EFFECTIVE PRODUCTION
BARCODE, SELECTION OF STATION AND TABLE ARRANGEMENT

Compass Software

The options barcode, selection of station and table arrangement serve to make the process of transferring data to the machine and managing data on the machine extremely easier, faster, and safer.

The option barcode is used whenever the automation of processes is desired. Users do not necessarily have to use barcodes for this option, but may also utilize RFID chips, or they can enter the distinct identification of each part, which is represented by the barcode, manually.

During operation of the CNC machine:
- the information of the part is transferred from the computer's database to the machine (control computers are also possible)
- the machine-appropriate CNC program is generated
- the positioning laser is controlled, if available
- clamping devices (vacuum cups and/or pneumatic clamps) are calculated, if necessary.

Since the whole process is initiated only by reading a barcode, the operation of the machine is extremely safe and fault-tolerant.

The plain text coding, which is part of the barcode, makes it possible to see which part it is even without scanning.

It is possible to use external data from other systems (ERP), which already include barcodes. The data is read in, clearly assigned to the respective CS-barcode (mapping), and can be used smoothly.

OPERATION OF THE CNC MACHINE

Barcode
The barcode is a distinctive identification feature of each part in the database. When creating or importing staircases, a barcode is assigned to each part. This code is unique for each part as long as the order exists in the database.

Selection of Station
Another option to increase efficiency is to combine the barcode option and selection of stations. When using this combination, the machine will not only scan the barcode for each part, but also has access to barcodes which have been assigned to specific stations on the machine in advance.

Table Arrangement
Table arrangement via barcode is used to place several parts on the table at once, which are then processed with optimized tool changes and only one CNC program. Since most machines still take a significant amount of time to change tools, the optimized version can save a lot of time.

Article 00329201
(Barcode)

Article 00323901
(Table Arrangement)

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Barcodes are printed on the **forms**.

Selection of stations
enables alternating operation on the machine. E.g. it is possible to put a part on the left side of the table (station "left side of table") and the program starts processing the part on that side. While the program is working on the left side it is possible to put a second part on the right side of the table (station "right side of table"), which is processed after the first part. Then the left side again and so on. Furthermore it is possible to assign stations that for example have fixed clamping devices. All stations are virtual, i.e. they can correspond to physical stations (stoppers), but they don't have to.
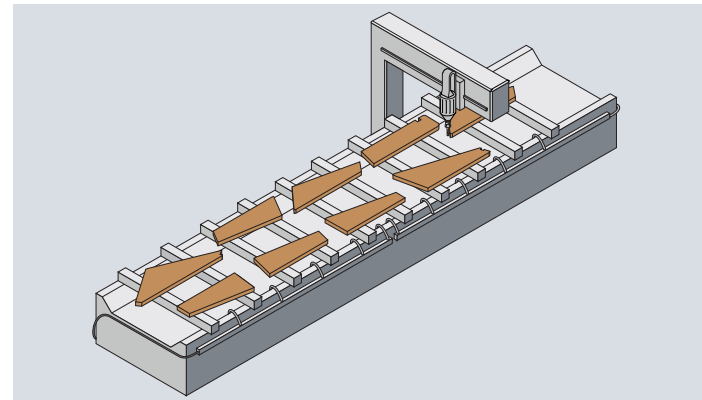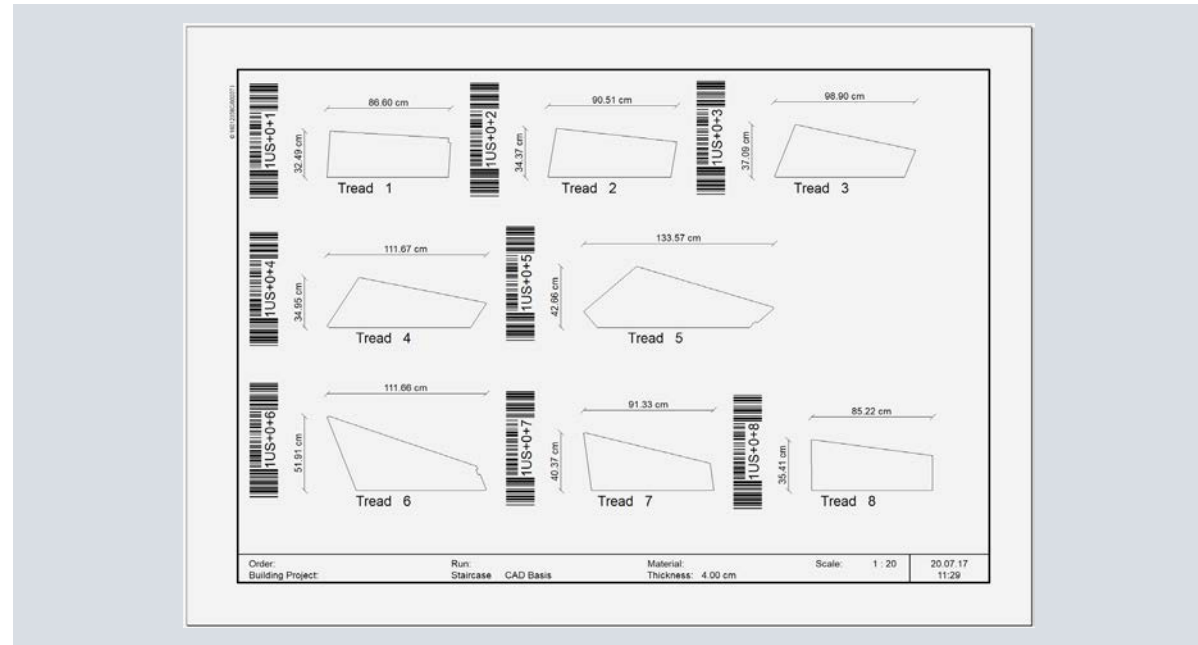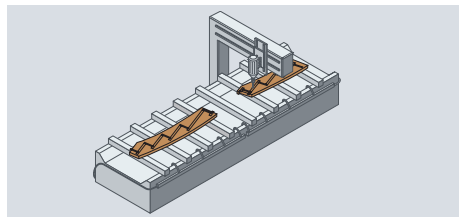

Table arrangement
demands that only the same type of part is used on the table at the same time, because it is only possible to use one predefinition for each group of parts on the table. Table arrangement is based on the stations which were described further in the section about selection of stations.

Area of Application 2 Time Recording
Each computer that is equipped with barcode can also gather operating data for the parts (order related), if they are coded with barcodes. For more information view the time recording data sheet.

Area of Application 3 Visualization of Data
By using barcodes it is possible to visualize all data for each part during production on each computer. This is possible for individual parts. Please ask for further information (not part of the standard solution).

Area of Application 4 Status Monitoring
By collecting data via the barcode method it is possible to visualize the production status of each part anytime. Please ask for further information (not part of the standard solution).