developing detego® solution based on the approved RFID Middleware detego® You-R OPEN, to avoid product counterfeiting



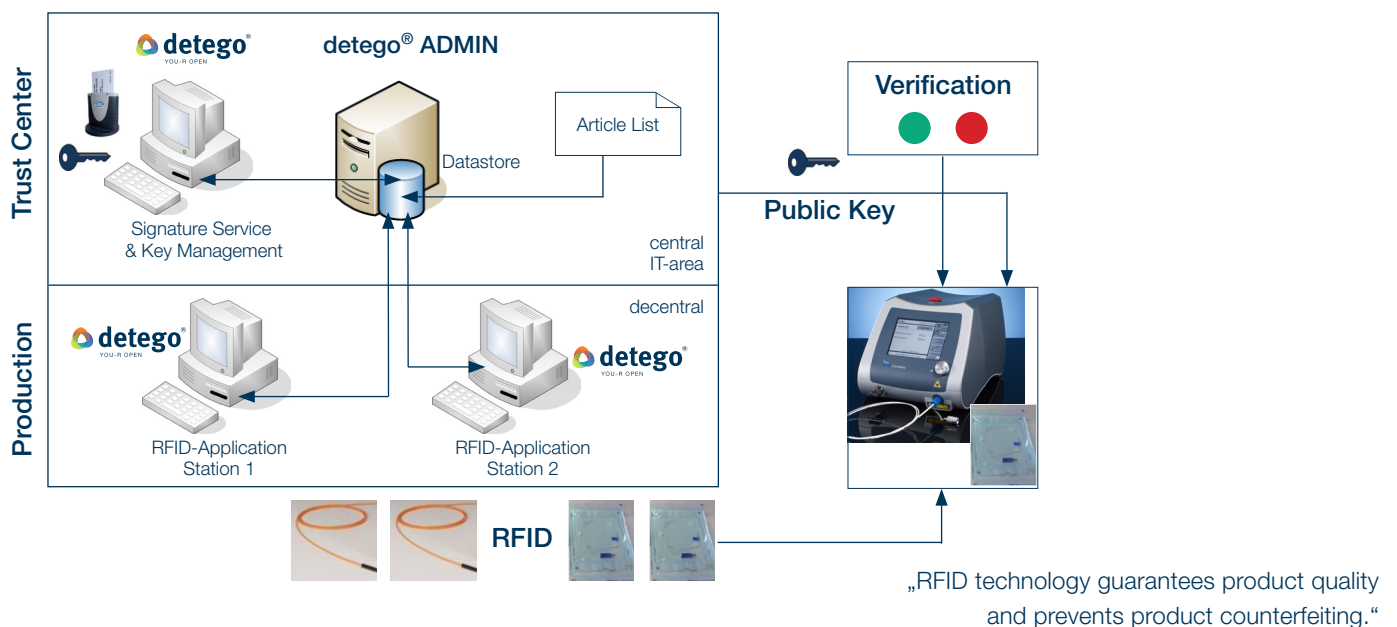
## Batches easily traceable

**detego® You-R OPEN** solution comprises RFID stations for the arrival of the raw consumables, their personalization and for the visualization of the current status during production. In addition, tracing batches, which are necessary in medical technology, have been simplified significantly.

At the secured biolitec AG headquarters, a **detego®** signing station runs for the preparation of authenticity certificates. The respective RFID stations at the production sites in Germany, Latvia and the USA request authenticity certificates from the headquarters and personalize the probes on site. At these stations, the consumables delivered are also inspected for set quality standards and, if these standards are not met, are automatically made unusable. Abuse of unsuitable material can therefore be eliminated.

The local business processes, the signing station and the exchange of data between the stations are managed via the proven RFID middleware **detego® You-R OPEN**. The **detego® Admin Suite** monitors the smooth operation of the system as a control center. The technical devices and probes are state-of-the-art after being upgraded to RFID.

## Architecture Overview



## Enhanced efficiency

In addition to the safety and quality aspects, the RFID solution also enhances the efficiency of the products and reduces investment costs significantly. „**We have undertaken great efforts to convert our devices to RFID encoding technology in order to ensure our turnover in the consumables segment while at the same time offering safer and healthier treatments**“, emphasizes Dr. Wolfgang Neuberger, Chairman of the Board of biolitec AG.

The new technology will make it possible to offer hospitals and doctors a business model in the future which adapts investment expenses to the budgets by drawing on consumables expenses for improved financial planning. Biolitec AG constantly strives to gain added value for their customers while at the same time minimizing the costs. This is an important sales argument, especially in consumption-oriented markets such as the USA.

detego® You-R OPEN Partner

