

TECNOLOGIA DE CONTROLE NUMÉRICO

CNC FANUC

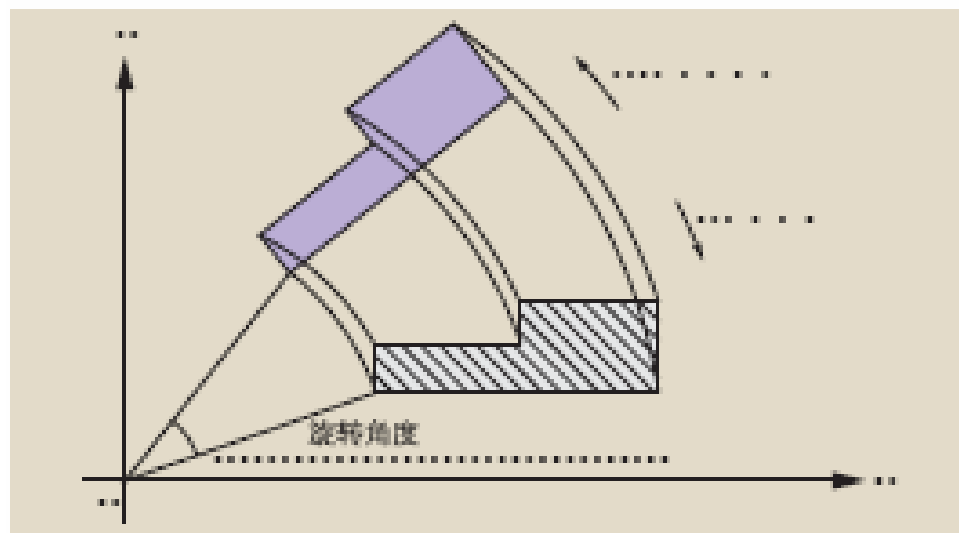




坐标系旋转 Coordinate system rotation

可对程序指定的形状进行坐标旋转。

Rotation of a programmed shape is possible.



刀具使用寿命管理 Tool life management

工具按类别分成若干组，每组工具的使用寿命以及工具编号均以表格形式存储于NC存储器中。

Tools can be classified into various groups, and the tool life and the tool numbers for each group can be arranged in the NC memory in the form of a table.



The screenshot displays a CNC control interface with the following data:

TOOL LIFE DATA			
GROUP	LIFE	COUNT	GROUP
0001	0070	0010	0000
0002	0000	0000	0000
0003	0000	0000	0000
0004	0000	0000	0000
0005	0000	0000	0000
GROUP	LIFE	COUNT	GROUP
0002	0024	0044	0074
0025	0020	0001	0000
0000	0000	0000	0000
0000	0000	0000	0000

TO BE CHANGED :

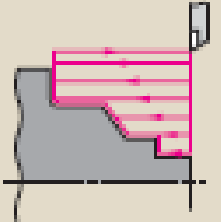
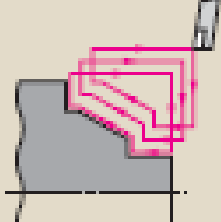
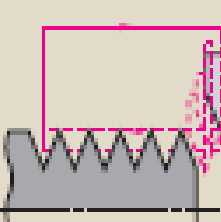
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MACRO MENU OPE TOOL LIFE COPY

复合加工循环 Multiple repetitive cycle

复合加工循环可用简单指令，生成一系列的切削路径。
如定义了工件的最终轮廓，可以自动生成多次粗车的刀具路径。这样可以简化车床编程。

The multiple repetitive cycles generate a series of cutting paths with simple commands. For instance, definition of final profile of workpiece generates tool path for rough cutting automatically. It simplifies the lathe programming.

G71粗车 Stock removal in turning	G73复合循环 Pattern repeating	G76切螺纹 Thread cutting
		

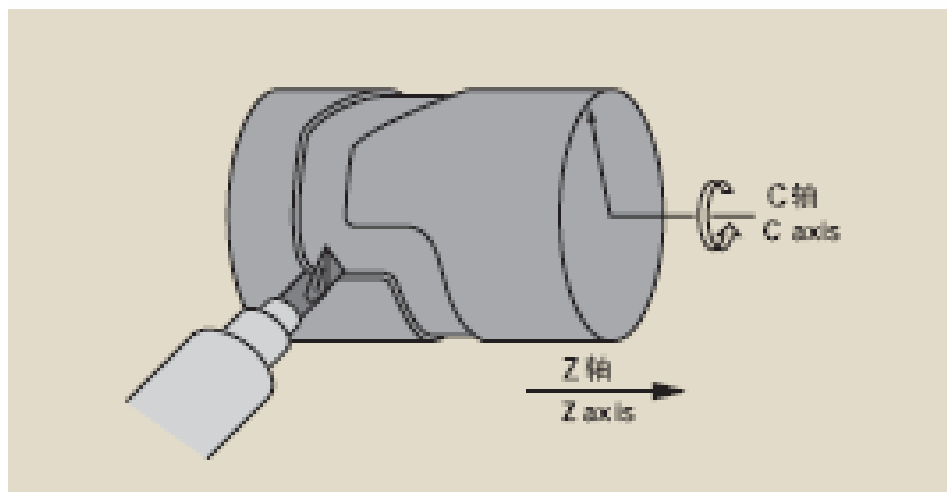
圆柱插补

Cylindrical interpolation

该功能最近用于切削圆柱上的槽。

能够按照圆柱表面的展开图进行编程。

This feature is ideally suitable for cylindrical groove cutting needs. Programming can be performed precisely as the cylinder developed.



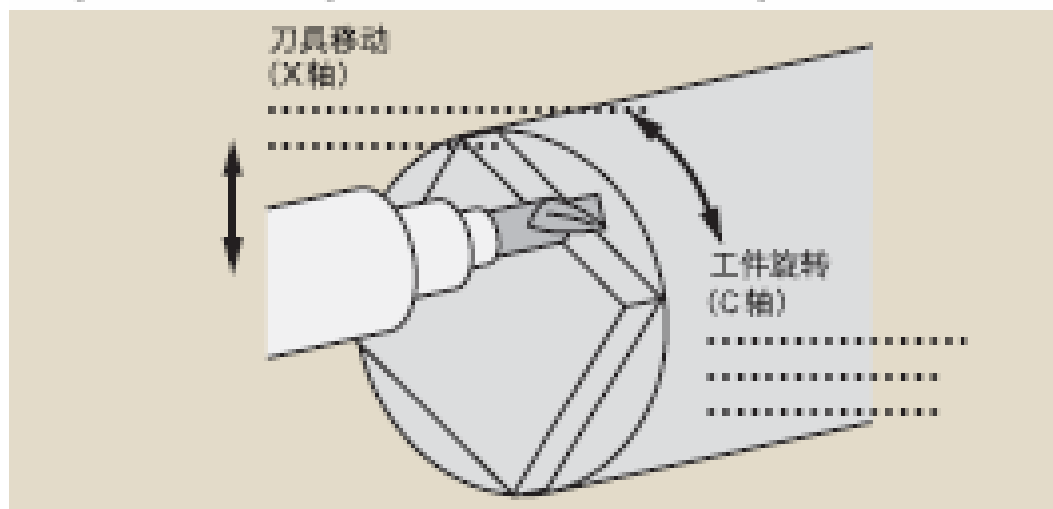
极坐标插补

Polar coordinate interpolation

此功能尤其是用于在车床上的凸轮磨削和端面铣削(X、C轴)。

使用笛卡尔坐标可对加工形状进行编程。

This feature is ideal for cam grinding and face milling (X, C axis) using a lathe. The machining profile can be programmed using a cartesian coordinate system.



图形显示功能 Graphic display function

可在CNC显示器上绘出加工工件的刀具路径图形，这样可以在加工前预先模拟加工程序。

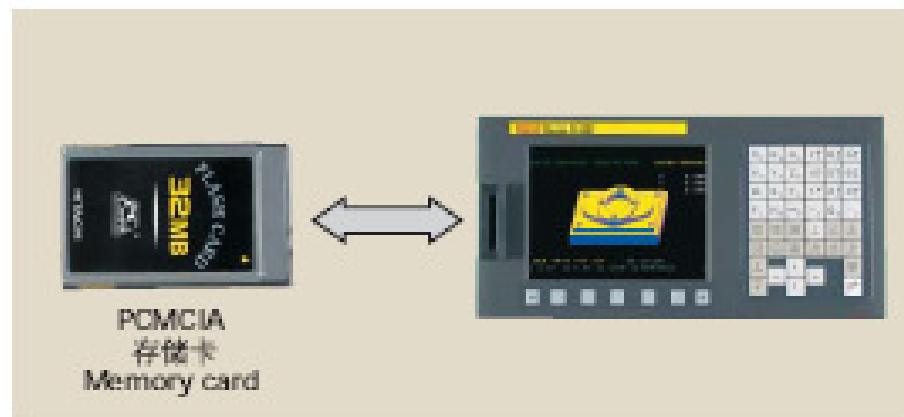
Tool paths of part programs are able to be drawn graphically on the CNC display. It offers visual program review prior to machining.



存储卡的存储和恢复功能 Saving and restoring by memory card

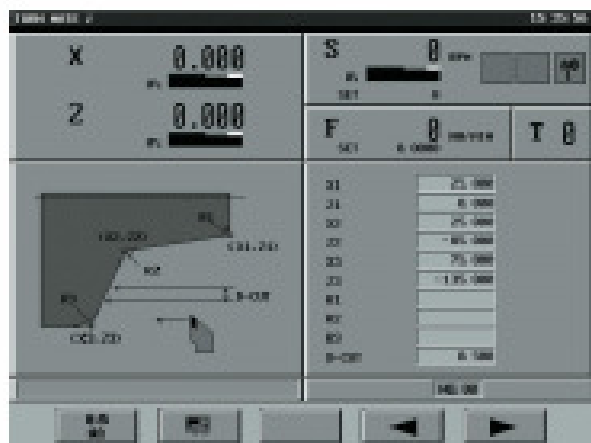
通过安装在液晶单元前面的存储卡，可以一次性地存储或恢复NC程序、偏置数据等CNC内部数据。

CNC data such as parameters, part programs, and offset data, can be saved to the PCMCIA memory card on the front of the LCD unit with easy operation, and are also restored conveniently from it for recovering CNC memory just in case.



触摸板

在7.2英寸单色LCD显示器上采用了触摸板。通过触摸板，成功地实现了信息显示和操作的一体化。只需触摸画面所显示的信息，就可以调出相关操作画面。同时，还可以把运转所需要的所有信息统一显示在一个画面中。直感式的操作和清晰可见的画面，使现场的加工作业轻松愉快。



Touch Panel

Touch panel is applied to 7.2" monochrome LCD unit. Using touch panel, information and operation are linked successfully. Only touching information on screen, a related operation screen appears. And all information for machining are integrated into one screen. Intuitive operation and plain screen help your turning work in job shop.



丰富的循环加工

囊括了通用车床所需要的循环加工。把图纸中经常出现的加工形状以图形显示出来，省去了输入形状的麻烦，用户友好的引导图帮助您输入循环加工的数据。

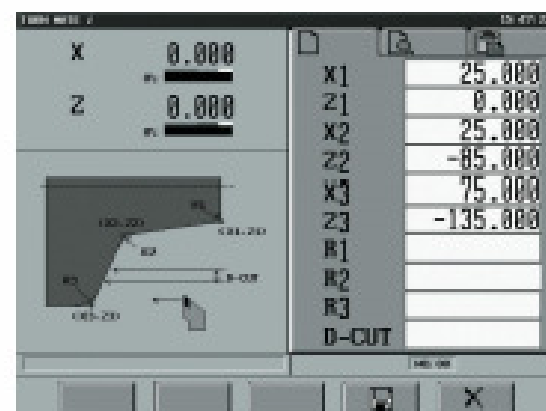
- 粗削加工（图形形状、任意形状）
- 精削加工（图形形状、任意形状）
- 槽加工（图形形状）
- 螺纹加工（通用螺纹）
- 螺纹再次加工（通用螺纹）
- 钻孔加工（钻孔、攻螺纹）



Various canned cycles

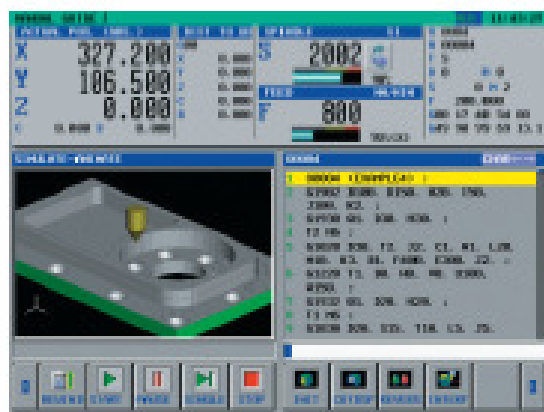
All necessary cycles for conventional lathe are covered. Patterning turning contours which often appear on drawings, input operation for contours can be saved. User friendly guidance drawing helps you to input cycle data.

- *Roughing (Pattern figure, Free figure)
- *Finishing (Pattern figure, Free figure)
- *Grooving (Pattern figure)
- *Threading (General thread)
- *Re-threading (General thread)
- *Drilling (Drilling, Tapping)



综合操作屏幕

综合操作画面将所需的操作全部集中于一个画面，用户不用切换画面就可以简便操作CNC。此外，还可以根据需要打开窗口并显示详细的数据。



Integrated Operating Screen

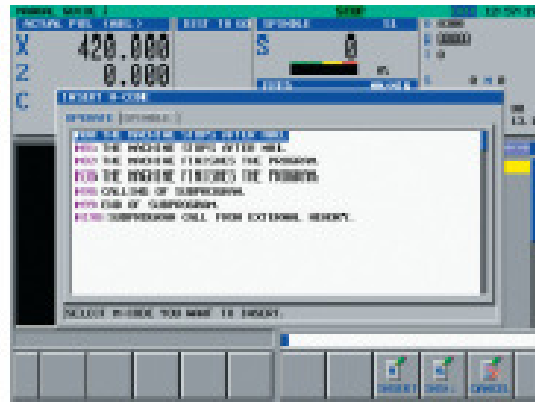
All the necessary operations are concentrated to one single screen. And, it is possible to operate easily a CNC without changing a screen. And, if necessary, the window will be opened in order to display the detailed data.



强大的程序编辑功能

由于本款机型支持加工现场的程序编辑操作，备有如下所示强大的程序编辑功能。

- 剪切（复制）和粘贴
- 引导信息
- 固定格式程序菜单
- M代码菜单
- 轮廓编程



Powerful Program Editing Functions

In order to support the program editing operations at shop floor, following powerful editing functions are prepared.

- *Cut, Copy & Paste
- *Guidance Message
- *Fixed form program menu
- *M-code menu
- *Contour Programming



逼真的加工过程模拟

Realistic Machining Simulation

编制的铣削加工和车削加工程序, 可以通过刀具轨迹描绘或动画简单进行确认。

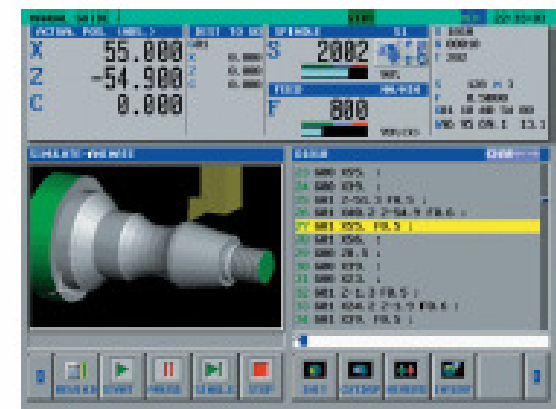
利用动画可以指定如下所示的工件形状。

- 矩形
- 圆柱形注塑件
- 圆柱形
- 棱柱形

Entered program for milling and turning can be checked easily by tool path drawing or animated drawing.

Following work-piece forms can be used for animated drawing.

- Rectangular
- Preformed cylinder
- Cylinder
- Prism

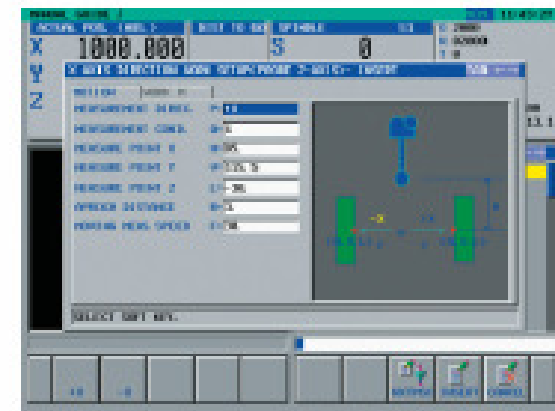


设置引导

Set-up Guidance

准备加工时，在选定屏幕上使用菜单形式的简单指令可对工件设置错误、刀具偏置值和已加工工件进行测量。

In preparation for machining, simple instructions in menu form on a selected screen enables measuring of work-piece setting error, tool offset value and machined work-piece.

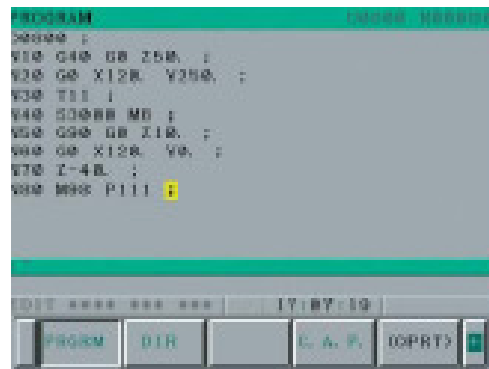


ISO 代码部件加工编程

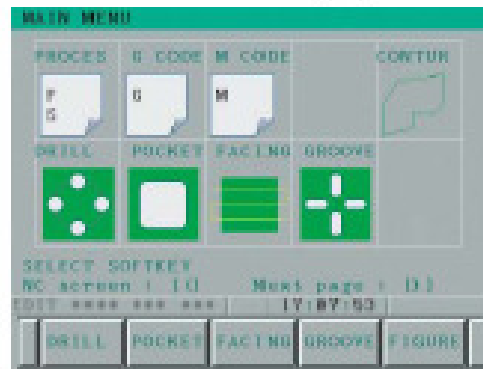
"操作引导0i" 采用ISO代码作为零件加工程序语言。

直线、圆弧等简单动作可直接用G代码输入。

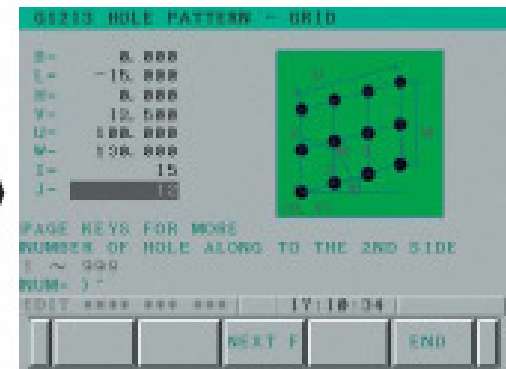
而通过循环加工程序段可以很轻松地进行如型腔加工和模型钻孔之类的复杂运动。



CNC程序屏幕
CNC program screen



菜单屏幕
Menu screen



孔模式屏幕
Hole pattern screen

ISO code part programming

"MANUAL GUIDE 0i" adopted ISO code program for its part program language. Simple motion such as line and arc are entered by G-code directly, and complex motions such as pocket machining and drilling patterns can be entered easily by cycle machining blocks.

Vídeo UNICAM