

CNC Programming Arcs (I,J,K Method)

G02 = Circular Interpolation (Clockwise)

G03 = Circular Interpolation (Counterclockwise)

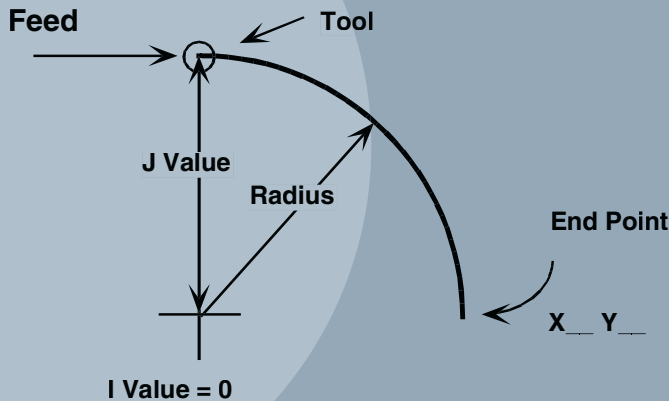
Information required:

1. End point of Arc: X and Y (or Z) coordinates
2. Center point of Arc: I and J (or K) values
Or: Radius of Arc
3. Feed Rate: F address

Example A

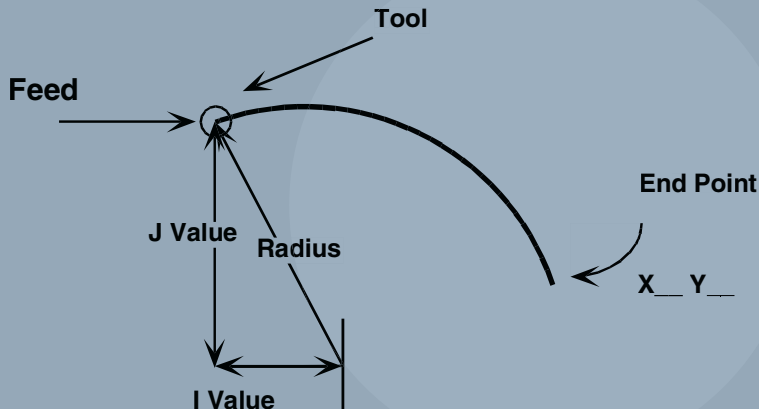
G02 X__ Y__ I0.0 J(-) F100;

The Radius of the Arc in Example A is equal to the J value, since the value of I is zero.

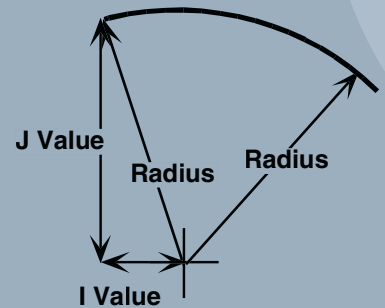


Example B

G02 X__ Y__ I__ J(-) F100;



The Radius of the Arc Is Equal to the Hypotenuse Of A Right Triangle With The I-Value and the J-Value Being the Other Sides.



I-Value is the Distance of the Arc Center in The X Direction from the Tool

J-Value is the Distance of The Arc Center in the Y Direction from the Tool

The Sign (+ or -) of the I or J Values Indicates the Direction of the Arc Center from the Tool.