6.

FECHNOLOGICAL FUNCTIONS Feedrate related functions

6.2.5 Acceleration control (G130/G131)

These functions allow to change the acceleration and deceleration of the axes and spindles.

Programming

The functions related to acceleration control are:

G130 Percentage of acceleration to be applied per axis or spindle.

G131 Percentage

Percentage of acceleration to be applied, global.



ap . Acceleration to be applied, set by the operator.

G130 Percentage of acceleration to be applied per axis or spindle.

The percentage of acceleration to be applied per axis or spindle is set by G130 followed by the axes and spindles together with the percentage to be applied to each of them.

The acceleration values to be applied must be integers (not decimals).

G00 X0 Y0	
G01 X100 Y100 F600	
G130 X50 Y20	(Acceleration on the X axis = 50%)
	(Acceleration on the Y axis = 20%)
G01 X0	
G01 Y0	
G131 100 X50 Y80	(Restore 100% of acceleration on all the axes)
	(Movement to point X=50 Y=80)

G131 Percentage of acceleration to be applied, global

The percentage of acceleration to be applied to all the axes and spindles is set by G131 followed by the new acceleration value to be applied.

The acceleration values to be applied must be integers (not decimals).

When added to a motion block, the new values will be assumed before executing the move.

Considerations

The #SLOPE instruction determines the influence of the values defined with these values.

- · In rapid positioning (G00)
- In the acceleration or deceleration stage.
- · In the jerk of the acceleration or deceleration stages.

The programmed percentages are absolute, in other words, programming a 50% twice means that 50% will be applied, not 25%.



Properties of the functions

Functions G130 and G131 are modal and incompatible with each other.

On power-up, after an M02, M30, EMERGENCY or a RESET, the CNC restores 100% of acceleration for all the axes and spindles.



(Ref: 1107)