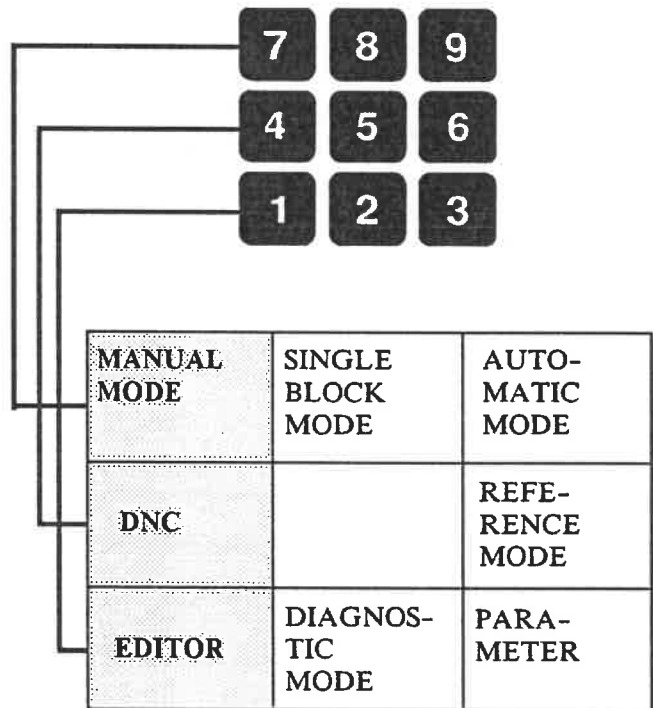# 1. Control System Operation
Menu System and Softkeys

Menu system
The control system facilitates programming
by means of the so-called menu technique.
The available functions are displayed on the
monitor and can be selected by pressing keys.

Softkeys
Each number key has the function
indicated in the square field on the
monitor. As the given functions of the
keys vary according to the display,
they are called softkeys.

7	8	9
4	5	6
1	2	3

MANUAL MODE	SINGLE BLOCK MODE	AUTO-MATIC MODE
DNC		REFE-RENCE MODE
EDITOR	DIAGNOS-TIC MODE	PARA-METER

Operating mode menu

Pressing the operating mode key
will always produce the operating
mode menu.

The display shows the
operating mode menu:

MANUAL MODE	SINGLE BLOCK MODE	AUTO-MATIC MODE
DNC	(*)	REFE-RENCE MODE
EDITOR	DIAGNOS-TIC MODE	PARA-METER

(*) Optional feature

This symbol will be given in the
manual whenever a softkey is to
be pressed.

"Browsing" through the menues
Operating modes are selected
by softkeys.

Press softkey for MANUAL
CONTROL mode (number key 7).

The screen displays the first
menu in MANUAL CONTROL mode.

FEEDRATE MM/REV.	SPEED REV./MIN	V-CONST M/MIN
TOOL SETTING MODE	T TOOL	SPINDLE SELECT >
H-WHEEL X-AXIS 0.01	H-WHEEL Z-AXIS 0.01	MACHINE FUNC-TIONS

Press softkey
FEED MM/REV.
Number key 7 now has a
different function.

The screen displays the
corresponding submenu.
The symbol > means that a
follow-up menu can be selected.

7	8	9
4	5	6 >
1	2	3

> ▬ Press the "continue" key
to reach the **follow-up menu**
on the same level.

The screen displays the follow-up
menu on the same level.
The symbol < means that no
further menu is to follow.

VARIABLE EXPRESS. "{...}"		SIMPLIF. GEOMETRY "?" <

> ▬ Press the "continue" key again.

The menu on this level reappears.

7	8	9
4	5	6 >
1	2	3

Press the "Up" key to reach the **next higher** menu level.

The first menu of MANUAL CONTROL mode will reappear.

FEEDRATE MM/REV.	SPEED REV./MIN	V-CONST M/MIN
TOOL SETTING MODE	T TOOL	SPINDLE SELECT >
H-WHEEL X-AXIS 0.01	H-WHEEL Z-AXIS 0.01	MACHINE FUNC- TIONS

The main or highest menu level is the **operating mode menu.** The operating mode menu can be accessed only by pressing the operating mode key, not via the "Up" key.

Note
The operating mode key reaches the operating mode menu from every other menu level.

MANUAL MODE	SINGLE BLOCK MODE	AUTO- MATIC MODE
DNC		REFE- RENCE MODE
EDITOR	DIAGNOS- TIC MODE	PARA- METER

Graphic Operator Support

Graphic editing support
The graphic editing support illustrates
the data required by the control
system.

For example:
In EDITOR operating mode, the meaning of
required addresses is displayed for
certain G-functions.

In MANUAL CONTROL operating mode,
the tool type dimension addresses are
illustrated.

Graphic simulation (option)
The graphic simulation of the machining
procedure facilitates controlling the
program.
For explanations on the graphic simulation
and how it is activated, see section 4.