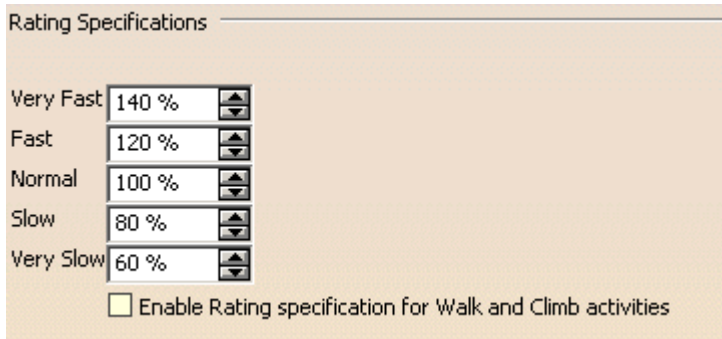


Joint Speed

This page deals with the options concerning:

- ◆ Rating Specifications
- ◆ Custom Joints Speed

Rating Specifications



Rating	Percentage
Very Fast	140 %
Fast	120 %
Normal	100 %
Slow	80 %
Very Slow	60 %

☐ Enable Rating specification for Walk and Climb activities

Rating is a scale that specifies the speed with which a manikin can accomplish a particular activity. This rating also indicates the worker's training level (novice, intermediate, expert). There are 5 rating levels:

- ◆ Very Fast - with default joint speed of 140%
- ◆ Fast - with default joint speed of 120%
- ◆ Normal - with default joint speed of 100%
- ◆ Slow - with default joint speed of 80%
- ◆ Very Slow - with default joint speed of 60%

The rating values can be customized and set in the Motion Basis (both speed and time) frame of **MoveToPosture Activity** dialog box.

Actual Speed – A read only value computed based on the speed and rating value. For example, if the motion basis is specified as Speed with 100% and rating is specified as Fast (120%), actual speed is computed as –

$$\text{Actual Speed} = \text{Speed}(100\%) * \text{Rating} (120\%) / 100 = 120\% \text{ (activity is accomplished with 120\% joint speed)}$$




Actual Time – A read only value computed based on the time and rating value. For example, if the motion basis is specified as Time with 5 seconds and rating is specified as Fast (120%), actual time is computed as –

$$\text{Actual Time} = [\text{Time}(5) / \text{Rating} (120)] * 100 = 4.166 \text{ seconds (activity is accomplished in this time)}$$

Custom Joints Speed

General | Cut Copy Paste | HumanTask Display | **Joint Speed**

Custom Joints Speed

Joints Speed

Body translation X	1.15
Body translation Y	1.15
Body translation Z	1.15
Body SPIN	3.1416
Body Fall Over	3.1416
Body Fall Aside	3.1416
Lumbar Spine 5-flexion/extension	1.5708
Lumbar Spine 5-lateral left/lateral right	1.5708
Lumbar Spine 5-rotation right/rotation left	1.5708
Lumbar Spine 4-flexion/extension	1.5708
Lumbar Spine 4-lateral left/lateral right	1.5708
Lumbar Spine 4-rotation right/rotation left	1.5708
Lumbar Spine 3-flexion/extension	1.5708
Lumbar Spine 3-lateral left/lateral right	1.5708
Lumbar Spine 3-rotation right/rotation left	1.5708
Lumbar Spine 2-flexion/extension	1.5708
Lumbar Spine 2-lateral left/lateral right	1.5708
Lumbar Spine 2-rotation right/rotation left	1.5708

This section deals with the options for the Joint Speed commands. Using the Joint Speed tab you can customize these joint speed values for the manikins Degrees of Freedom.

◆ **Save button:**

this allows you to save your defaults as a Microsoft excel file (xls).

◆ **Open button:**

You are prompted to specify a Microsoft excel file (xls) where the manikin joint speed values for each segment is specified in a pre-agreed format and order. Instead of specifying the joint speed value for each segment DOF, all the segment DOF joint speeds will be read and updated in one shot.

◆ **Undo button:**

This returns the defaults to their original number.