

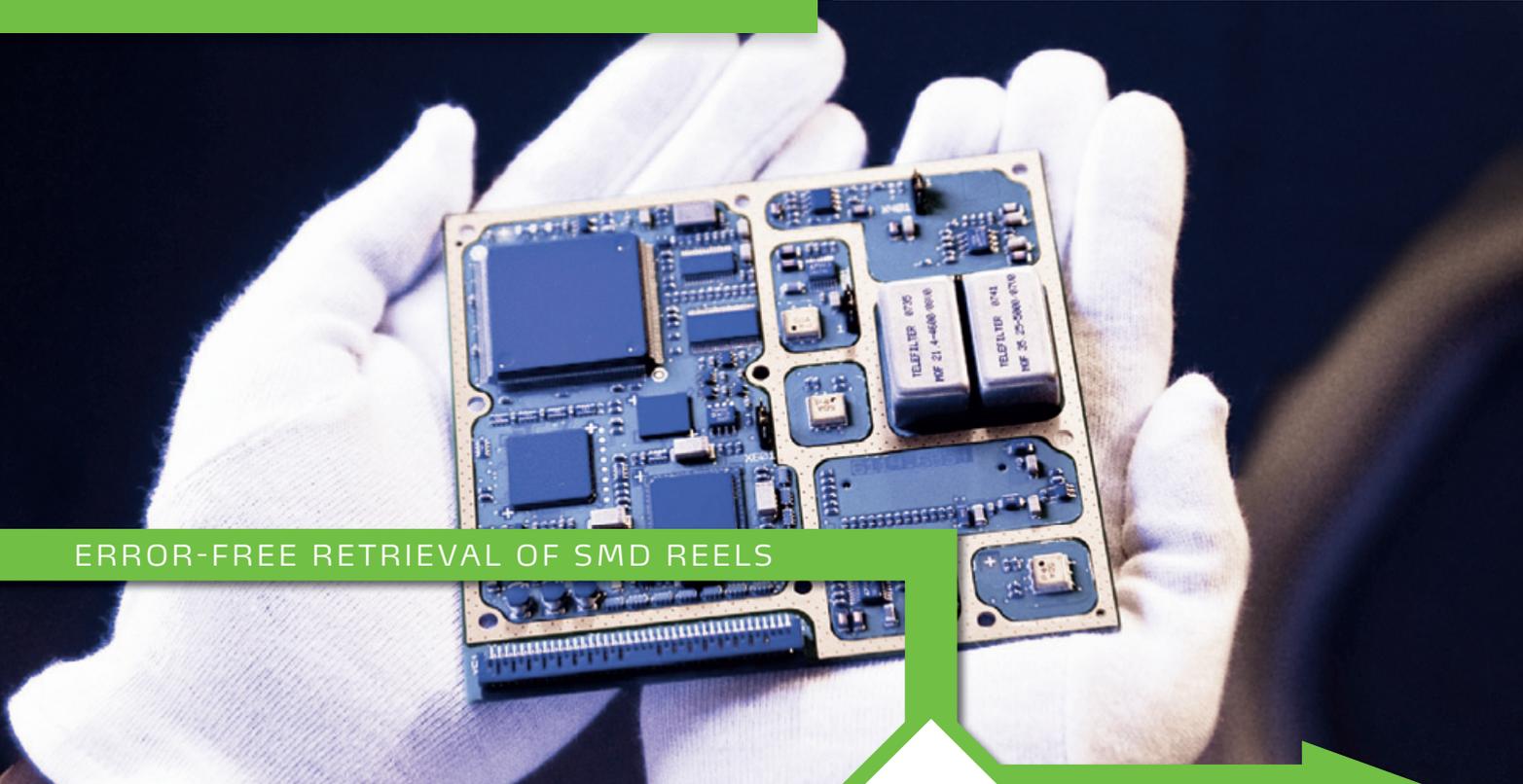
Storage

Order Picking

Handling &amp; Automation

# Case Study 047

## Electrics / Electronics



ERROR-FREE RETRIEVAL OF SMD REELS

### The Customer

The German electronics group Rohde & Schwarz is a leading supplier of solutions in the fields of test and measurement technology, radio, radio monitoring and location technology, and secure communication. In the area of high-end measurement technology, "building blocks for future devices" are produced, among other things. Founded 80 years ago, the independent company is active in more than 70 countries around the world with its extensive service network. Around 9,300 employees generated turnover of 1.9 billion euros in the 2012/2013 financial year (July to June). The company's head office is in Munich, Germany.

Further Information:  
[www.kardex-remstar.com](http://www.kardex-remstar.com)



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## Task definition

The task at Rohde & Schwarz was to optimize the setup process for populating electronic assembly groups with SMDs, because the main potential lies in optimizing the time needed for an average of 200 setup processes an hour. The focus was on the availability of the SMD reels to ensure that the changeover goes smoothly on the populating lines and buffering times are avoided in the production process. The aim is to ensure fast, simple, and error-free retrieval of SMD reels for downstream production. This allows for a high degree of flexibility in the production process which is necessary in view of a wide range of products and changing batch sizes. Hence, a quick reaction to changing market needs is possible at any time.



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## Solution



A total of 12 Megamat RS units from Kardex Remstar help to organize the SMD reel logistics and ensure that the assembly groups can be set up and removed during the production process on a permanent basis. Two or three employees on average work on the units at the same time and put the SMD reels into storage, retrieve them, and return them there after use. The whole process is paperless thanks to the use of a pick-by-voice system. Each operator can work at their own pace through the individual items of an order, step by step. The total fill level of the Megamat RS units is 90–95 percent. This is achieved as a result of the flexible way in which storage space is allocated depending on storage space availability. The highly dense storage method makes it possible to supply four production lines with 10,000 reels per day and populate around 441 million components every year. Connecting the Kardex Remstar warehouse management system software to SAP facilitates inventory management of the SMD reels in real time and makes it possible to maintain a permanent inventory without stopping production.

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## Advantages at a glance

- Simple and clearly structured picking process
- Throughput increased by more than 50 % with the same number of employees
- 100 % error-free retrieval of SMD reels for the setup / removal process
- Storage space fill level 90–95 % (storage density)
- Permanent (real-time) inventory

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## Process description

We would be delighted to explain the various processes to you in person.

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## Scope of delivery

- 12 x Megamat units (W x D x H: 3,501 x 1,774 x 4,900 mm)
- JMIF (linked to pick-by-voice)
- Warehouse management system from Kardex Remstar (linked to SAP)
- ESD protection
- Pick-by-voice from Vocollect



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