



PRODUCTS  
FOR THE

# CONVERTING INDUSTRY

APPLICATION GUIDE

## NEXEN SOLUTIONS FOR YOUR CONVERTING CHALLENGES

Nexen is an internationally recognized industry leader offering a full range of tension and web related products (including sensors, closed or open-loop controls, web guides, splice detection devices, and tension brakes and clutches) as well as comprehensive custom engineering services. Nexen systems prevent wasting of materials, time and money by providing dependable performance and easy integration. In addition to the applications listed below, Nexen offers products ideal for inserting, collating and flying splice applications. Nexen also carries a full line of products for web printing presses. All systems feature air or spring-engaged clutches and/or brakes to provide the best tensioning in the industry.

### SLITTERS

#### Tension Clutches

**Function:** Maintains tension on the windup stand.

#### Tension Controls

**Function:** Monitors tensioning and sends corrective signals to the brakes/clutches to compensate for any tension disturbances.

#### Tension Brakes

**Function:** Regulates tension on roll stock as material is fed into the slitter.

### ROTARY DIE CUTTERS

#### Web Guides

**Function:** Maintains alignment of material through the die cutter.

#### Tension Brakes

**Function:** Regulates tension on roll stock as material is fed into the die cutter.

#### Torque Limiters

**Function:** Detects torque overloads and disconnects downstream processes to prevent jamming.

### SHEETERS

#### Tension Brakes

**Function:** Regulates tension on roll stock as material is fed into the sheeter.

#### Dancer Control System

**Function:** Maintains tension between roll changes.

#### Paper Checker

**Function:** Detects spliced/glued stock and signals the machine to discard the pieces.

### LAMINATORS

#### Tension Clutches

**Function:** Maintains tension on the windup stand.

#### Tension Brakes

**Function:** Regulates tension on roll stock as material is fed into the laminator.

#### Tension Controls

**Function:** Monitors tensioning and sends corrective signals to the brakes/clutches to compensate for any tension disturbances.

#### Web Guides

**Function:** Maintains alignment of material through the laminator.

# Web Control Products



Designed to dissipate heat away from the unit, Nexen's **tension control brakes and clutches** have high thermal capacities and long operating lives. Multiple actuators allow for versatile, precise tension control. Installation and maintenance are made easy by simple connections.

Nexen offers **tension control systems** for open-loop/diameter compensating and closed-loop/load-cell (sensor) based tension control. Working with pneumatic brakes/clutches, these systems monitor web tension and adjust brake/clutch torque output to maintain appropriate web tension. The load cell system produces accuracy of 1-2%; the open-loop system is about 8-10% accurate.



Nexen's innovative **dancer position control system** is ideal for out-of-round rolls, flying splice applications and multiple start/stop situations. The RSD100 Digital Dancer Controller maintains constant web tension with fast response to tension disturbances and features PC-based setup and calibration, eliminating potentiometer adjustments.



Nexen's **torque limiters** play an essential roll in safeguarding expensive web equipment and limiting down time by preventing damage during overload situations. The single piston, ball-detent design assures synchronized re-engagement in the same position every time. Operators can also manually position machinery by disconnecting the air supply to the torque limiter.

Nexen carries a variety of **web sensors** that communicate with Nexen controls for accurate web processing. Our ultrasonic sensors are perfect for edge/center control of photosensitive print paper for transparent print film. Offering sensors for splice/break detection, tension metering, line following, web guiding, and positioning, Nexen has everything you need to monitor web operations and maintain accurate positioning.



Nexen **web guiding systems** provide consistent lateral alignment to ensure quality operations. With a wide range of self-contained web guides for unwind, intermediate and windup processes, Nexen also offers **web guide controllers and amplifiers**. These units provide automatic positioning of the web by translating feedback from web sensors into control signals which are sent to the web control drive motors.

## nexen®

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