Segment Mass

Every segment in a Visual3D model has a mass, which is used to calculate kinetic quantities.

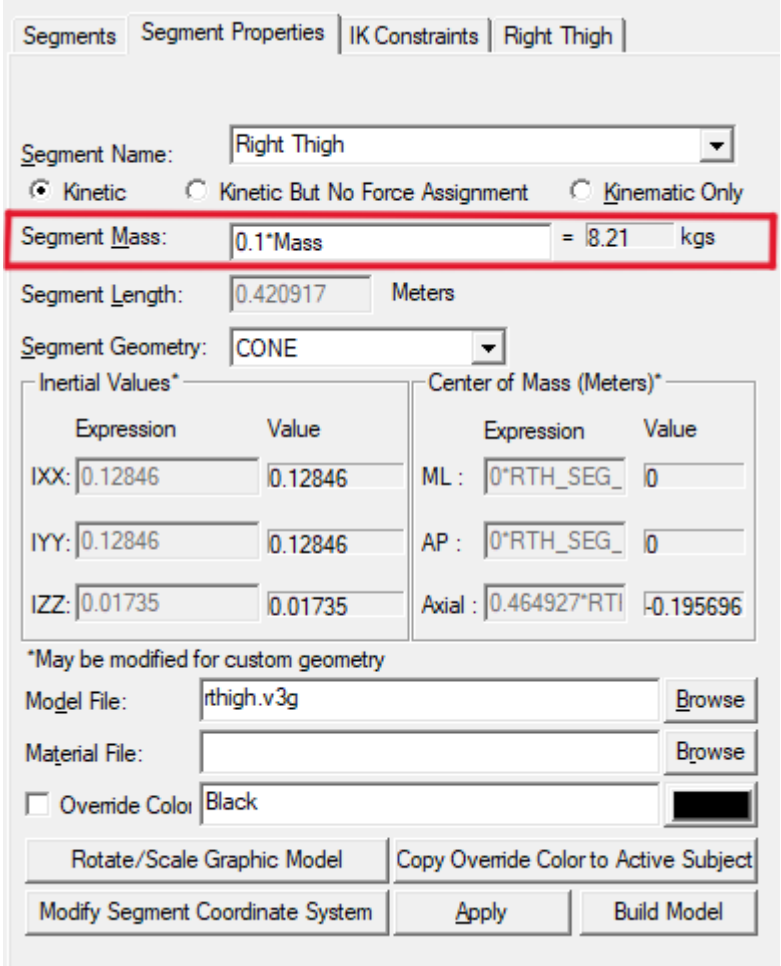
Default Segment Mass

The default segment masses defined in Visual3D are based on Dempster's 1955 regression equations[1] (link) and are:

Segment	Mass (% body mass)
Foot	0.0145
Shank	0.0465
Thigh	0.10
Hand	0.006
Forearm	0.016
Upper arm	0.028
Pelvis	0.142
Thorax/abdomen	0.355
Head	0.081
Trunk	0.497

Modifying Segment Mass

Users can modify Segment Mass under the segment properties tab in Visual3D's model builder.



See Also

Visual3D also supports the Adjusted Zatsiorsky-Seluyanov parameters[2].

Go back to the Segment Overview for more information about segments in Visual3D.

1)
Dempster, W. T. (1955). Space requirements of the seated operator, geometrical, kinematic, and mechanical aspects of the body with special reference to the limbs (No. WADCTR55159).
2)
De Leva, P. (1996). Adjustments to Zatsiorsky-Seluyanov's segment inertia parameters. Journal of biomechanics, 29(9), 1223-1230.