
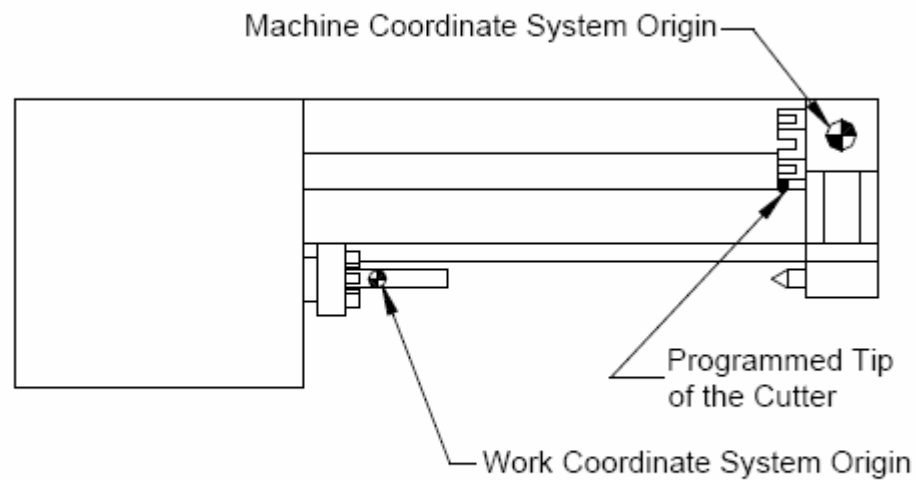


TECNOLOGIA DE CONTROLE NUMÉRICO

OPERAÇÃO E
CARACTERÍSTICAS DE UM
EQUIPAMENTO CNC: SISTEMA
DE REFERÊNCIA EM
MÁQUINAS CNC (ZM, ZF, ZP)



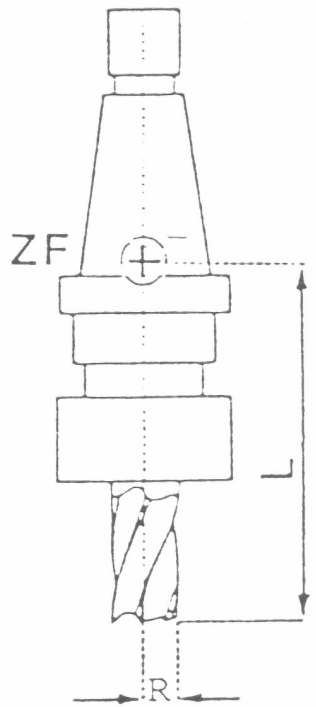
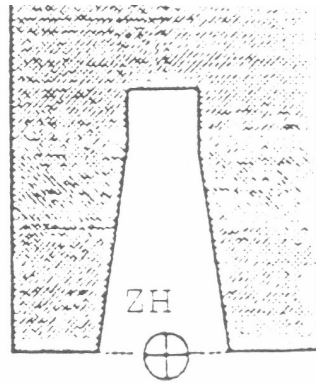


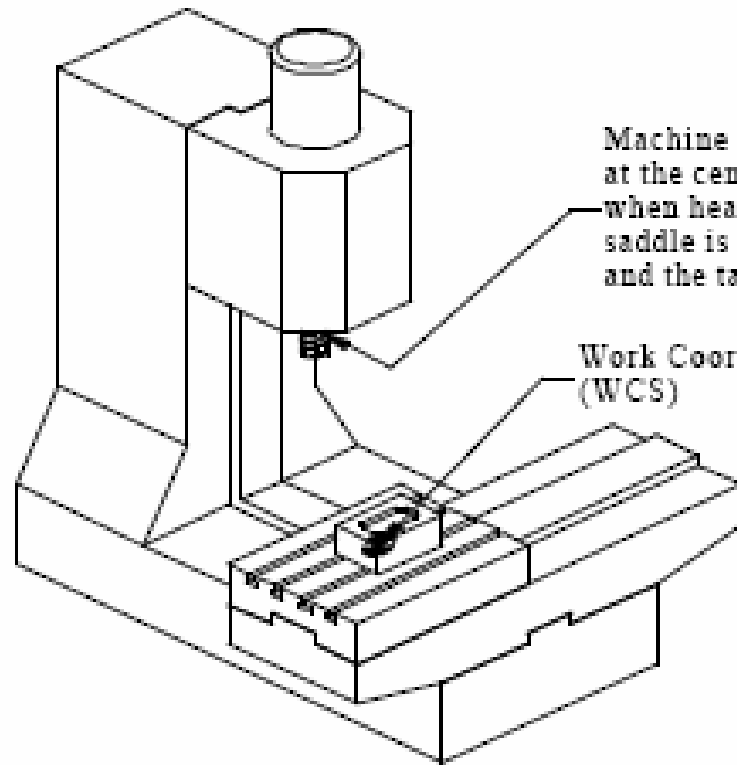
Top View of the Turning Center

The machine operates from the Machine Coordinate System (MCS). Note that all MCS movements are in the negative X and Z directions.

We program from the Work Coordinate System (WCS).

The tip of the cutter is offset from the MCS and is different for each cutter.

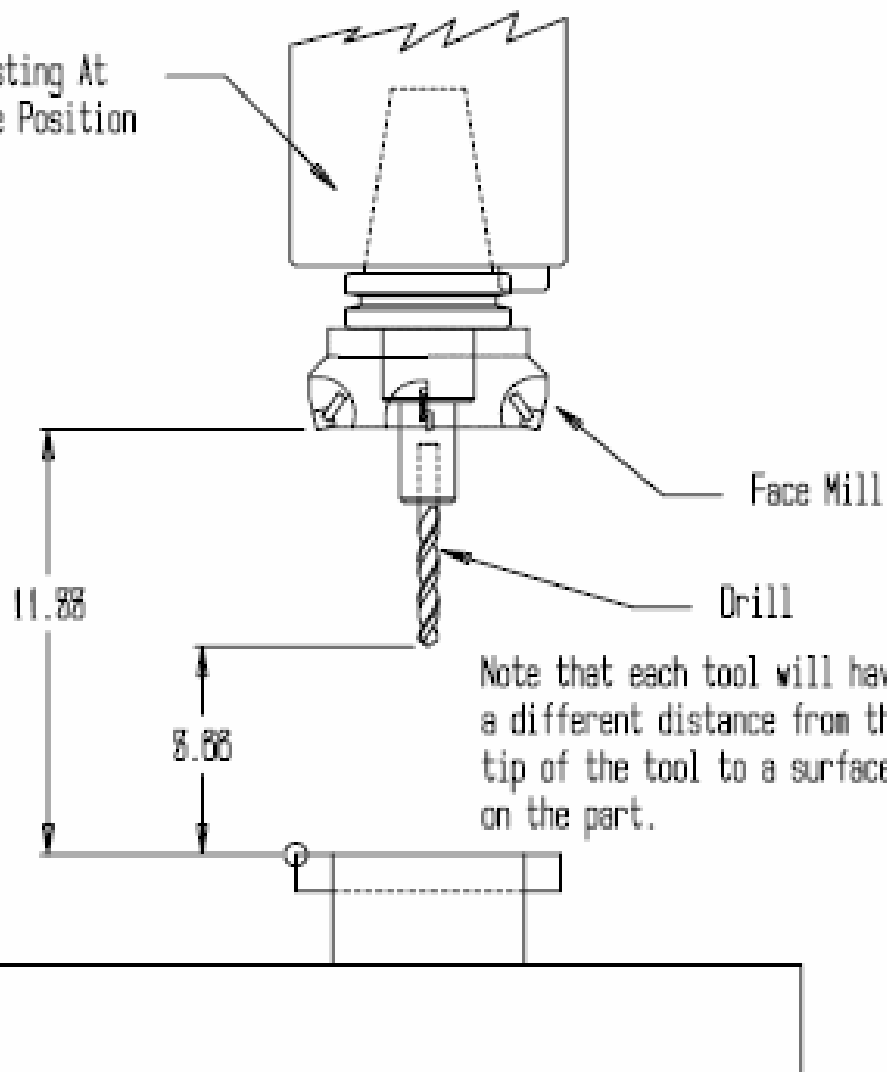




Machine Coordinate System (MCS)
at the center, end of the spindle
when head is in its uppermost position,
saddle is all the way towards the operator,
and the table is all the way left.

Work Coordinate System
(WCS)

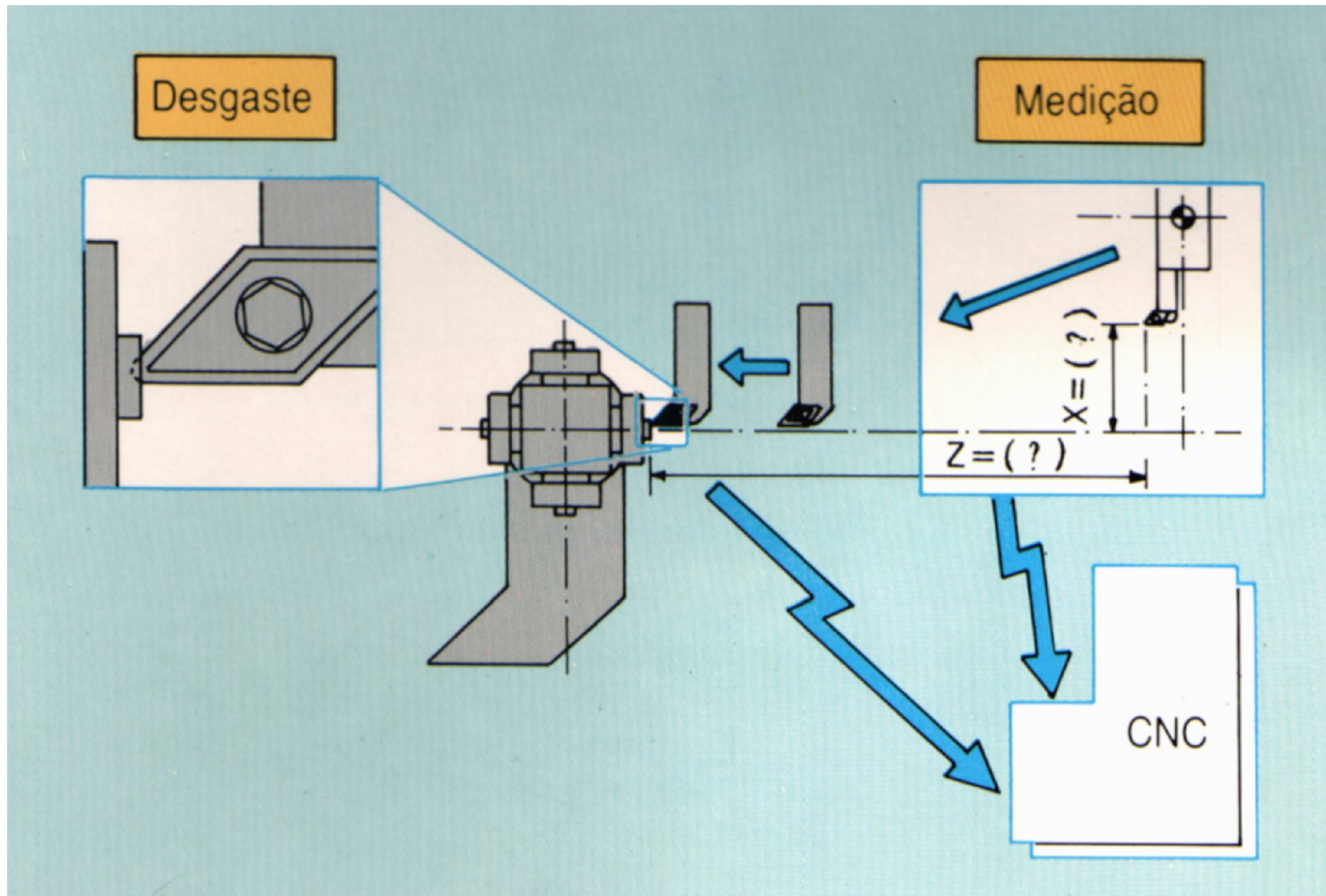
Spindle Resting At
Tool Change Position





Desgaste

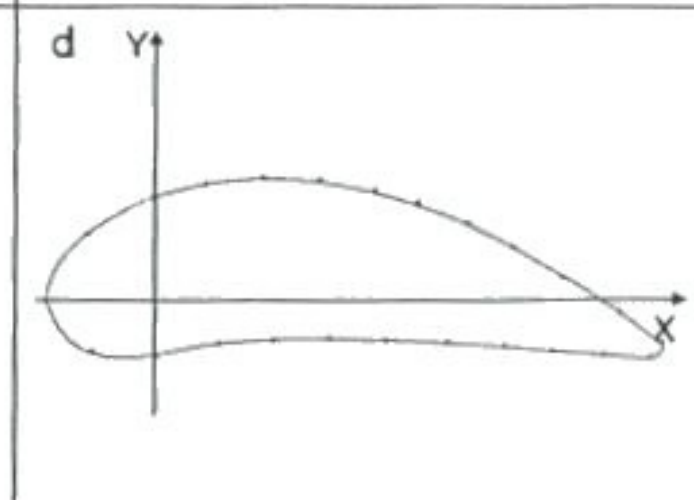
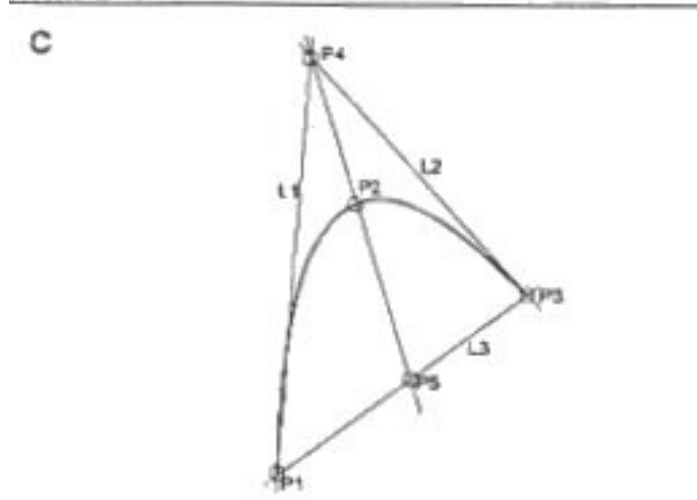
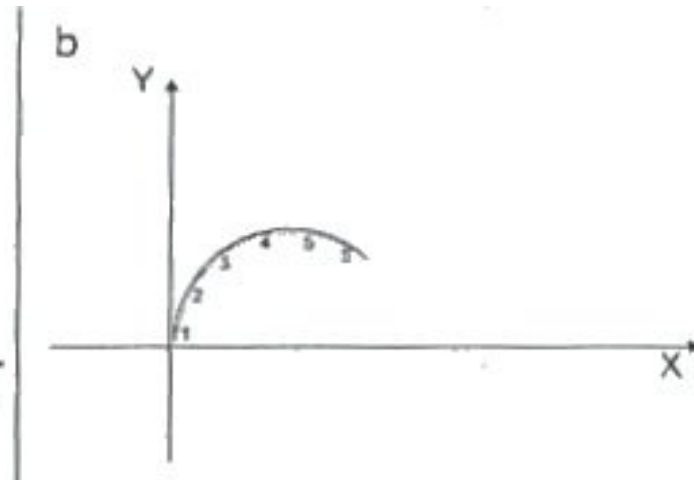
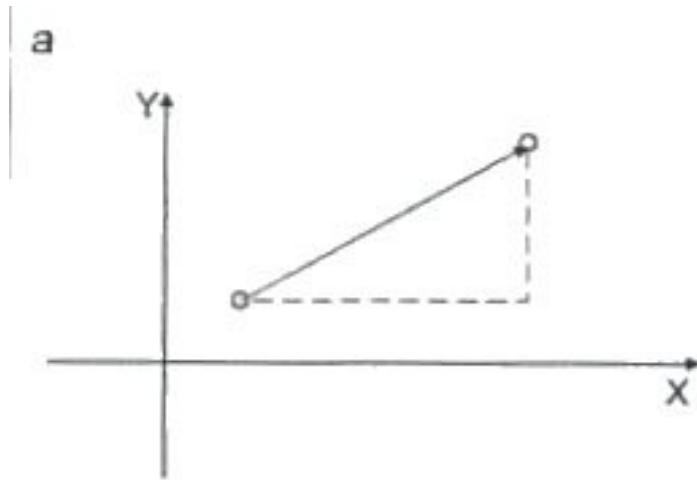
Medição



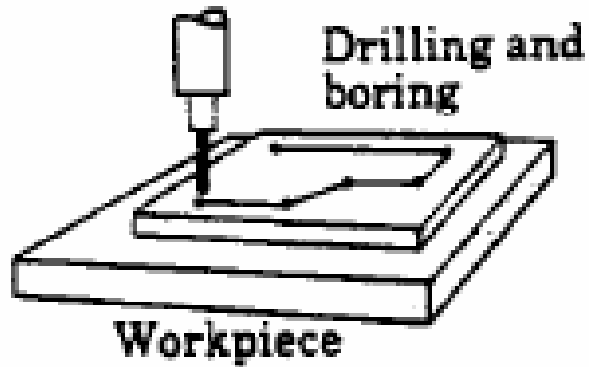


Medição da
ferramenta

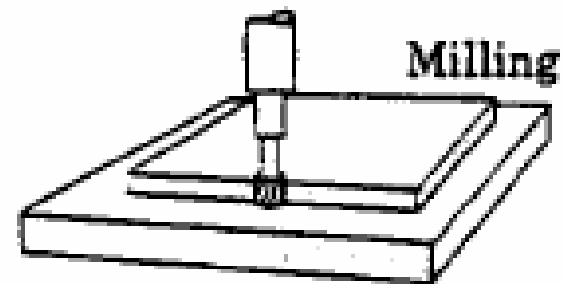
Compensação de
desgaste da ferramenta



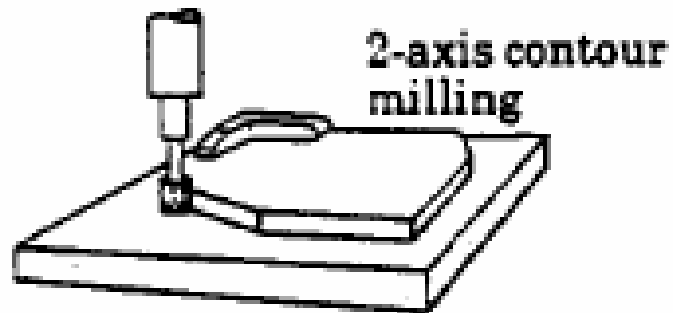
Point-to-point



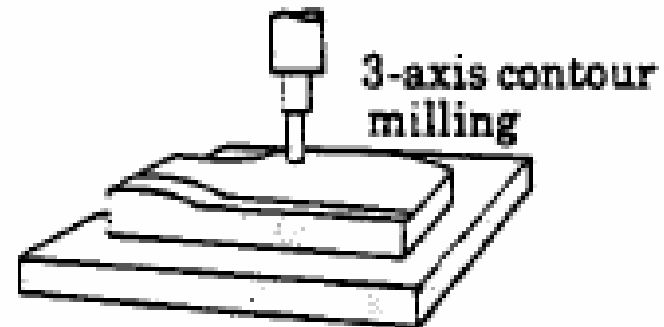
Point-to-point and straight line

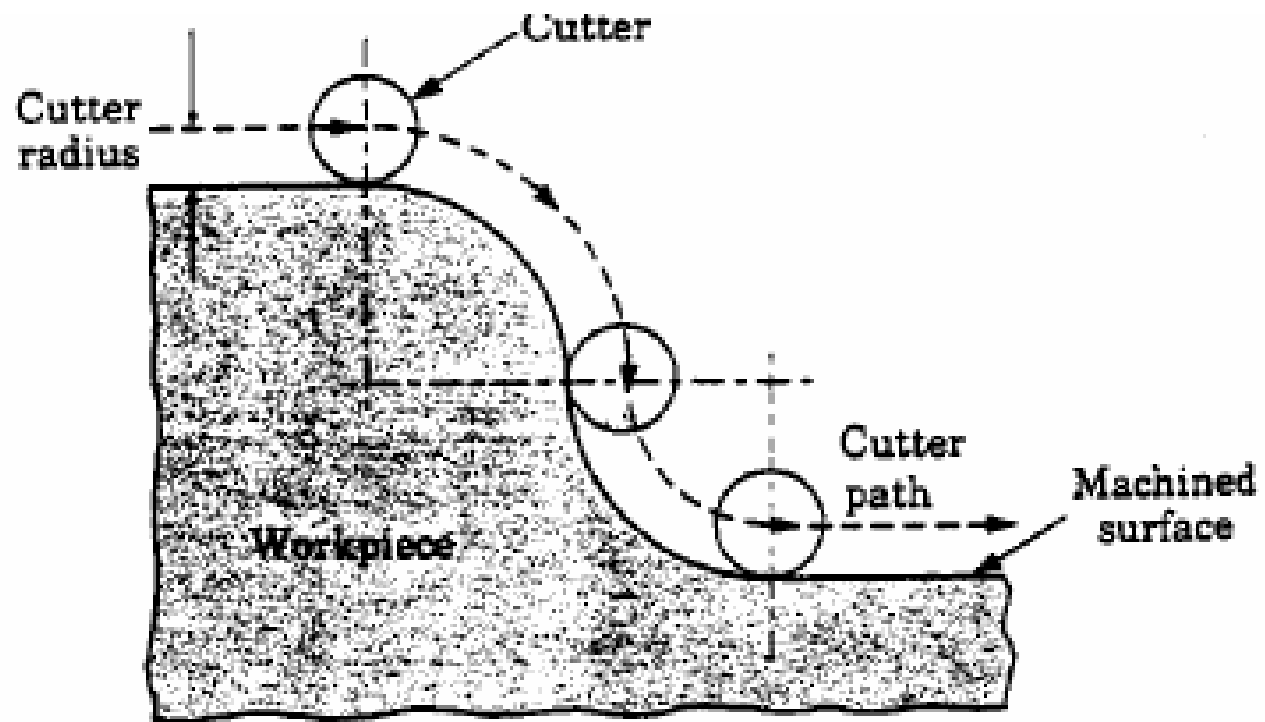


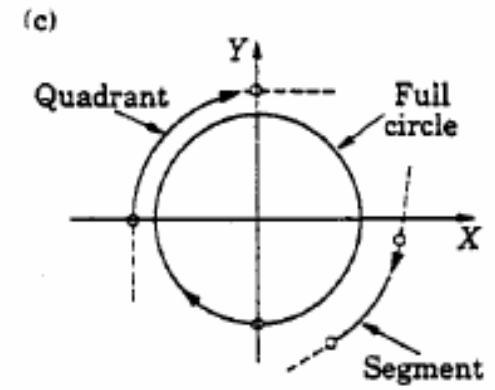
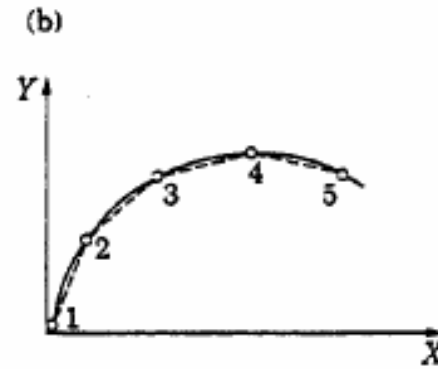
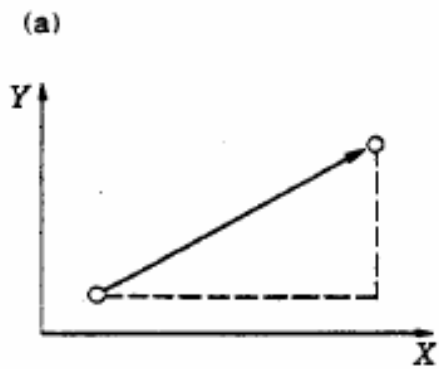
2-axis contouring with switchable plane



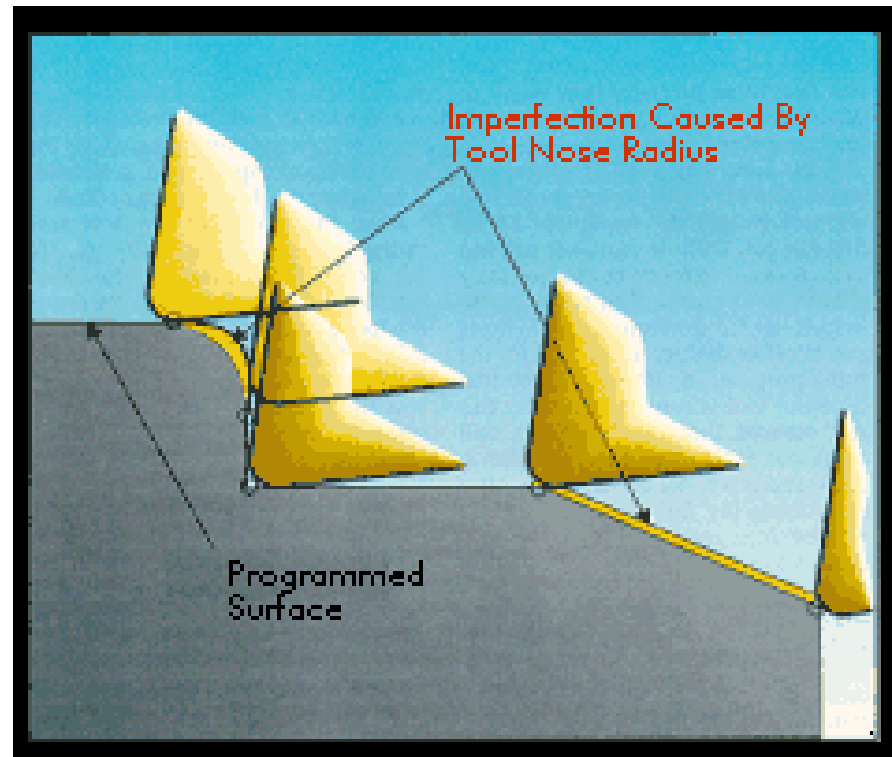
3-axis contouring continuous path



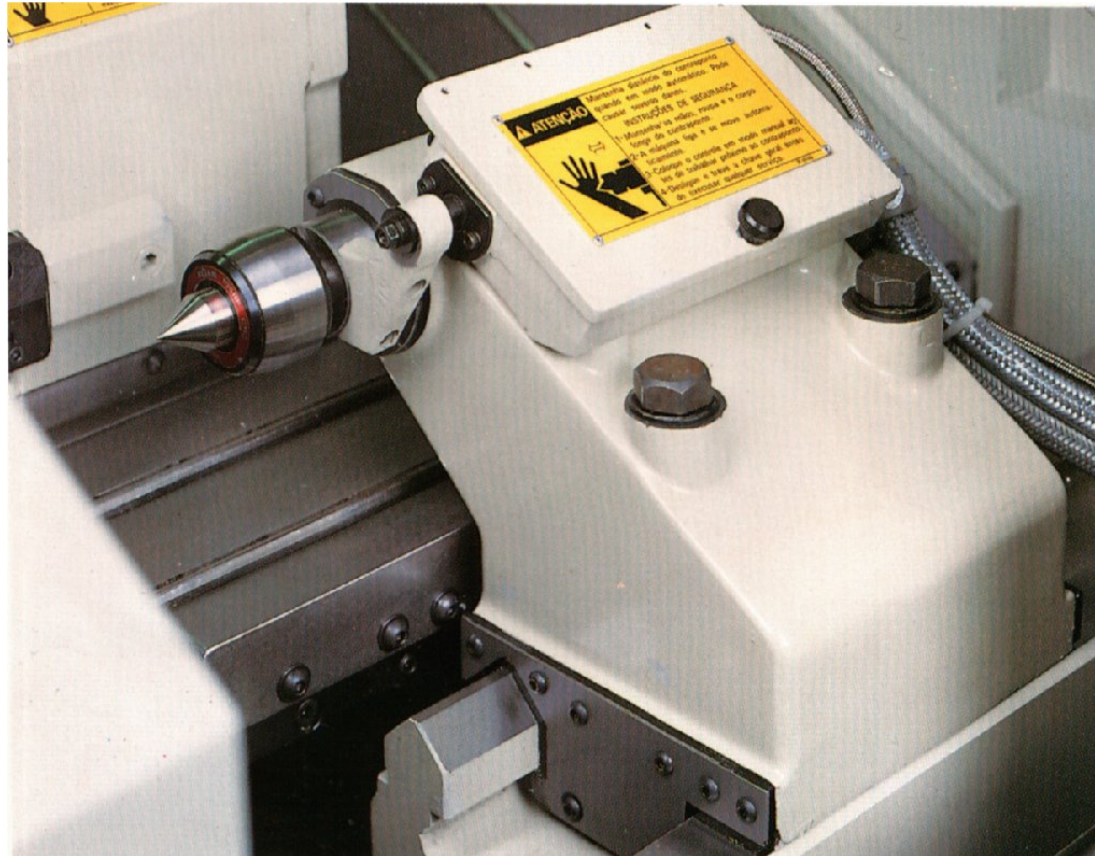




Tipos de Interpolações



Compensação de Raio de Ferramenta



ATENÇÃO

Mantenha distância do componente em movimento. Não toque em partes girantes.

INSTRUÇÕES DE SEGURANÇA

- 1. Mantenha as mãos longe de ferramentas.
- 2. A máquina só pode ser usada com o protetor de segurança instalado.
- 3. Colocar o protetor de segurança em posição antes de iniciar a operação.
- 4. Não desmontar a máquina sem a chave de segurança.

