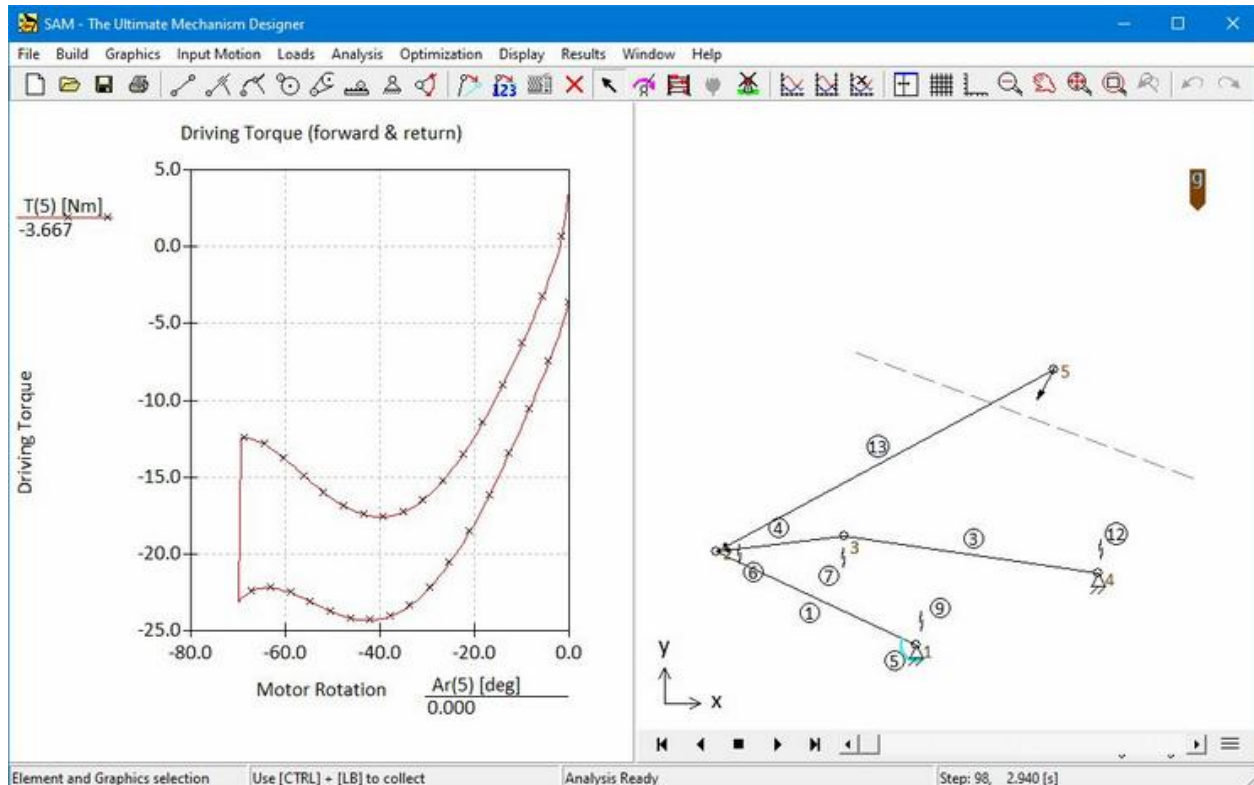


What is new in SAM 8.4

Load dependent friction

- A load dependent friction torque has been added to the already existing constant no-load friction torque of the rotation friction element. The total friction is now defined by a no-load friction torque, a friction coefficient and a friction radius.
- Friction has also been added to the (curved) slider element via two additional parameters, being the constant no-load friction force and the friction coefficient. The total friction force equals: no-load friction + contact force * friction coefficient.

Example of an motorized automotive engine hood incl. rotation friction elements in all joints

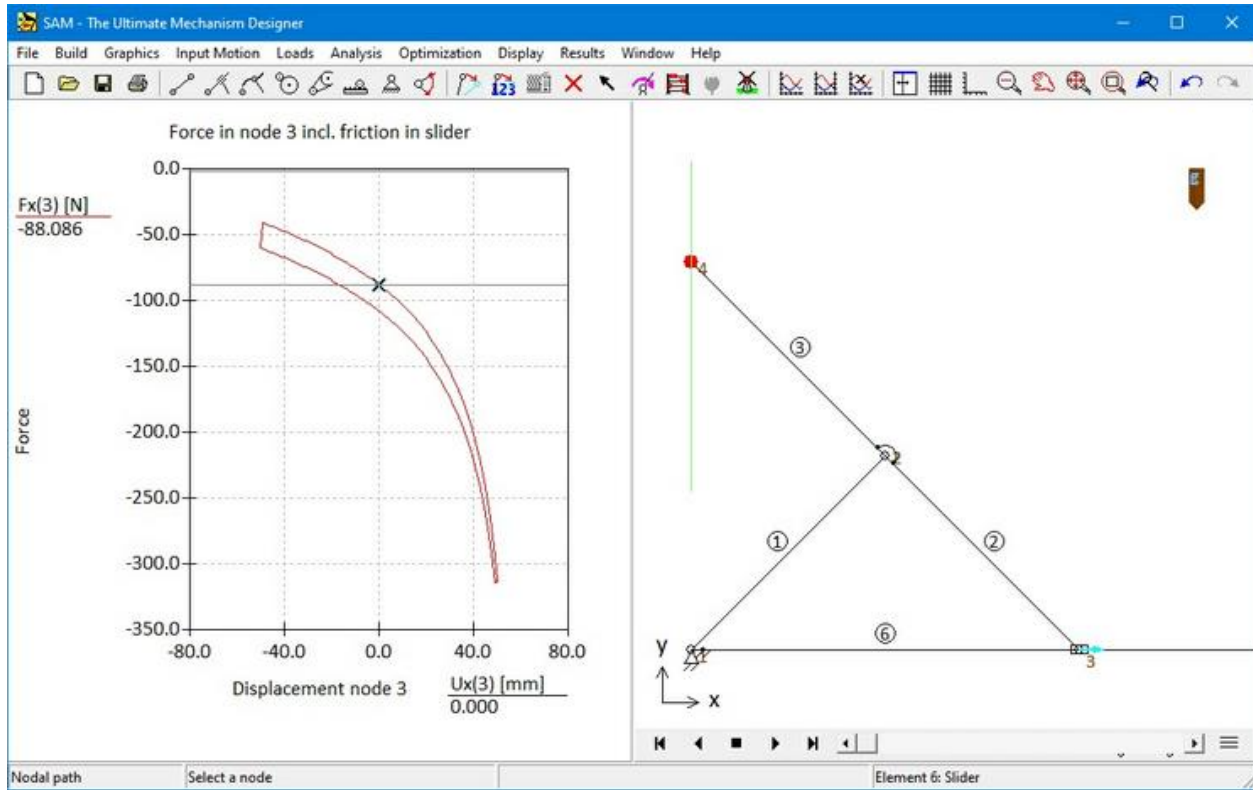


Required driving torque (back & forth motion) as function of the motor rotation.

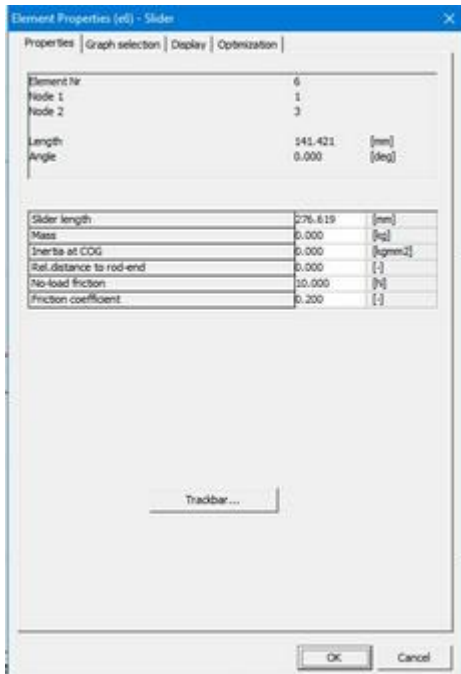


Rotation Friction

Example of a slider element used in a Hoecken mechanism to generate an exact linear motion

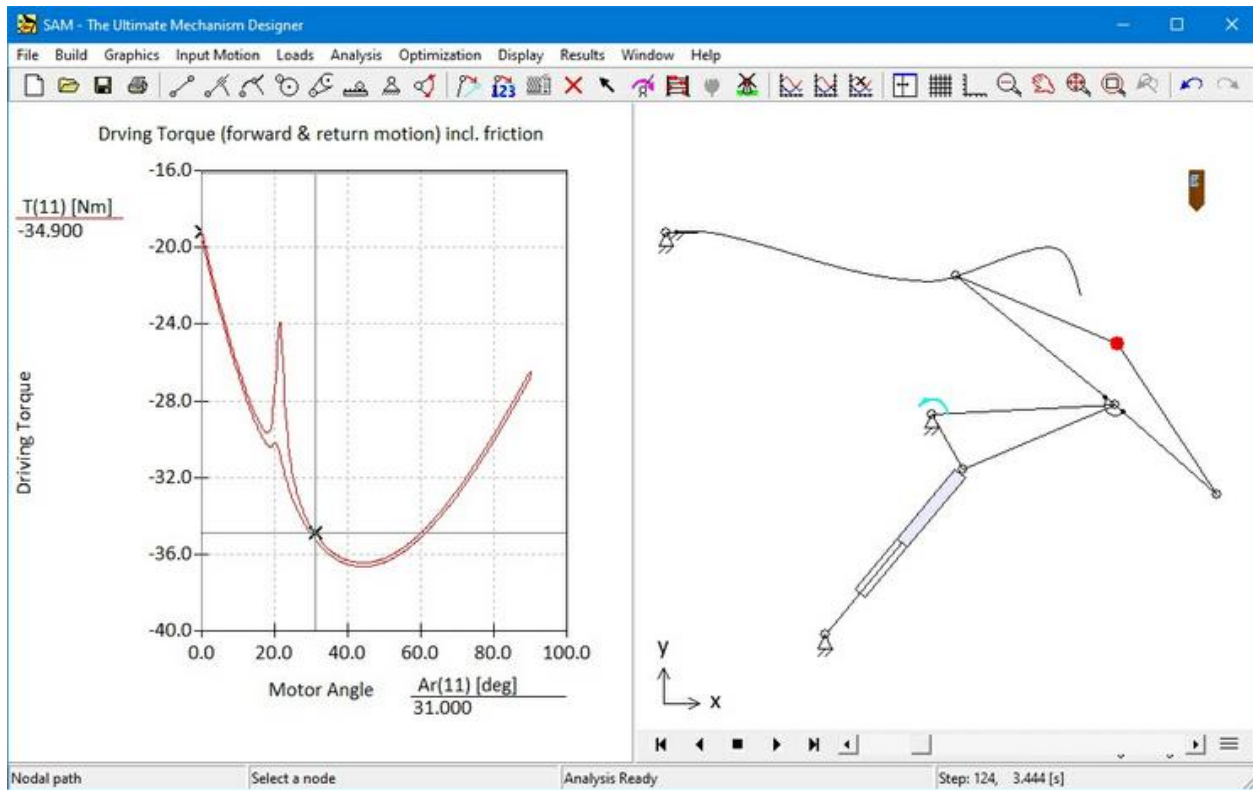


Exact linear guiding according to Hoecken incl. friction in slider element 6



Properties of the slider element

Example of a toolbox riser incl. normal force dependent friction in the curved slider



Example of a toolbox riser incl. normal force dependent friction in the curved slider

Element Properties (e8) - Curved Slider

Properties | Graph selection | Display | Optimization

Element Nr: 8
 Node 1: 7
 Node 2: 3
 Trajectory distance to Node 2: 0.572 [m]
 Curve type: Bezier

No-load friction	0.500	[N]
Friction coefficient	0.200	[-]

	X [m]	Y [m]
1 (point)	7.801	1.503
2 (control point)	7.823	1.504
3 (control point)	7.845	1.506
4 (point)	7.867	1.501
5 (control point)	7.969	1.479
6 (control point)	8.023	1.447
7 (point)	8.128	1.442
8 (control point)	8.169	1.441
9 (control point)	8.238	1.485
10 (point)	8.279	1.485
11 (control point)	8.304	1.485
12 (control point)	8.312	1.454
13 (point)	8.319	1.423

Buttons: Add, Insert, Delete, Import points..., Import points and control points..., Delete all, When moving node 2: also translate the curve. (checked), OK, Cancel

Properties of the curved slider element