Hover Weave

KEY BENEFITS

- Expansion of weaving function enables weaving for processes where the robot itself is not performing weave or other movement
- Available for arc welding and general applications
- Also works in combination with “Comarc” arc sensor

OVERVIEW

The standard configuration of a robot program when using weaving motion requires the start and end locations or any adjacent positions to be taught at different locations relative to each other. Those robot locations are created by either moving the manipulator or by moving a coordinated external axis/positioner.

For those applications where either (1) robot positions must be the same or (2) there is no coordinated positioner, hover weave must be used.

FIG. 1: Example of welding application
Workpiece is operated by a non-coordinated external axis/positioner while the start/end positions of the robot path is the same.

FIG. 2: Example of grinding/polishing application
The workpiece in the robot’s tool/gripper has only one position in relation to the abrasive belt, therefore there is no direction of movement. The only movement is lateral weave motion.

FIG. 1

FIG. 2

Various weaving shapes are available:

- Single
- Triangle
- L-type

0 : With smoothing
1 : Without smoothing