# **VISION**

**FANUC 0 - M / 21 - M** 

- Fräsen
- Milling
- **■** Fraisage
- Fresar

Ausgabe 2002

Ref. Nr.: VS 9973

#### Hersteller:



#### **INHALTSVERZEICHNIS**

Folie Nr.	Thema
1, 1a 2 3	Steuerungslayout Fanuc 0 - M, 21 - M Bezugspunkte (M,A,W,R) und Koordinatensystem - Grundbild Bezugspunkte am Werkzeugsystem (N, P); Darstellung Referenzieren.
4	Bezugspunkte: Symbole und Kurzzeichen
5 6	Nullpunktverschiebung (NPV) Offset Nr.00 - Grundbild G54 - G59 Additive NPV Nr. 01-06 - Grundbild
7	Kombination Offset und Additive NPV - Grundbild
8	Koordinatensystem zu NPV-Darstellung
9	Werkzeugkorrektur-Daten
10	G00 Eilgang
11	G01 Linearinterpolation
12	G02 Kreisinterpolation im Uhrzeigersinn
13	G03 Kreisinterpolation im Gegenuhrzeigersinn
14 15	Kreisinterpolation mit Mittelpunktskoordinaten I, K
15 16	Einfügen von Radien "R" und Fasen "C" G04 Verweilzeit
10	OUT VOI WOIIZOIT
17	G16 Polarkoordinaten
18	G17 - G19 Ebenenwahl
19	G33 Gewindeschneiden
20	G40 - G42 Fräserradiuskompensation
21	G51 Maßstabsfaktor
22 23	G51 Spiegeln Kontur G09, G61, G64 Genauhalt, Schneidmodus
23	309, 301, 304 Gerlauffalt, Schillefulffodds
24	G73, G83 Bohrzyklen Spanbruch / Ausheben
25	G74, G84 Gewindebohrzyklen Links / Rechts
26	G81, G82 Bohrzyklen ohne / mit Verweilzeit
27	G85, G89 Ausreibbohrzyklen ohne / mit Verweilzeit
28	G86, G88 Bohrzyklen mit Spindelhalt / Programmhalt
29	G90, G91 Absolut- / Inkrementalwertprogrammierung
30	G98, G99 Rückzug auf Startebene / Rückzugebene
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Slide No.



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8	Coordinate system to zero shift presentation			
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30	G98, G99 Retrait sur plan de positionnement / de référence		
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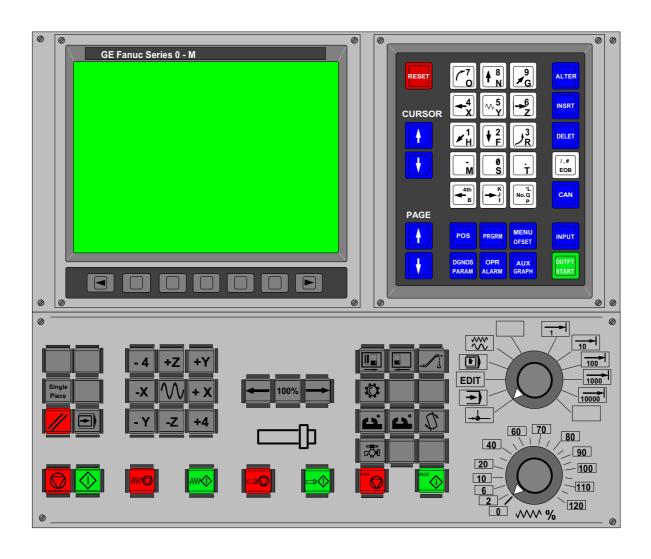


#### **CONTENIDO**

Hoja no.	Tema		
1, 1a 2 3	Pupitre de mando Fanuc 0 - M, 21 - M Puntos de referencia (M,A,W,R) y sistema de coordenadas Puntos de referencia en el sistema de herramientas (N,P);		
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5 6 7 8 9	Decalaje del origen básico no.00 G54 -G59 Decalaje del origen no.01-06 Combinación de decalaje del origen no.00 con no.01-06 Sistema de coordenadas para representación de decalaje Datos de corrección de herramienta		
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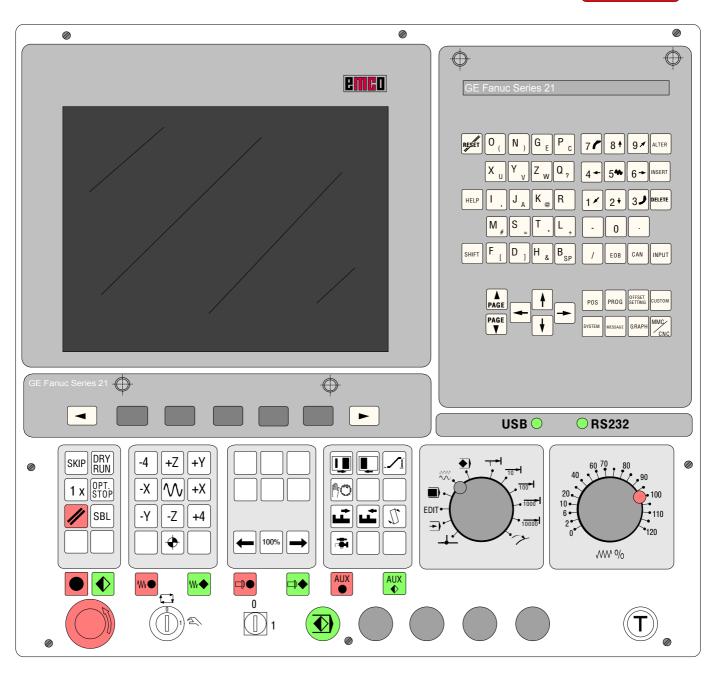






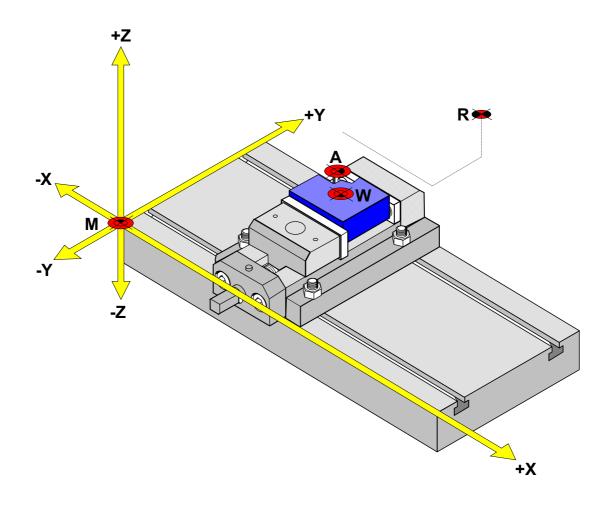


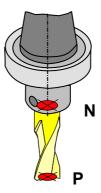












Fanuc 0 - M

3

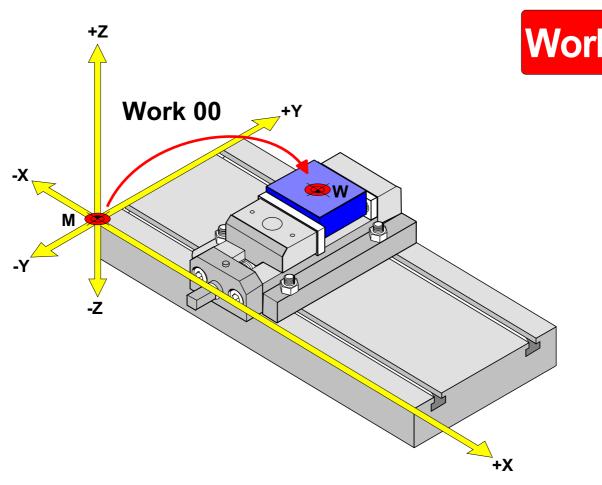


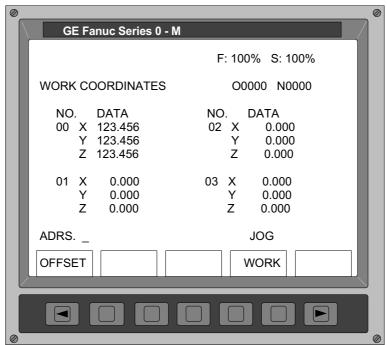


	M	Maschinennullpunkt Machine zero point Origine de la machine Punto cero de la máquina
	Α	Anschlag-Punkt Dead stop point Point dárrêt du piéce Punto de tope
	W	Werkstücknullpunkt Workpiece zero point Origine de la piéce Punto cero de la pieza
<b>—</b>	R	Referenzpunkt Reference point Référence de la machine Punto de referencia
<b>—</b>	Т	Werkzeugträger-Bezugspunkt Toolholder reference point Référence des portes-outils Punto de referencia del portaherramientas
<b>—</b>	N	Werkzeugaufnahme-Bezugspunkt Tool mount reference point Référence du système d´outillage Punto de referencia para toma de herramienta
<b>—</b>	Р	Werkzeugpunkt Cutterpoint Point tranchant d´outil Punta de berramienta

Punta de herramienta

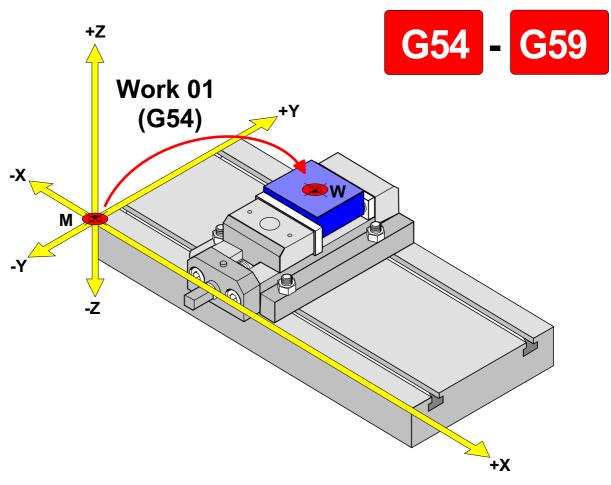


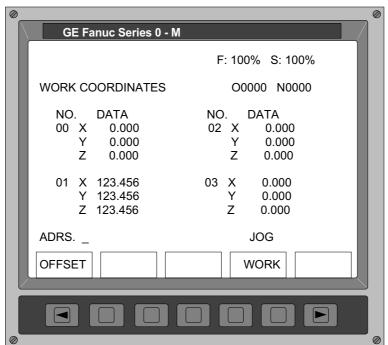




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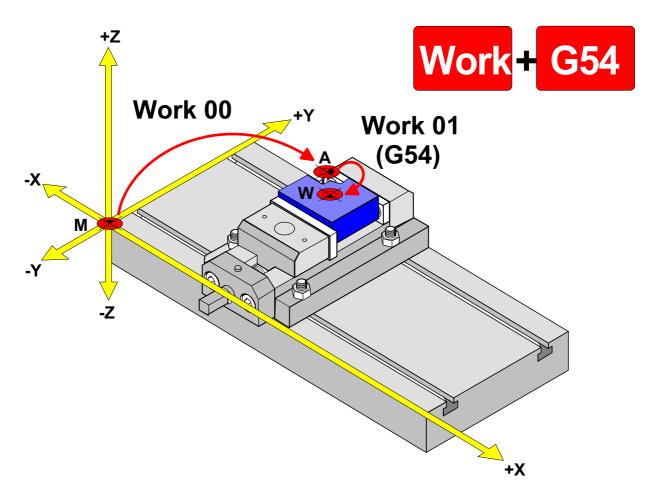


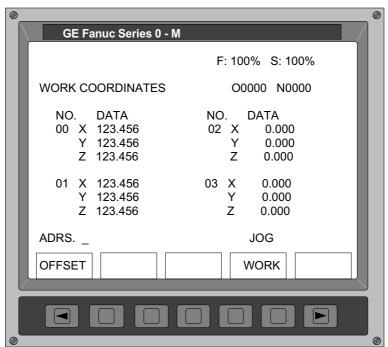




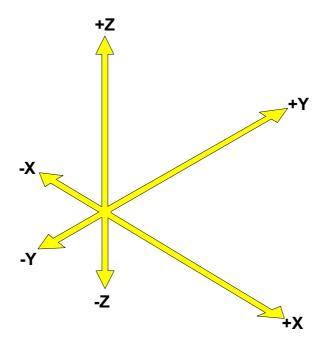
Fanuc 0-M / 21-M 6





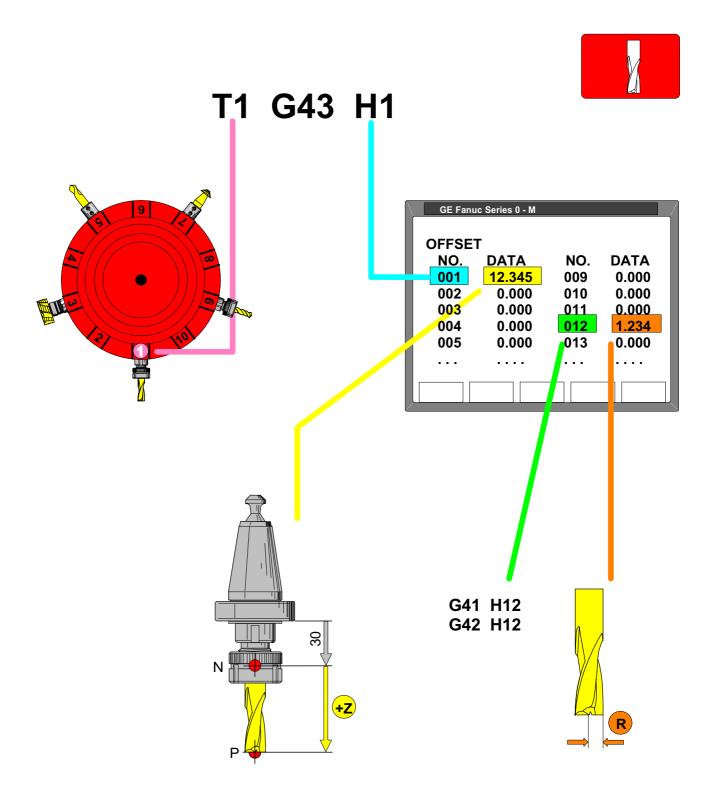


Fanuc 0-M / 21-M 7



Fanuc 0 - M

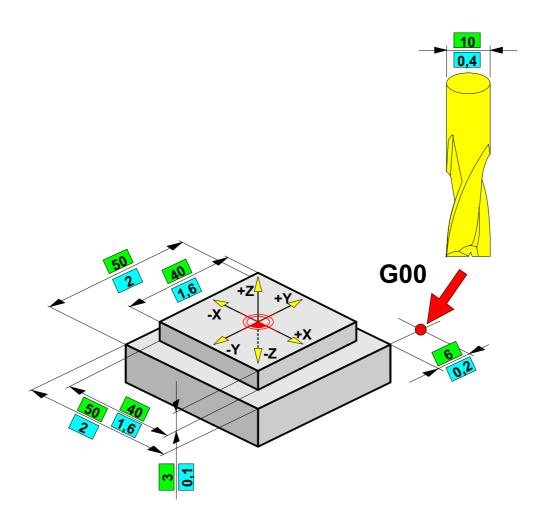


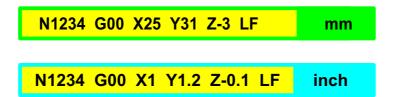


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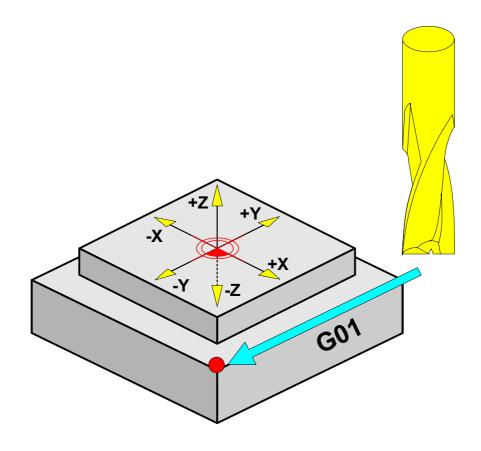




Fanuc 0-M / 21-M





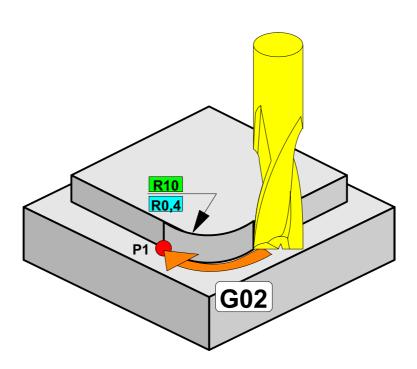


N1234 G01 X25 Y-25 LF mm

N1234 G01 X1 Y-1 LF inch





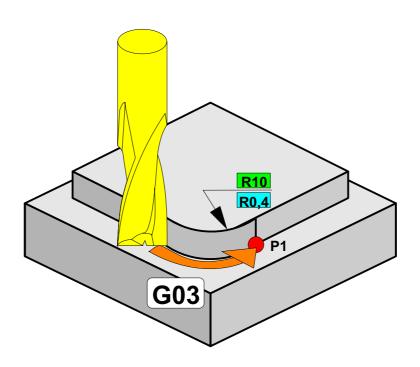


N1234 G02 X... Y... R10 LF mm

N1234 G02 X... Y... R0.4 LF inch



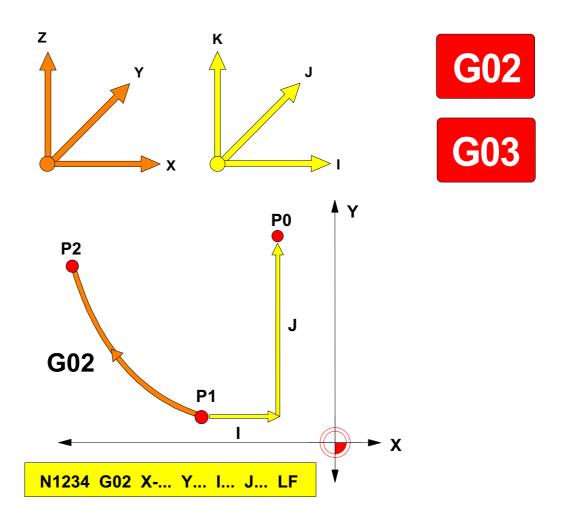


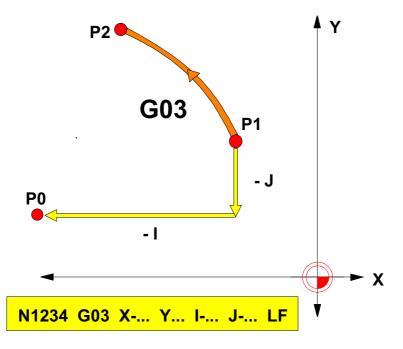


N1234 G03 X... Y... R10 LF mm

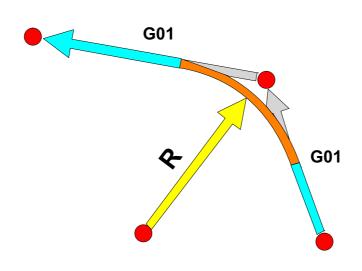
N1234 G03 X... Y... R0.4 LF inch







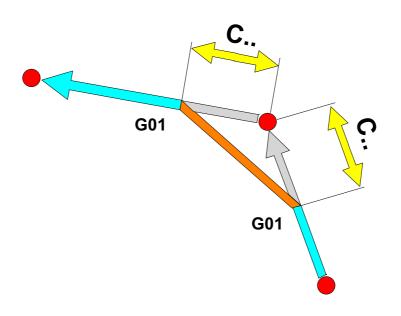






N0042 G01 X... Y... R... LF

N0043 G01 X... Y... LF

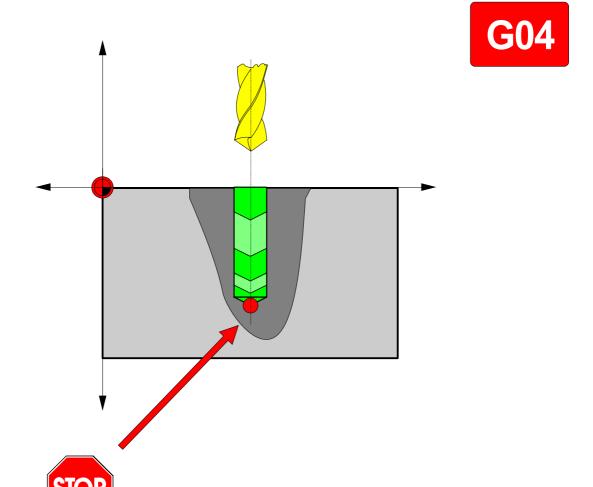


C

N0042 G01 X... Y... C... LF

N0043 G01 X... Y... LF







N1234 G04 X... LF (sec.)

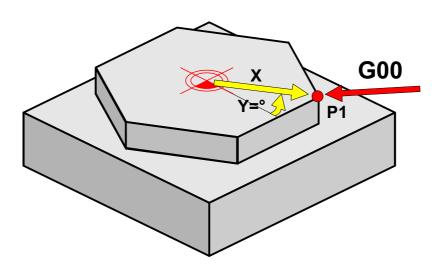


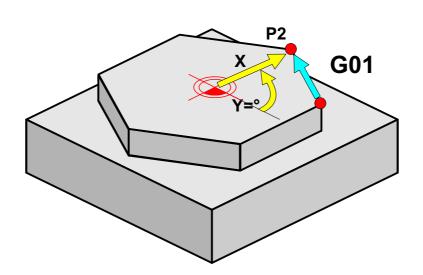
N1234 G04 P... LF (msec.)











N1234 G16

N1234 G00 X... Y...° (P1)

**N1234 G01 X... Y...**° (P2)

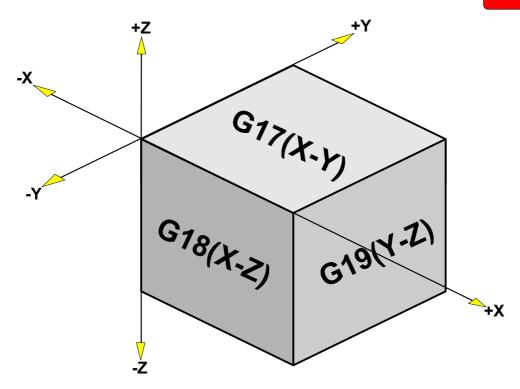
N1234 G15



**G17** 

G18

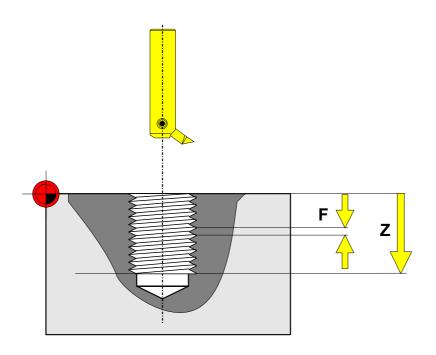
**G**19



18

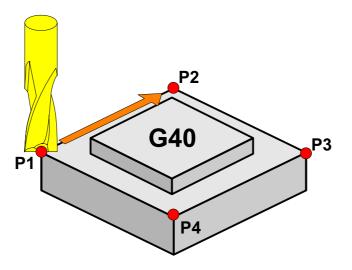




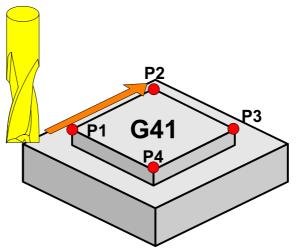


N1234 G33 Z ... F ... N1234 G01 .....

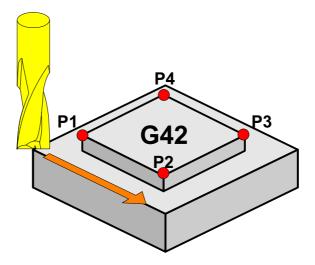






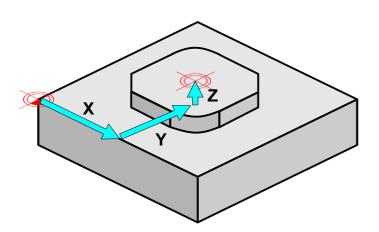






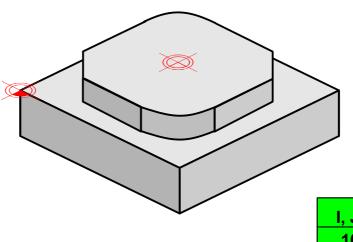
G42











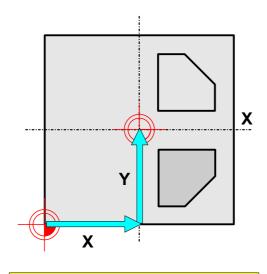
I, J, K	M/S
1000	1:1
2000	1:2

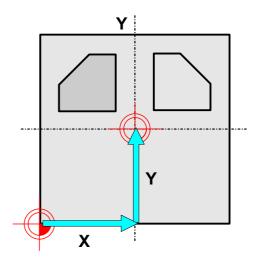
N1234 X... Y... Z... I1500 J1500 K1500



G50

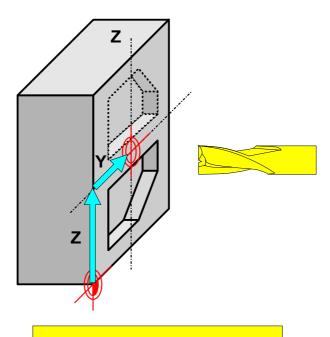
**G51** 





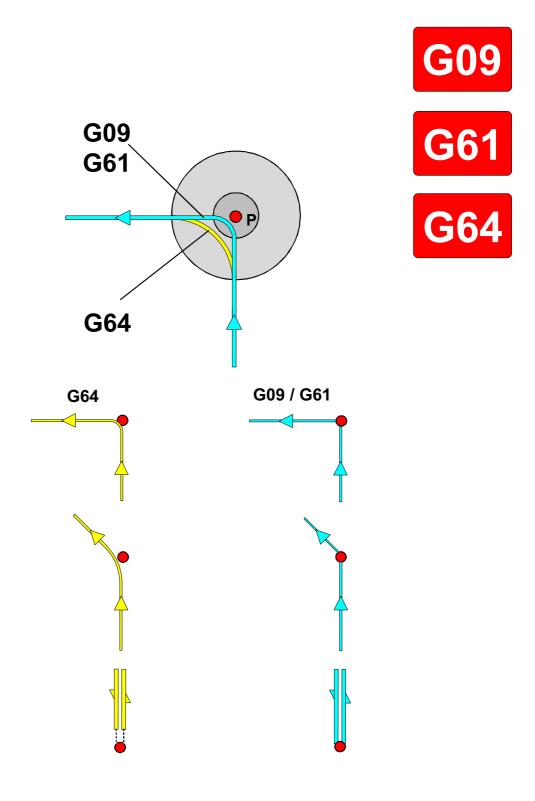
N1234 G51 X... Y... J-1000

N1234 G51 X... Y... I-1000

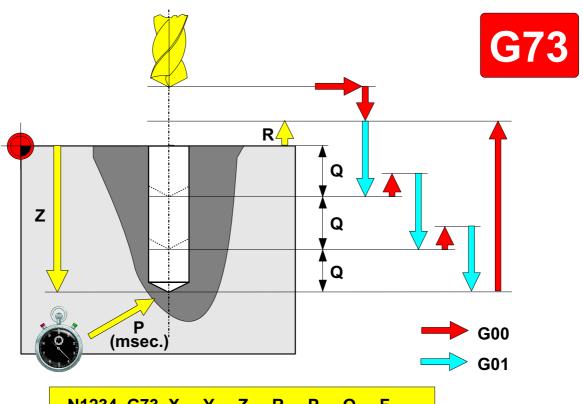


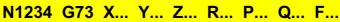
N1234 G51 Y... Z... K-1000

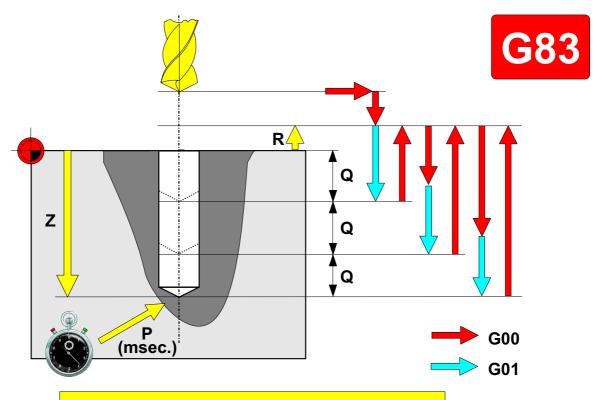






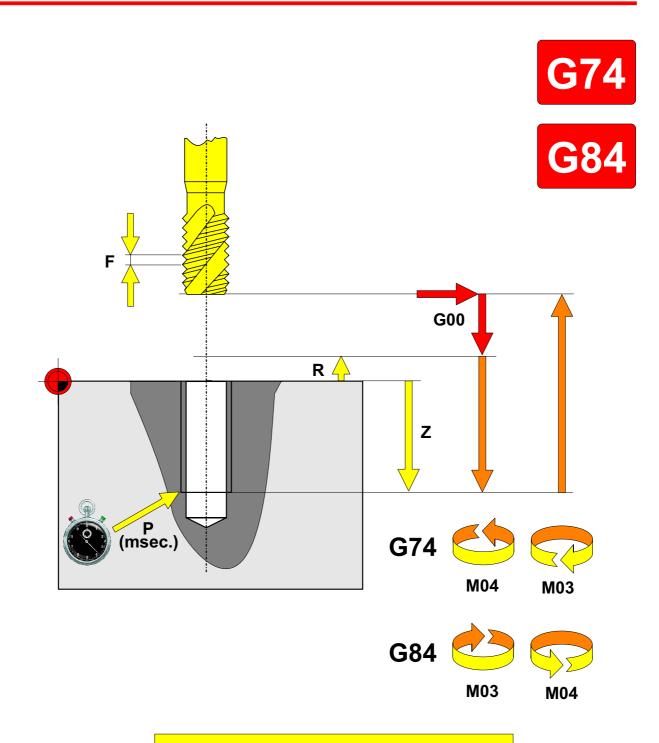






N1234 G83 X... Y... Z... R... P... Q... F...

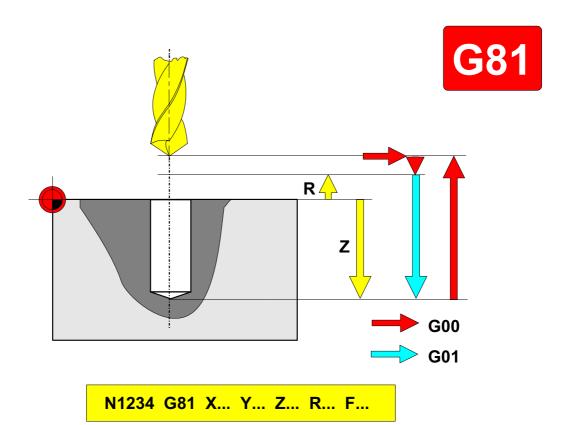


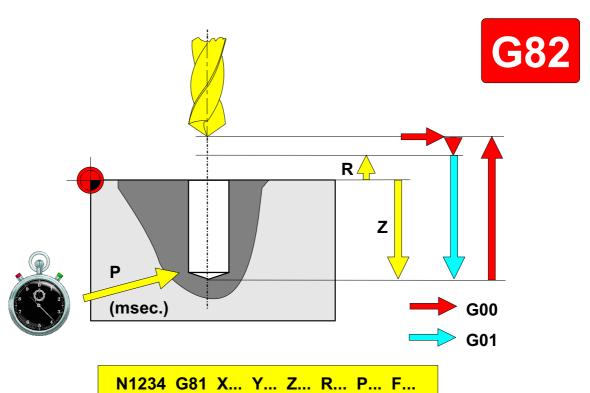


N1234 G74 X... Y... Z... R... F... P ...

N1234 G74 X... Y... Z... R... F... P ...

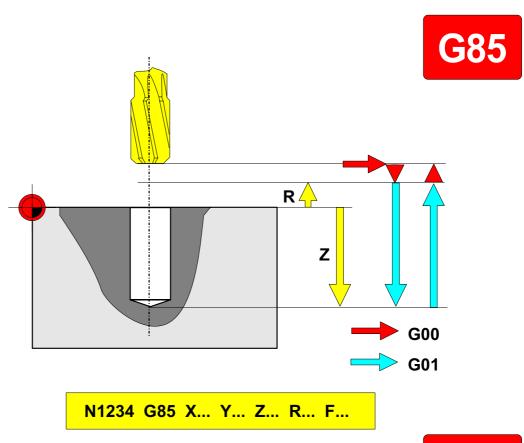


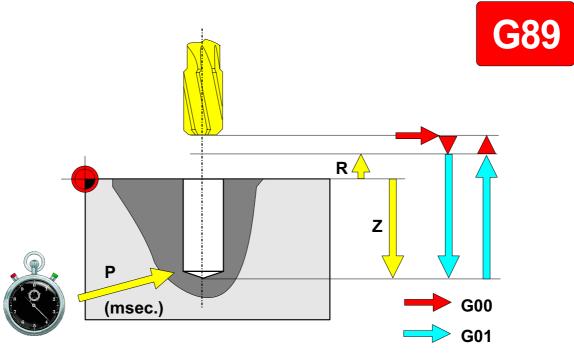




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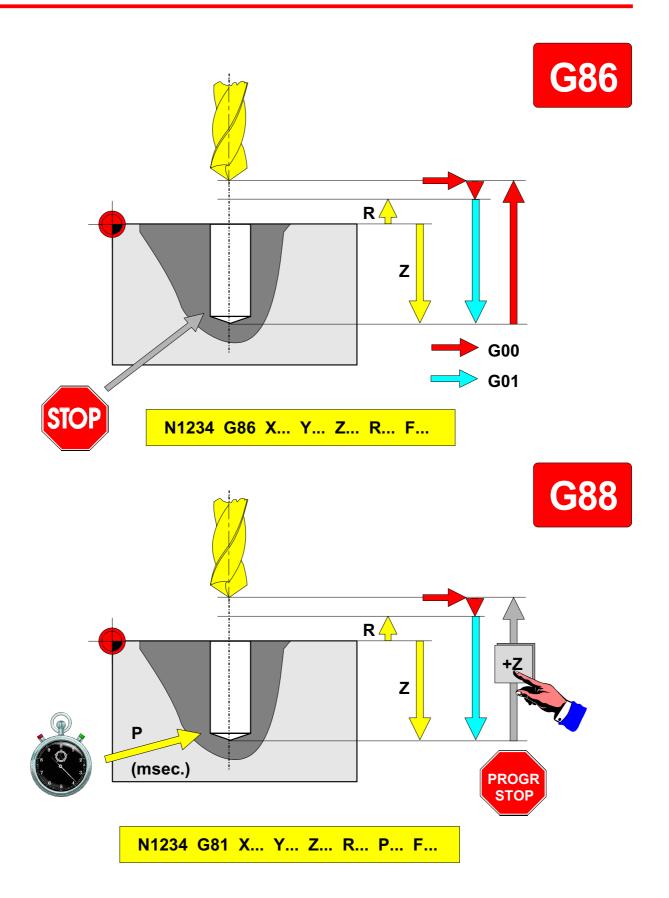




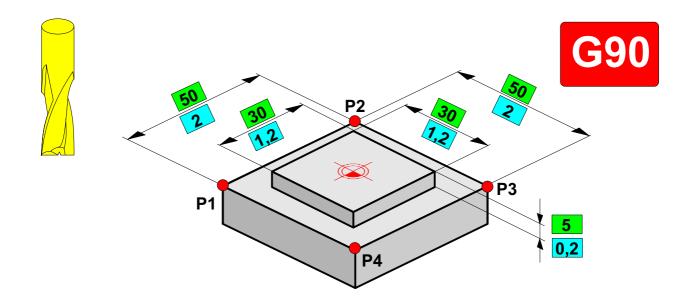


N1234 G89 X... Y... Z... R... P... F...









N0100 G01 X-25 Y-25 Z-5 LF

N0105 X-25 Y25 LF N0110 X25 Y25 LF

N0115 X25 Y-25 LF

N0120 X-25 Y-25 LF

N0100 G01 X-1 Y-1 Z-0.2 LF

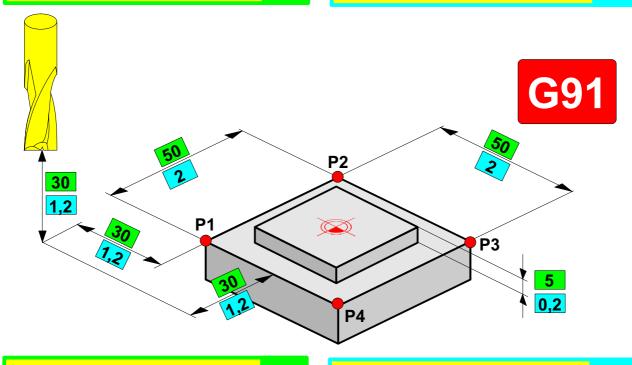
N0105 X-1 Y1 LF

N0110 X1 Y1 LF

N0115 X1 Y-1 LF

N0120 X-1 Y-1 LF

Inch



mm

N0100 G01 X30 Y30 Z-30 LF

N0105 X0 Y50 LF

N0110 X50 Y0 LF

N0115 X0 Y-50 LF

N0120 X-50 Y0 LF

N0100 G01 X1.2 Y1.2 Z-1.2 LF

N0105 X0 Y2 LF

N0110 X2 Y0 LF N0115 X0 Y-2 LF

N0120 X-2 Y0 LF

Inch

mm



