



MapleSim™ Web Handling Library

The MapleSim Web Handling Library expands the modeling scope of MapleSim to easily simulate roll-to-roll processes, helping you manage tension across spans, optimize the web speed and reduce web slippage.

Using this add-on library to MapleSim, you can model the dynamics of web such as paper, textiles, metal foils, and plastic films passing through web handling and converting systems, and view enhanced 3-D visualizations of your line performance.

Use the Web Handling Library to add fidelity to your machine models by including nip rollers, dancers, accumulators and more.

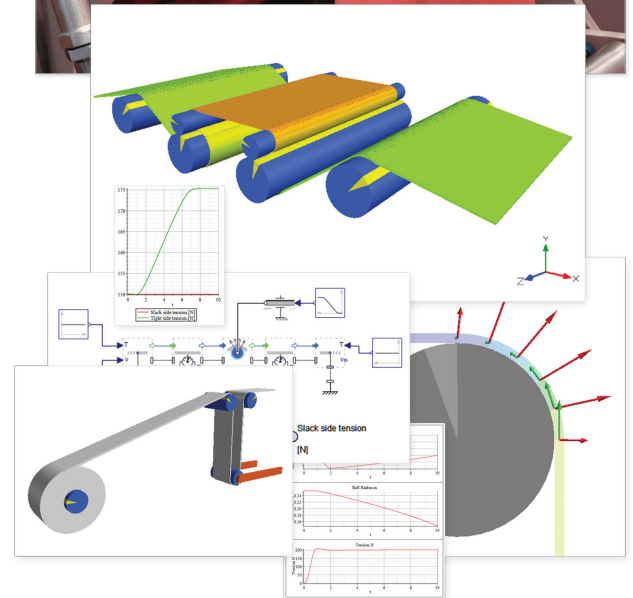
The MapleSim Web Handling Library contains a variety of specialized components that can be customized to suit your specific system, representing the web material properties and the motion of the rollers.

Features include:

- **Wind and Unwind drums, Nip Rollers (simple, with slippage, suction, s-wrap)** to match your plant layout
- **Accumulators and various Dancer mechanisms**
- **Load Cells** can be added to measure the tension at key points
- **Inclinometer** to measure web span inclination
- **Clutch, torque brakes, motors, and actuators**, making use of the multi-domain systems in MapleSim

Highlights

- **Create web handling systems-based models** using components such as nip rollers, idlers and wind/unwind drums, and view performance under a variety of web speeds and material thicknesses.
- **Incorporate realistic behaviors** of roll-to-roll systems, including web properties, wrap angles, web slippage and bearing loads.
- **Explore systems with 3-D visualizations** that show web flow and system tensions using force arrows and color mapping.



Are you facing challenges with modeling your roll-to-roll systems? **We can help!**

Contact the [Maplesoft Engineering Solutions team](#)



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