

About Cable Motion Range



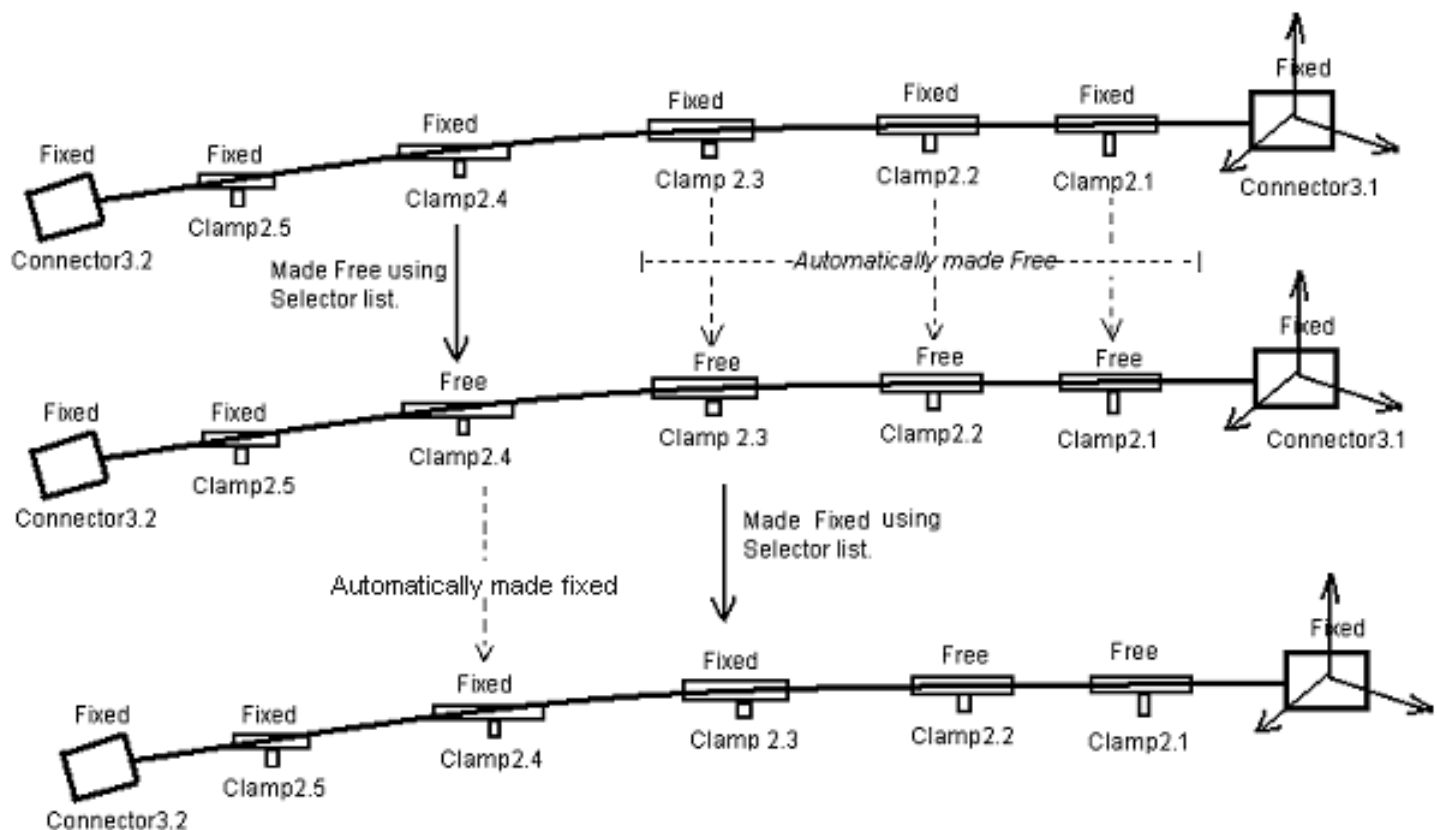
This section describes the effects of different cable motion range selections.

In the **Fixed in Space/Free to Move** lists, connectors are at the end points of the cable; therefore, they do not appear in selector list because they are always fixed. They may be manipulated by selecting them from **Connector/Clamp** pulldown menu. Once a connector/clamp is selected, all other clamps become fixed.

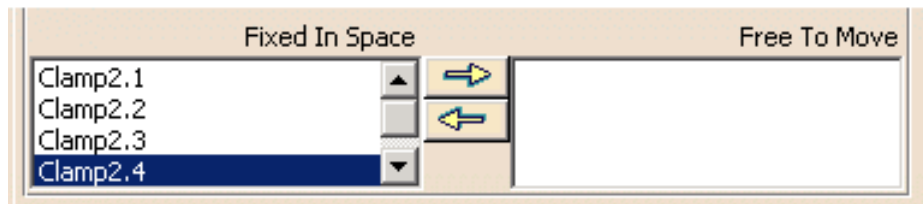
Once you select a clamp, it will be highlighted in the 3D window.

When a clamp is set free to move, there will not be any instantaneous change in the shape of the cable. As soon as we start moving the cable, there will be a sudden change in the shape of the cable, as constrain parameter on the cable has changed.



Once you select the connector/clamp to move, only successive support/clamps lying on either side of it can be made free to move in space while moving the selected support/clamp. That is, there cannot be a fixed support/clamp between two free connectors/clamps or a free support/clamp between two fixed supports/clamps. This behavior has been implemented in automatic fashion. As soon as the user sets a support/clamp to be free, all the supports/clamps between it and the product to which the compass is snapped are made free automatically. Similarly, if the user sets a free clamp/support to a fixed state, all the supports/clamps after it are automatically set as fixed.





For example, select Clamp 2.4, to transfer it to Free To Move.




Once Clamp2.4 is set free, Clamp2.1, Clamp2.2, and Clamp2.3 are automatically set as Free To Move.

Fixed In Space		Free To Move
Clamp2.5		Clamp2.1
		Clamp2.2
		Clamp2.3
		Clamp2.4

Then Clamp2.3 is set Fixed in Space.

Fixed In Space		Free To Move
Clamp2.5		Clamp2.1
		Clamp2.2
		Clamp2.3
		Clamp2.4

Clamp2.4 is automatically set as Fixed In Space.

Fixed In Space		Free To Move
Clamp2.3		Clamp2.1
Clamp2.4		Clamp2.2
Clamp2.5		