

## Motor Load Model

This simulation shows how to model the static and kinetic aspects of a motor load. The load block accepts motor electromagnetic torque as an input, and it generates acceleration, velocity, position and power outputs. It includes the effects of friction, damping, load torque, and also accommodates hard stop position limits.

TRANSIENTS: At  $t=0$ , the motor is energized to produce 1 NM of torque, and the load torque is set to 0.8 NM. At  $t=1.5$  sec, the load torque is increased to 0.88 NM.

PLOTS: Motor Speed, Load Power

REQUIREMENTS: [Spice Executable](#), [Support Pack](#)

Unzip these simulation files into the same folder as the files extracted from the Support Pack, and then run "01 Load Model.asc".