

User Frame Rotate (UF-ROT8) Macro

Introduction

UF-ROT8 will calculate and move your defined rotation along a single axis of a user frame (UF). The macro was specifically created to assist with press brake applications. (The required files are available via the icons on the last page of this document.)

Installation and use of the UF-ROT8 Macro

- 1.) The Macro function must be enabled. To check if you have macros enabled, attempt to create a new job. You should see ROBOT MACRO as an option under JOB TYPE. If it does not appear, contact Yaskawa for assistance.
- 2.) With a defined TCP, create a User Frame at the desired location. The User Frame origin will be referenced for the location of the bend.
- 3.) Load the Macro job (UF-ROT8.JBI), then load the MACRO.DAT file.
- 4.) Create your robot job.
- 5.) Insert a move to establish your start location. It will be with the bend along the rotational axis of User Frame.
- 6.) Insert a call to the UF-ROT8 macro within your robot job.
- 7.) Edit the arguments used by the macro as defined below.

Argument definitions:

Arg#1: UF# Referenced: Enter a UF# for reference of rotation. This UF remains unchanged.

Arg#2: Angle in degrees of rotation: Enter degrees of rotation desired.

Arg#3: Axis of rotation: Rx=1, Ry=2, & Rz=3 (limited to single axis)

Arg#4: Velocity of motion (mm/sec): Enter xxx.x for speed of motion.

Arg#5: Over rotation in degrees (if not needed enter 0): Robot will over bend before returning to final bend position.

Arg#6: Over rotation delay: Robot will temporarily wait at over bend before returning to final bend position. (Only referenced if using over rotation.)

Arg#7: New UF#: A new UF will be created with offset. Do not use the currently defined frame. UF is **redefined** with each cycle of the macro.

This document captures ideas, experiences, and informal recommendations from the Yaskawa Partner Support team. It is meant to augment – not supersede manuals or documentation from motoman.com. Please contact the Partner Support team at partnersupport@motoman.com for updates or clarification.

Arg#8: UF x offset: X axis offset from Arg#1 UF origin to bend location.

Arg#9: UF y offset: X axis offset from Arg#1 UF origin to bend location.

Arg#10: UF z offset: X axis offset from Arg#1 UF origin to bend location.

Run the Newly Created Job and Test Results.

All bending motion occurs within the UF-ROT8 macro. The only move required to be placed before the macro instruction is to establish a start location.

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Required Files

Macro Job You Will Call from Your Job



UF-ROT8.JBI

Macro Instruction Configuration File



MACRO.DAT