

The dummy block is not programmed for actual movement but it only provides data required for tool radius compensation computation. In the example indicated above, an instruction that is the same as the first block (N020) of restarted movement of the XY plane after movement of Z axis is programmed as a dummy by I and J. I, J and K are used as the addresses of this dummy instruction, and they correspond to X, Y, Z axes respectively. Suitably use them in accordance with the plane designation.

I: Dummy for X axis command  
J: Dummy for Y axis command  
K: Dummy for Z axis command

Programmed in incremental values

If X... Y... of N020 is in absolute values in the above example, give an instruction by converting into incremental values.

Note: Make a dummy block as follows if the object of the dummy block is circular interpolation.

#### EXAMPLE

N050 G01 X... Y... ;

N050 G01 I(b) J(-a) ; — Dummy block

N052 Z... ;  
N053 Z... ;  
N059 Z... ; } Z axis

N060 G03 X... Y... I(a) J(b) ; — Circular interpolation

N061 G01 X... Y... ;

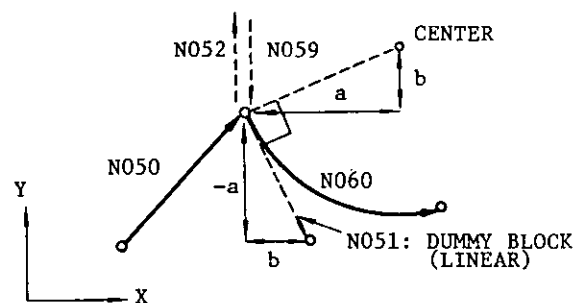


Fig. 2.46

This is, insert a linear dummy block that gives the tangential direction at the start point of the circular interpolation program block as shown above. Exercise care with the sign of the dummy block data depending on the shape of the circle. The tool stops at point A by the dummy block in preparation for the next circular command.

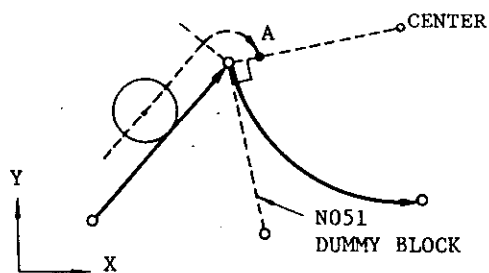


Fig. 2.47

- Switching between G41 and G42 in compensation mode

In this compensation mode, direct switching between G41 and G42 is possible without making cancellation with G40.

#### EXAMPLE

N10 G17 G01 F... ;

N11 G41(G42) D... ;

...

N20 G01 X... Y... F... ;

N21 G42(G41) X... Y... ; — Block of switching

N22 X... ;