

## Product specifications

### ● Design Position Control System DPC

Model	NIP100	NIC100
Power supply	DC24 V (2 A)	DC24V (1 A), supplied by the NIP100
Light source	—	High brightness color LED (white)
Imaging element	—	CCD area sensor (VGA W640 x H480)

### ● Automatic Register Control System MR5500 / MR5500S

Web speed	10 to 500 m/min.	Cylinder size	200 to 2000 mm
No. of channels	2 to 12 channels (8-channel system is standard)		
Controller power supply	<ul style="list-style-type: none"> <li>Power supply voltages: AC 100, 110, 00, 20, 240, 380 V, switchable via the internal tap</li> <li>Power supply frequency: 50/60 Hz</li> <li>Power consumption: 1.1 kW</li> </ul>		
Motor power supply	<ul style="list-style-type: none"> <li>Power supply for the compensator and side-lay motors</li> <li>Maximum usable voltage: 240 V AC</li> <li>Internal breaker: 15 A</li> </ul>		
Options	<ul style="list-style-type: none"> <li>Remote control panel</li> <li>AC servo motor</li> <li>Initial register control</li> <li>Change gear</li> <li>2-unit split</li> </ul>		
Sensor	Optical fiber (halogen)		

### ● Automatic Register Control System MR101

Web speed	10 to 500 m/min.	Cylinder size	200 to 2000 mm
No. of channels	1 to 12 channels		
Controller power supply	<ul style="list-style-type: none"> <li>Power supply voltage: AC100 to 220 V ±10%</li> <li>Power supply frequency: 50/60 Hz</li> <li>Power consumption: 100 VA/per controller</li> </ul>		
Sensor	Scanning head (LED)		

### ● Print Quality Inspection System BCON5000

Inspection width	1200 mm (when 2 cameras are used) with a maximum width of 1999 mm (when 4 cameras are used)		
Plate cylinder circumference range	Max. 2000 mm; Min. 100 mm		
Power supply	AC 100V/AC 200V ±10% (50/60 Hz)		
Power consumption	2.0 kVA (single-sided specifications), 3.0 kVA (double-sided specifications)		illumination LED
Camera pixels	4096 (3-line sensor camera), 2048 (3CCD camera)		

### ● Print Quality Inspection System BCON3500

Inspection width	1200 mm (when 2 cameras are used) with a maximum width of 1999 mm		
Plate cylinder circumference range	Max. 2000 mm	illumination	LED
Power supply	AC 200 V ±5% (50/60 Hz)	Power consumption	2.0 kVA
Camera pixels	4096 (3-line sensor camera)		

### ● Defect Inspection System for Plain Surfaces Mujiken+

No. of cameras	Max. 128		
Input systems	Max. 8		
Camera pixels	16384, 8192, 4096, 2048		

### ● Defect Inspection System for Plain Surfaces Mujiken+ TypeS

No. of cameras	Max. 8	Monitors	Supports 1 or 2 monitors
—	Other specifications conform to those of the Mujiken+.		

### ● Ultrasonic Autowide Sensor UHW Series

Model	UHW051	UHW280	UHW500	UHW700
Power supply	DC15 V (12 to 18 V)			
Detection field of view	56 mm	280 mm	504 mm	728 mm

### ● Photohead

Model	PH16B
Distance between projector and receiver	28 mm
Effective detection length	±4 mm
Light source	LED

### ● Ultrasonic Sensor

Model	UH01
Distance between projector and receiver	48 mm
Effective detection length	8 mm
DC power supply	+15 VDC/100 mA, -15 VDC/50 mA

### ● Liteguide Controller

Model	AE1000	AE500	AE120/AE122
Power supply voltage	AC100 to 240 V 50/60 Hz ± 10%	DC+24 V	AC100 to 240 V (switches voltage automatically)
Power consumption	300 VA (inrush current 50 A 5 ms type (200 V))	4 A (peak response considered to be 6 A and approx. 50 msec.)	100 VA (Note)

(Note) If a breaker or other device is installed externally, please set the breaker capacity to at least 4 A, taking into account the inrush current of the internal power supply.

### ● Tension Controller TC920V

Power supply voltage	AC100 to 240 V 50/60 Hz
Power consumption	300 VA (inrush current 60 A type (20 ms))
Current capacity	1.5 A (200 V)

### ● Tension Meter TM340/TM310T

Power supply voltage	DC: DC24 V/AC: AC100 to 240 V 50/60 Hz 300 VA		
Power consumption	25 VA	Detector power supply	+6 V, ±15 V

### ● MB Tension Sensors

Model	MB05B	MB05A	MB11B	MB11A
Rated tension (N)	100	200	100	200
Roller displacement (nm/N)	2.42	1.20	2.80	1.38
Allowable roller mass (kg)	10	20	10	20

### ● MJ Tension Sensors

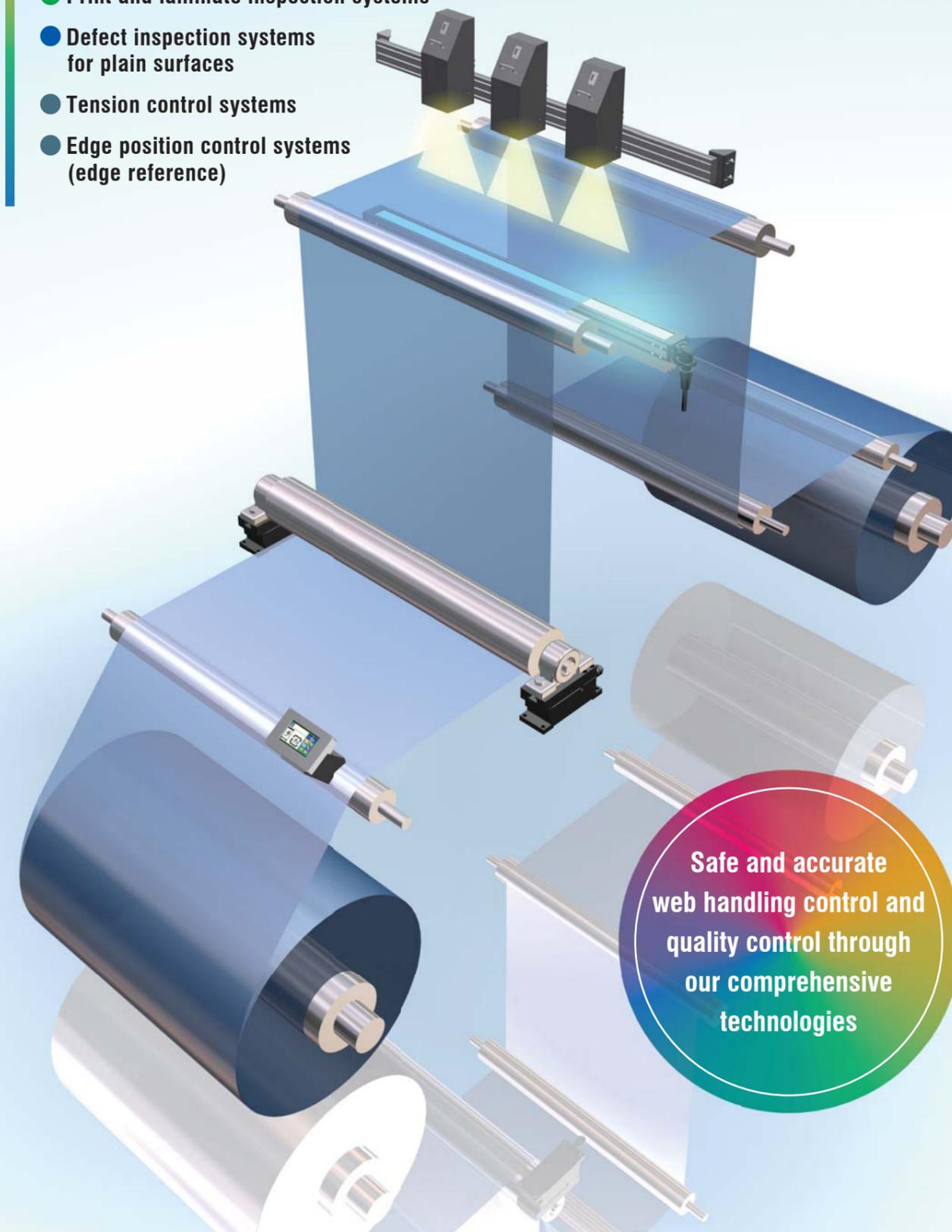
Model	MJ050	MJ200	MJ500	MJ1000
Rated tension (N)	50	200	500	1000
Roller displacement (nm/N)	0.36	0.12	0.05	0.03
Allowable roller load (N)	200	200	500	1000

### ● CJ Tension Sensors

Model	CJ200	CJ500	CJ1000
Rated tension (N)	200	500	1000
Roller displacement (nm/N)	0.12	0.06	0.035
Allowable roller load (N)	200	500	1000

# Nireco's Web Handling Control and Quality Control

- Design position control systems (pattern reference)
- Automatic register control systems
- Print and laminate inspection systems
- Defect inspection systems for plain surfaces
- Tension control systems
- Edge position control systems (edge reference)



Safe and accurate web handling control and quality control through our comprehensive technologies

# Nireco technologies achieve safe and accurate web handling control and quality control

## Defect inspection systems for plain surfaces

A control-panel-free compact design!  
Amazing inspection ability for such a small system!

**Mujiken+<sup>LT</sup>**



It won't miss defects, even on a high-speed line.

**Mujiken+**



Ideal for the inspection of production lines of films for industrial materials or food applications

**Mujiken+ TypeS**



## Print and laminate inspection systems

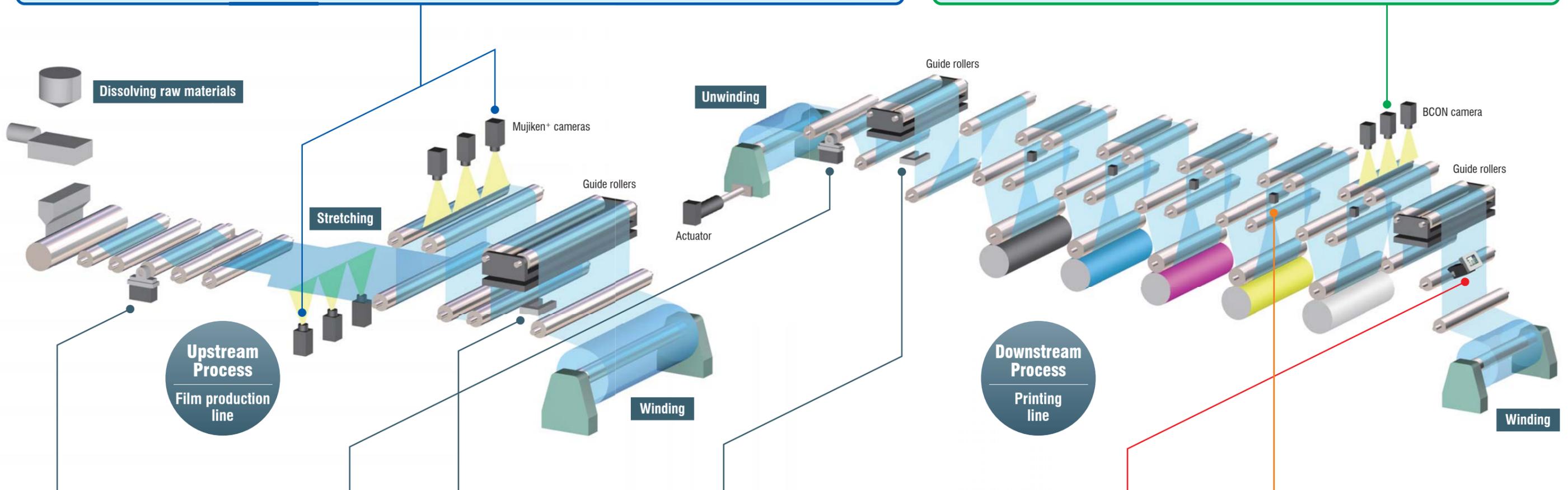
Can detect film splitting and oil stain!  
Our top-of-the-line model with a wide range of functions

Print Quality Inspection System  
**BCON5000**



Limited to single-sided inspections with high performance

Print Quality Inspection System  
**BCON3500**



## Tension control systems

Keeps webs at a constant tension to prevent wrinkles and sagging



MB tension sensors MJ tension sensors CJ tension sensors



Tension sensors for vacuum environments

## Edge/Center position control systems (edge/center reference)

Can handle a wide range of materials while keeping the web in a constant position and preventing meandering



EPC sensor for vacuum environments Ultrasonic Autowide sensors UHW Series

## Design position control systems (pattern reference)

You can see it, so there won't be any mistakes!  
Corrects for meandering, based on pattern reference!

Design Position Control System

**DPC**



## Automatic register control systems

Top-of-the-line models with a range of variations  
You can select the sensors, drive motors and other components

**MR5500/MR5500S**

Economical, high performance!

**MR101**

