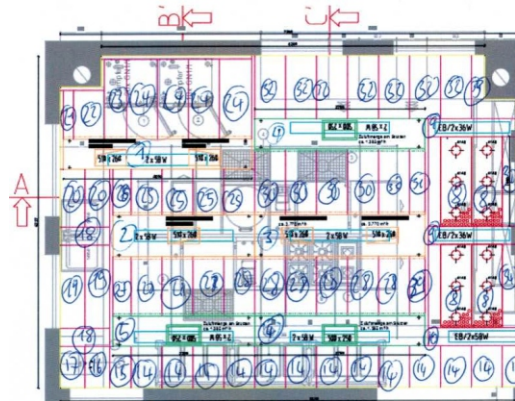


# REITEC developed a software to compile a ceiling bill of materials for Rentschler REVEN

## The Initial Situation

The sales department and the back office prepared an AutoCAD DWG drawing of the ventilation ceiling based on the kitchen floor plan and the furnishing layout plan. This drawing was printed in the manufacturing department and the bill of materials was compiled manually on a sheet of paper with indication of the corresponding items. After this, the items were manually registered in the production planning system or in an Excel list for external production. The high time expenditure for the bill of materials (approx. three to six hours for each ceiling) was due to the manual calculation of the dimensions of the components and the manual transfer of the data. The drawings had an unprofessional look and involved the drawback that you had to re-register all item numbers in the drawing when changes had to be applied.

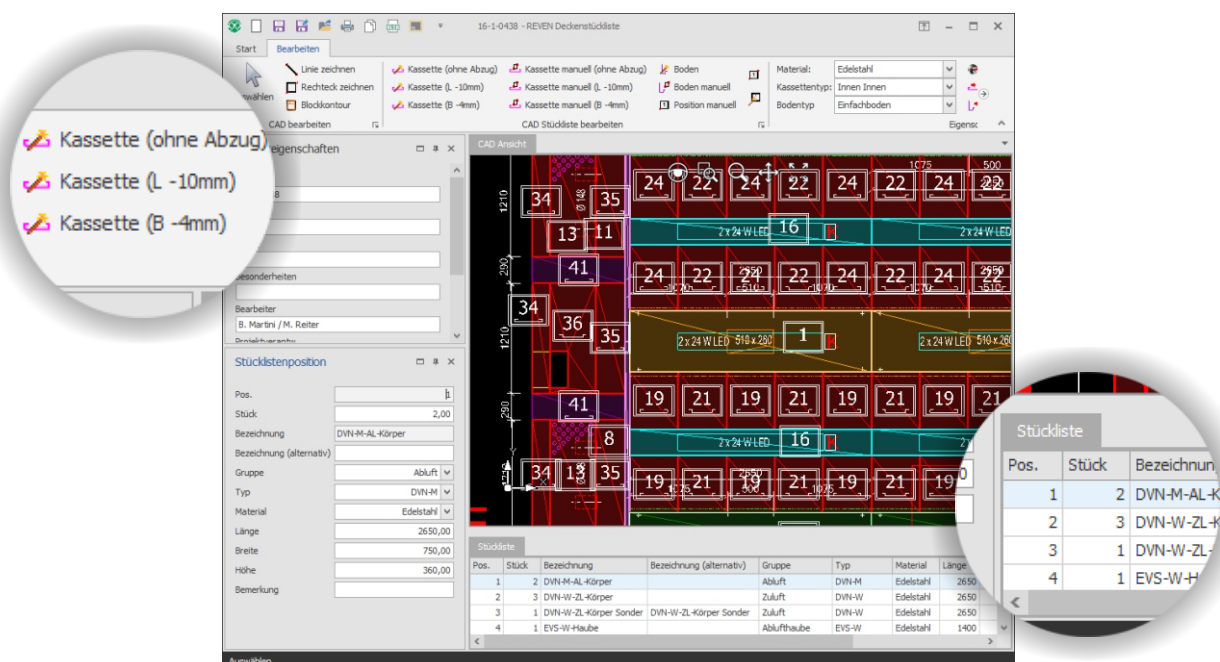


## The Idea

This situation brought about the idea of developing a software program that would compile a digital bill of materials based on the existing DWG drawing.

## The Solution

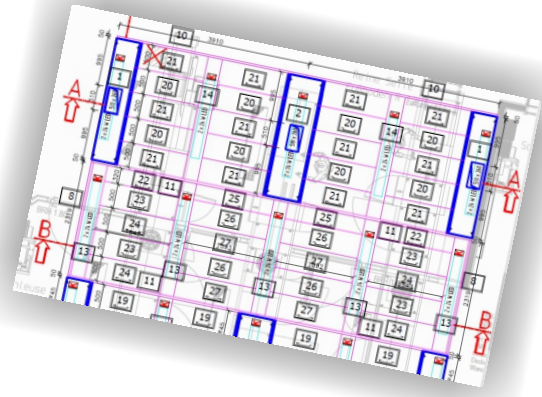
The CeilingBOM software developed by REITEC allows the user to import the DWG file created in the design department and to generate a bill of materials based on the drawing. After the import of the drawing, the components that are referenced as blocks in the drawing are identified by the system, their dimensions are determined and the bill of material items are assigned automatically to them. For the ceiling coffers, which are represented in the DWG file through a grid of lines, we developed a mechanism that automatically identifies the contour. This allows the production planner to generate the item with the correct dimensions with a single mouse click in the middle of the area.



In addition, the CeilingBOM program provides for the direct deduction of allowances. Moreover, the user can define the length and the width of a ceiling coffer in a dimensional grid to keep the number of items as low as possible. Due to the colouring of the areas of the different BoM items on the screen, the user can easily identify the areas that still need to be worked on. The sorting of the bill of materials and the merging of identical items takes place automatically, of course. Functions to edit the bill of materials complete the functional range of the program. After having finished the bill of materials, the user can print or export it. Moreover, an interface to the production planning system allows the direct transmission of the data. The item symbols can be saved in a DWG file, which can be assigned as a reference to the drawing.

## The functions

- Independent of the CAD system
- State-of-the-art customizable user interface
- Reading and writing of DWG files
- Automatic identification of items from block references
- Automatic detection of the contours
- Interactive displacement of BoM items
- Export of the bill of materials to an Excel file
- Connection to the PPC system



## The Benefits

"The new software by REITEC facilitates and accelerates the planning of a ceiling". This is how F. Deißer, Production Planning Manager at Rentschler REVEN, describes the situation after the implementation of the software. The easy manipulation of this customizable software that runs independently of the CAD system provides for a high productivity. The DWG format ensures a common data basis for the sales department, the back office and the production planning department.

## About Rentschler REVEN GmbH

The company Rentschler REVEN is based in the German town of Sersheim and was founded in 1905. It has become the leading manufacturer of air-purification equipment. The continuously improved separating system X-CYCLONE® is used in manufacturing and finishing processes as well as in the food industry and commercial restaurant and canteen kitchens.

## About REITEC GmbH

REITEC GmbH is a special provider of .NET Programming in CAD environments and of database solutions. It has been active in the market since 1996. Our services in the CAD environment include CAD automation and CAD enhancements for AutoCAD, SolidWorks, Inventor and SolidEdge. The Reitec.Testplan review software and the Confit product configurator complete our service portfolio. REITEC GmbH is distinguished by its confident collaboration with customers and its solution-oriented approach.

REITEC GmbH  
Mühlstr. 20  
71735 Eberdingen - Deutschland

Telefon: +49 (0) 70 42 - 81 52 80  
E-Mail: [info@reitec.de](mailto:info@reitec.de)

[www.reitec.de](http://www.reitec.de)

