



THE CNC-CONTROL FOR EFFICIENT WOODCUTTING

Bewertung nächste Liste

FROM PRACTICE - TO PRACTICAL USE

In developing the CONTROL 5.0 the Reinhardt engineers always had an eye to practical applications. Instead of a lot of colours and expensive design, they set the more important priorities:

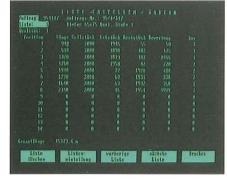
- simple operation, which requires no knowledge of EDP (electronic data processing)
- practical build-up of the screen masks
- EMC electromagnetic compatibility by industrial computer components
- compact construction, so that the control can be placed to be userfriendly (eg directly in front of the saw blade)
- highest safety in operation, eg by opto-coupler
- easy to maintain
- possibility of expansion by free plug places
- can be individually expanded from the simple application to complex procedures.

OPERATION WITHOUT KNOWLEDGE OF EDP



The functions of CONTROL 5.0 are selected directly via softkeys around the screen.

Example: A cutting to size list is to be started. By pressing the button next to the screen text "Producing/Changing Lists" the required screen mask appears immediately. The data can be entered.



Up to 10 lists can be produced. Up to 300 fixed lengths can be stored on these. The required total length per list appears automatically.

The following screen masks belong to the standard version of CONTROL 5.0:

- machine data
- working parameters
- remaining length parameters
- machine parameters
- diagnosis
- reports

THE OPTIMUM FOR EVERY APPLICATION

	Module	Types of operation	Available Functions	Application
	Module 5.01	Individual cutting to size	 Automatic cut Calling up pre-programmed dimensions Direct input and calling up of special dimensions Manual control via joystick Moving forwards or backwards and cutting with visual control. 	Individual cutting to size and manual cutting off defects.
	Module 5.02	Semi-automatic	1. Automatic cut 2. Manual control via joystick Moving forwards or backwards and cutting with visual control 3. Producing according to cutting to size programs	IIndividual cutting to size, but according to stored programs.
	Module 5.03	Fully automatic	Automatic cut Fully automatic processing according to cutting to size programs	Mass production - no cutting off defects.
	Module 5.04	Bar marking	The operator marks the defects on the workpiece (eg with a special chalk or with the measuring carriage via laser beam). The computer controls the machine so that this will automatically make a sawcut at each marking.	Cutting off defects, eg for finger-jointing.
	Module 5.05	Partial Optimization	Marking the workpiece as for module 5.04. The machine automatically positions the greatest possible programmed length between the markings.	Cutting off defects with simultaneous production of fixed lengths, eg fixed lengths on a certain raster.

Application Module **Available Functions** Types of operation Module 5.06 Full optimization Cutting according to frequently Marking the workpiece as for module according to 5.04. The computer divides the changing lists related to orders. priorities workpiece, taking the priorities into account, so that there is the least offcut. Following priorities are possible: 1. Priority by length: The most important lengths are prefered. 2. Priority by quantity: The most required lengths are prefered. 3. Priority by values: For each length a value can be set. The most important values are prefered. 4. Priority by quantity and values: The quantity and values are multiplicated. The most important results are prefered. 5. Absolute offcut minimization.



Module 5.061 Full optimization as for 5.06, but with simultaneous processing of different qualities

Marking the workpieces as for module 5.04, every cutting list can be assigned to a quality stage. Apart from marking defects, quality marking can also be done on the workpiece.

The computer consults the assigned list per part-workpiece, where any remainder produced (if possible) is added to an adjacent part of equal or lower quality.

Several qualities can occur during processing, where a separate cutting to size list is valid for each quality.



Module 5.062 Full optimization as for 5.06, but additional width measurement (only trimmed material)

Marking the workpiece as for module 5.04, every cutting to size list can have a width range assigned to it. Due to the measured workpiece width (done fully automatically in the measurement station), the computer consults the assigned list in optimization.

Workpieces of different widths are processed simultaneously. A separate cutting to size list is valid for each

Module 5.07



Full optimization according to created value and demand (with simultaneous processing of different qualities)

Marking the workpiece as for module 5.04. A value is given for each length. Due to the demand (remaining number of pieces) and the value, the highest value creation is calculated taking the permitted qualities into account.

Exact knowledge of the value of the individual cut sections is available.

AUTOMATIC REPORTS

Automatic reports makes CONTROL 5.0 perfect. Extensive data and parameters are collected for internal calculations. The following reports are available:

- Input-Report: The computer collects and lists the input lengths of each workpiece.
- Output-Report: The cutting to size lists are shown with reference, actual and remaining part numbers. The running meters produced are calculated.
- Total-Report: The opposite illustration shows the build-up.



DIAGNOSIS FUNCTIONS

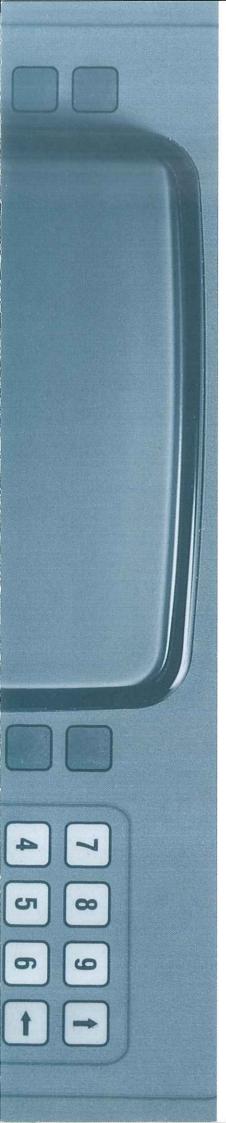
In case of a defect, a message appears on the screen. Further, the last 100 machine states are automatically shown by the computer. Extensive diagnosis functions are available for this purpose.

These data can be called up at any time and traced back.

PRINTER AS OPTION

For processing and archiving the data, all information can be emitted via a printer, if required.





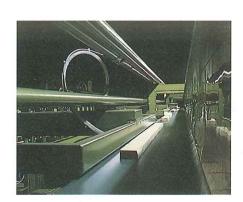
ADDITIONAL MODULES

Sorting Control

It controls the ejectors, so that the parts - sorted according to length or quality - are ejected into boxes.

Data Transmission

This module is suitable if the machining orders are produced by EDP systems in work preparation. These cutting to size lists can then be transmitted with all the data related to orders, such as lengths and numbers off, to the machine controls.

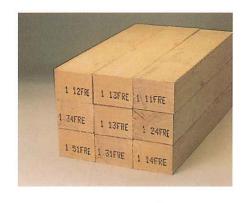


Ink-Jet

The ink-jet is initiated by this, in order to mark each cut section with its length.

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Each cut section can be marked too with an identification number or with information specific to the firm via the ink-jet initiation. This additional module is especially suitable for window manufacturers and can only be used together with the data transmission and ink-jet modules.





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