Preface

Software A6C 114 004

In the first chapter you find surveys concerning the new features of the Compact 5 CNC Software A6C 114 004.

In the chapter "Programming" also the G-Functions which have not been changed are described in a clear and short way.

The new codes are described detailled. Attached to the descriptions you find examples.

How to Use this Book

For users who know the Compact 5 CNC with software version A6C 114 003 this book has all information to program and operate the machine. For CNC-beginners the very detailled instructions of the books "BASIS" resp. "INSTRUCTOR" are valid. The contents of these books must be a little bit extended. Look for it the chapter "Old Programs new Software" in this book.

To the Programming Exercises

With machines with control serial number below 5350 the functions M03 and M05 are not activated. In the programming exercises M03 and M05 are written in brackets. If you have a machine with control serial number below 5350 program an empty line so that you must not renumber the program.

Operation

With serial control numbers from 5350 upwards MO3 and MO5 is activated by the control.

In this case the main spindle switch must be in CNC-position (or position 2).

Extensions in operating see chapter "Operating".

INDEX:

1. Extension Compact 5 CNC
Software AGC 114 004
- Short Summary of Extension and New Features 1/1
- New Software Compact 5 CNC A6C 114 004 1/2
- Re-mounting of Compact 5 CNC with New Software
A6C 114 004
- Modification of Front Panel 1/4
- Old Programs, New Software
- 6-Codes (Extension)
- H-Codes (Extension)
- Addresses (Extension)
- Format A6C 114 004 1/9
- Summary of Max. Values, Input Size
(SW-A6C 114 004) 1/10
- Max. Main Spindle R.P.M. when Threading
(SW-A6C 114 004)
- Alarm Signs 1/12.1 - 1/12.2
- DNC-Interface, PIN-Coverage (SW-A6C 114 004)
(3# NOC 114 0047 111111111111111111111111111111
<pre>2. G-Codes/M-Codes:</pre>
G-Codes:
- Description of Formats 2/1
- G00-Rapid Traverse 2/G00/1
- GO1-Linear-Interpolation 2/GO1/1
- 602-Circular Interpolation Clockwise, 603-
Circular Interpolation Counterclockwise. 2/602/603/1-21
- 604-Dwell 2/604/1
- G21-Empty Line
- 624-Rodius Input with Absolute Value
Programming 2/C2h/1

- G65-Cassette Operation 2/G65/1-2
- G66-RS 232 Operation 2/G66/1-2
- G73-Chip Breakage Cycle 2/G73/1
- G78 Threading Cycle 2/G78/1-7
- 681-Drilling Cycle 2/681/1
- G82-Drilling Cycle with Dwell 2/G82/1
- G83-Drilling Cycle, Deep Hole with
Withdrawal 2/G83/1
- 684-Longitudinal Turning 2/684/1-4
- G85-Reaming Cycle 2/G85/1
- 686-Grooving Cycle 2/686/1-2
- G88-Facing Cycle 2/G88/1-4
- G89-Reaming and Drilling Cycle with Dwell 2/G89/1
- G90-Absolute Value Programming
- 624-Radius Input with Absolute Value Programming 2/624/1
- 691-Incremental Value Programming
- 692-Set Register
- 694-Feed in mm/min
- 695-Feed in mm/rev (inch/rev)
M—Codes: - MOO-Programmed Stop/MO3-Main Spindle in Clockwise Rotation/MO5-Main Spindle STOP
3. Program Input - Operation
- Survey 3/1
- Operating Elements CNC-Operation 3/2
- The Key and its Additional Functions 3/3.1,3/3.2
- The INP -Key 3/4
- The DEL -Key 3/5
- The REV -Key 3/6
- The FWD -Key 3/7
- TheKey 3/8
- Program Input
- Take Over of Registered Values from Previous

- Inserting and Deleting of Blocks $3/1$
- The Program Sequence 3/1
- Testrun 3/1
- Single Block Operation 3/15.1,3/15.
- Automatic Operation 3/1
- Program Stop 3/1
- Program Interruption 3/18.1,3/18.
- Deleting of a Registered Program 3/1'
4. DNC-Interface
RS 232-Interface
DNC-Interface:
- DNC-Interface (Compact 5 CNC)
- DNC-Interface (PIN-Coverage SW-A6C 114 004) 4/2
- Function of the DNC-board 4/3.1-4/3.3
- Mounting of the DNC-board 4/4.1-4/4.2
RS 232 Interface:
- G66-RS 232 Operation 4/5
- Survey RS 232 Operation 4/6
- RS 232c-Connection cable for Compact 5 CNC and F1 CNC
- Video Connection, TV-Connection Interface
RS 232 4/8.1-4/8.3
- Pinning of Compact 5 CNC 4/8.4-4/8.5
- RS 232 Connection/Some Tips 4/8.6-4/8.8
- Data Formats COMPACT 5 CNC
Software A6C 114 004 4/9

- Service Information Turret Toolpost 4/10

1. Extension Compact 5 CNC Software A6C 114 004

- Short Summary of Extension and New Features 1/
- New Software Compact 5 CNC A6C 114 004 1/
- Re-mounting of Compact 5 CNC with New Software A6C 114 004 1/
- Modification of Front Panel 1/
- Old Programs, New Software
- G-Codes (Extension)
- M-Codes (Extension) 1/
- Addresses (Extension) 1/
- Format A6C 114 004 1/
- Summary of Max. Values, Input Size (SW-A6C 114 004) 1/1
- Max. Main Spindle R.P.M. when Threading (SW-A6C 114 004) 1/1
- Alarm Signs 1/12.1 - 1/12.
- DNC-Interface, PIN-Coverage (SW-A6C 114 004) 1/13