

MARKET TRENDS

As consumer awareness of environmental issues rises and regulations tighten, businesses must find innovative solutions for sustainable products.

Let's explore how equipment upgrades are driving greener, smarter development.





2023 Market Review

Driving Sustainable Food & Pharma Packaging with Cutting-Edge Slitter Rewinders

In 2023, manufacturers worldwide experienced lower-than-expected economic conditions, with stagnant market inventories and hindered investment momentum. Notably, the only accelerating trend is the global demand for environmental sustainability and carbon reduction.

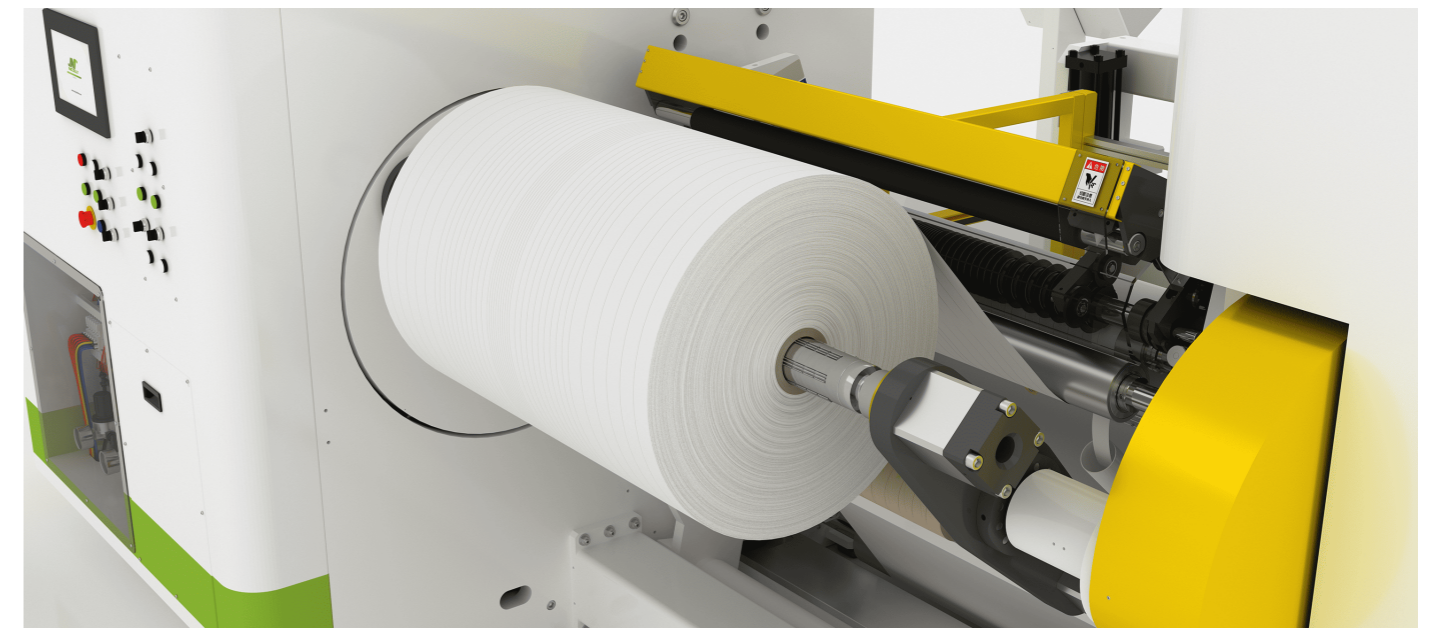
After all these years, Nicely would like to take this opportunity to share our observations and experiences in the field of food and pharmaceutical packaging, as well as how we have assisted our clients in achieving machine sustainability.

Slitter Rewinders are Blasted for Global Food & Pharmaceutical Packaging

In 2023, Nicely Machinery successfully deployed multiple slitter rewinders for pharmaceutical & packaging applications. Our production facilities span across Asia, Europe, North and South America, handling plastic base materials with thickness ranging from 100 μ to 800 μ , including coated and uncoated plastics, along with other environmentally innovative materials.

EG-7000 series Duplex Center Winding Slitter Rewinder

Roller Width	600mm - 2300mm
Unwind Diameter	1500mm, max.
Rewind Diameter	800mm, and up
Speed	600 M/min depends on material properties.



Building Lasting Partnerships : Advantages Beyond Pricing

The mainstream approach in the packaging industry involves duplex shaft center winding designs, emphasizing factors such as shaft load, material thickness variation, and tension control in structural design.

However, the technological threshold for the slitter used in most packaging materials is not particularly high, making it more susceptible to price competition.

While an attractive price is undoubtedly a stimulus for purchases, it may not be the determining factor. Deliberative clients prioritize machine investment, additional value and services.



How does Nicely Machinery go beyond pricing to build lasting partnerships?

01 Flexible Design

Tailoring to Production Capacity and Operational Needs

Additional Features to the Original Mechanism

Master roll handling, CCD defect detection, overhead heating, suspended rewind station, and elevating unloading trolley. The suspended rewind station boosts rewind load by 50%, enhancing convenience, safety, and durability.

Precise Rewind and Operational Enhancements

A special touch roller ensures precise tension regulation, while an upgraded rewind shaft support extends shaft lifespan by 30%.

Intelligent Automation

The automation system includes electric web threading, automatic knife and rewind station positioning, laser core alignment, auto unloading, and roll handling, reducing manual intervention by over 50%, improving efficiency and safety.

Nicely's automation proposal offers high customization, particularly in rear-end roll handling, seamlessly integrating product transfer to the **conveyor** for **weighing**, **wrapping**, and **stacking**, providing a complete solution.

02 Reliable Post-Sales Service

As machinery becomes more digital globally, post-sales service is evolving. While many companies offer data-driven subscriptions, Nicely Machinery sets itself apart by providing direct, point-to-point service. Our efficient business model and reliable technical support network ensure fast, responsive assistance during breakdowns.

Periodic On-Site Technical Support

Ensuring timely, hands-on assistance at your location.

Dedicated Service Hotline

Direct access to technical experts for immediate troubleshooting.

Remote Diagnostics

Real-time troubleshooting and diagnostics to minimize downtime.

Driving Equipment Sustainability

The plastic films in the competitive packaging industry are undergoing transformational challenges.

Material Transformation to High-Value Materials

Such as energy films and flexible electronic packaging.

Enhancing Equipment Capabilities

Expanding production capacity through speed increases and conversion rate improvements.

Carbon Reduction and Energy Efficiency Considerations

Such as upgrading to high-efficiency motors and implementing digital cloud monitoring.



Replacing Old Equipment isn't Always Necessary.

Nicely advocates retrofitting and upgrading existing slitters to enhance efficiency and create value.

In 2023, Nicely assisted 13 customers with over 50 modifications, benefiting both Nicely and other brand slitters. Retrofitting saves capital, lowers maintenance costs, and supports sustainable practices.

What are the Benefits of Retrofitting ?

40%

Reduce energy consumption.

50%

Reduce maintenance costs.

-30%^{UP}

Reflecting reduction in the equipment investment budget.

Supporting Your Sustainability Goals with Reliable Paper Slitter Rewinders

The landscape of the paper packaging and paper roll converting industry is undergoing a significant transformation, driven by the increasing demand for sustainable solutions towards paper materials that are biodegradable, recyclable, and reusable. This surge in demand marks a clear shift towards sustainability.

For instance, sustainable paper-based packaging alternatives are being developed in response to the global movement against single-use plastics. These alternatives often include materials such as kraft paper, cardboard, coated, or uncoated paperboard.

In this article, we will explore the paper applications that Nicely has catered to through a comparison table covering a broad range of paper roll slitting machines.



What Applications do Nicely's Paper Slitter Rewinders Mainly Serve?

Here are Some Key Applications where Sustainable Paper Materials are Being Increasingly Utilized :

1. Paper-Based Packaging
2. Labels and Tags
3. Specialty Applications

For example, sustainable paper labels and Variable Information Print (VIP) thermal labels are increasingly preferred by consumers seeking eco-friendly options. These labels are commonly used in the e-commerce sector and for liner-free applications.

From packaging to electrical insulation and beyond, in today's paper roll converting industry, sustainable paper materials are reshaping industries and driving positive environmental change. With increasing emphasis on productivity, quality, and sustainability, our customers now more than ever rely on a solution-oriented provider to streamline their operations.

Enhancing Efficiency in Paper Converting Processes

To Increase Efficiency in Paper Converting Processes, there are Several Key Factors to Consider :

01 Enlarging Unwind Capability and Durability

Enhancing the unwind capability allows for smoother and longer production runs. It helps reduce downtime associated with roll changes and minimizes material waste. Durability is crucial to ensure the machinery withstands extended use and high production speeds. An example from our installations includes a roller width of 3200mm (10.5 ft), a maximum roll OD of 2500mm (8.2 ft), and a production speed of 1500 M/min (4921 ft/min).

02 Automatic Knife Positioning and Precision Slitting

Ensures precise and consistent slitting by eliminating the need for manual adjustments.

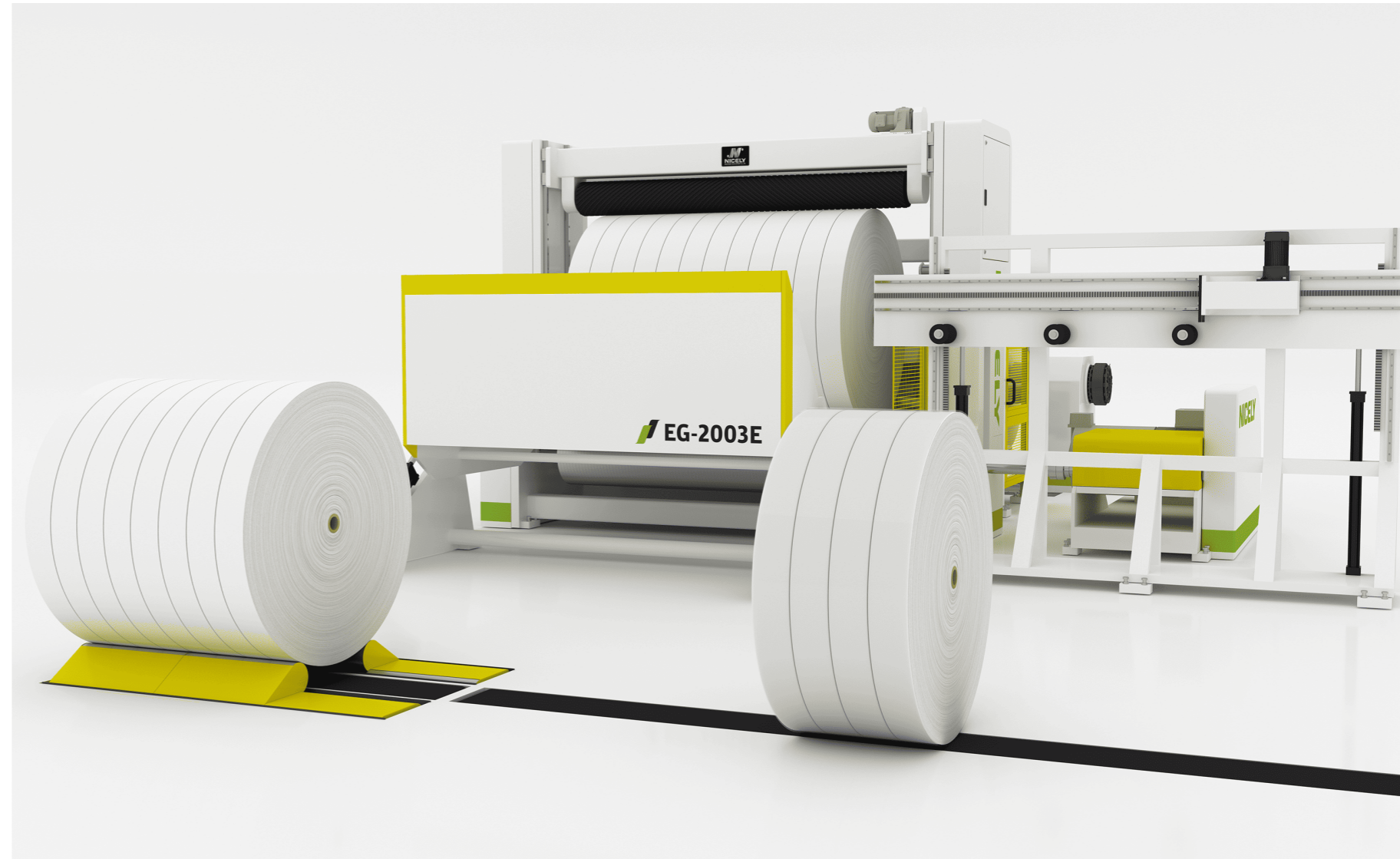
With the ability to manage 10 sets of cutters in just 60-90 seconds, this automatic knife positioning feature significantly reduces setup time by at least 50% compared to regular blades setting and minimizes the risk of errors.

03 Advanced Control and Drive System

Modern machinery control implementations, combined with a stable drive control system, enable high-speed slitting and rewinding of jumbo paper rolls. This greatly enhances production output and improves energy efficiency by around 30%. Advanced control systems also support automated paper processing through precise speed and tension control, ensuring optimal results in paper converting.

04 Automated Roll Handling

Integration of multiple automations for end-of-the-line roll handling streamlines the unloading and packing processes, reducing the risk of potential hazards associated with manual adjustments.



Exploring Nicely's Paper Converting Solutions

A Comparative Overview of Paper Slitter Rewinder




In the following comparison table, we will introduce the most frequently asked machine models categorized by Surface Winding Principle and Centre Winding Principle, along with their corresponding material applications.

Automation Options




With a diverse range of machine types and configurations, the options for automation are plentiful. Depending on specific needs and preferences, these automation features ensure efficiency and productivity at every step of the process.

- 01 Auto Core Loader
- 02 Motorized Web Threading
- 03 Shaftless Winding
- 04 Auto Knife Positioning
- 05 Auto Shaft Handling System
- 06 Auto Tail Cut and Start-up
- 07 Auto Roll Unloading / Handling / Conveying
- 08 Advanced Control & Drive

Surface Winding Principle

EG-1N	EG-2	EG-2003E
		
Rewind OD : 300 mm (12") Speed : 250 M/min (820ft/min)	Rewind OD : 1200 mm (47") Speed : 250 M/min (820ft/min)	Rewind OD : 2500 mm (98") Speed : 1500 M/min (4920 ft/min)
Single Surface Winding	Duplex Surface Winding	Shafted & Shaftless Surface Winding
Thermal paper roll & Linerless label	Kraft paper, Woodfree paper	Kraft paper, Coated & uncoated paper board
E-commerce labels	Tobacco paper	Food packaging, Paper tube

Centre Winding Principle

EG-4	EG-7001	EG-8002
		
Rewind OD : 1500 mm (59") Speed : 600 M/min (1968ft/min)	Rewind OD : 800 mm (31.4") Speed : 600 M/min (1968ft/min)	Rewind OD : 1500 mm (59") Speed : 800 M/min (2624 ft/min)
Single Shaft Cantilever Center Winding Slitter	Duplex Shaft Turret Slitter Rewinder	Duplex Shaf Center Winding Slitter Rewinder
Specialty paper	Plotter, Printing paper, Specialty paper	Labels, Silicone paper
Insulation	Food packaging Moisture Barrier	Food Packaging Moisture Barrier

Strength of Nicely's Paper Slitter Rewinders

01 Versatility

It often happens that when we ask a new customer where they obtained information about Nicely, they mention being told,

"When you need anything challenging, go to NICELY."

This statement highlights the diverse solutions we currently provide, affirming Nicely's dedication to evolving alongside our customers. From consumer-end products like linerless thermal rolls (EG-1N series) to upstream jumbo paper roll production (EG-2003E series) and middle-range food-related packaging (EG-8002 series), all of which are among our popular models.

02 Solution-Oriented

From the above paper slitter comparison table, the key strength lies in our ability to provide tailored end-of-line solutions, aligning the trend towards replacing labor-intensive tasks with automated processes.

Nicely understands the importance of streamlining the production line, from handling jumbo rolls to final packaging, therefore offers end-to-end solutions that ensure ease of operation and peace of mind for our customers.

03 Reliability

As demand for automatic slitting machines rises sharply in certain countries, numerous manufacturers flood the market, offering competitive pricing.

However, amidst this intense competition, the critical question remains: what about the quality of service provided? Nicely's solid alliances with major players across industries say it all !

EG-2003E series

Single Shaft / Shaftless Surface Winding Slitter Rewinder

*Or designed according to customer needs

Roller width	1500 - 3200 mm
Unwind diameter	1200 - 2200 mm
Min. slit width	50 mm and up
Rewind diameter	1200 - 2200 mm
Machine Speed	400 / 600 / 800 / 1500 M/min

This high-performance slitting machine is designed for large paper rolls, widely used in paper mills and food packaging.

Featuring surface rewinding and automation, it ensures top slitting quality, with optional systems to boost efficiency.



Learn more



✓ Film Producer Upgrade Trends

Shifting from New Purchases to Upgrades of Existing Machinery

Current Market Situation in the Film Industry

In recent years, the global film manufacturing industry has faced multiple challenges, including price competition and market saturation. Many companies have had to innovate with high-value-added film products to maintain resilience and avoid falling into the trap of price wars.

The film industry covers a wide range of products, from plastic films used in packaging to advanced functional films used in display technologies. Optical films have gained significant attention for their superior optical performance, being widely applied in high-end displays and smartphones with better profit.

However, optical films impose high requirements on the precision and stability of production equipment. Apart from precise slitting control, the slitting process must avoid defects like burrs, edge imperfections, and no tolerance on surface damage.

These slitting quality requirements directly impact the optical performance and appearance of the final product, representing a major challenge and barrier for manufacturers in the tech panel industry. The quality of the film manufacturing process not only affects the product but also directly determines a company's market competitiveness.



Enhancing Competitiveness: Not Necessarily with New Equipment

Amid growing global economic uncertainties, many film manufacturers are realizing that the costs of investing in brand-new equipment are prohibitively high. This is especially true with the fluctuating demand in plastic-related industries, making large-scale capital investments risky.

As a result, **equipment upgrades** and **production capacity optimization** are becoming increasingly viable alternatives to improve productivity and product quality. This trend is particularly noticeable in the film manufacturing equipment sector, where automation solutions are being integrated to drive efficiency.

How Slitting Machine Manufacturers Add Value for Their Customers

Between 2020 and 2024, the global economy was heavily impacted by pandemics, wars, and material shortages. These challenges led many companies to reassess the long-term value of **equipment upgrades**, especially as they prepared for a swift recovery once the market began to stabilize.

During this period, Nicely Machinery handled more than 70 equipment upgrade projects. These upgrades spanned automation enhancements, control system optimizations, and more. Here are a few notable cases:

- 01 Automation Enhancements**
Systems like automatic web threading, automatic knife positioning, automatic laser placement, and automatic unloading helped companies reduce downtime and increase **production efficiency** by over 30%.
- 02 Control System Upgrades**
Modifications to software, replacement of electrical components, upgrades to drive systems, and pneumatic and hydraulic system updates improved **energy efficiency** by 10%–40%.
- 03 Precision Improvements**
Specific to the requirements of optical films, Nicely improved slitting precision, reducing issues such as burrs and cutting cleanliness. The optimized design also minimized surface damage.
- 04 Additional Features**
Added simple lamination functions, stand-a-long trim waste winders, and relevant changes for additional production spec, with customized PLC and HMI interface modifications.

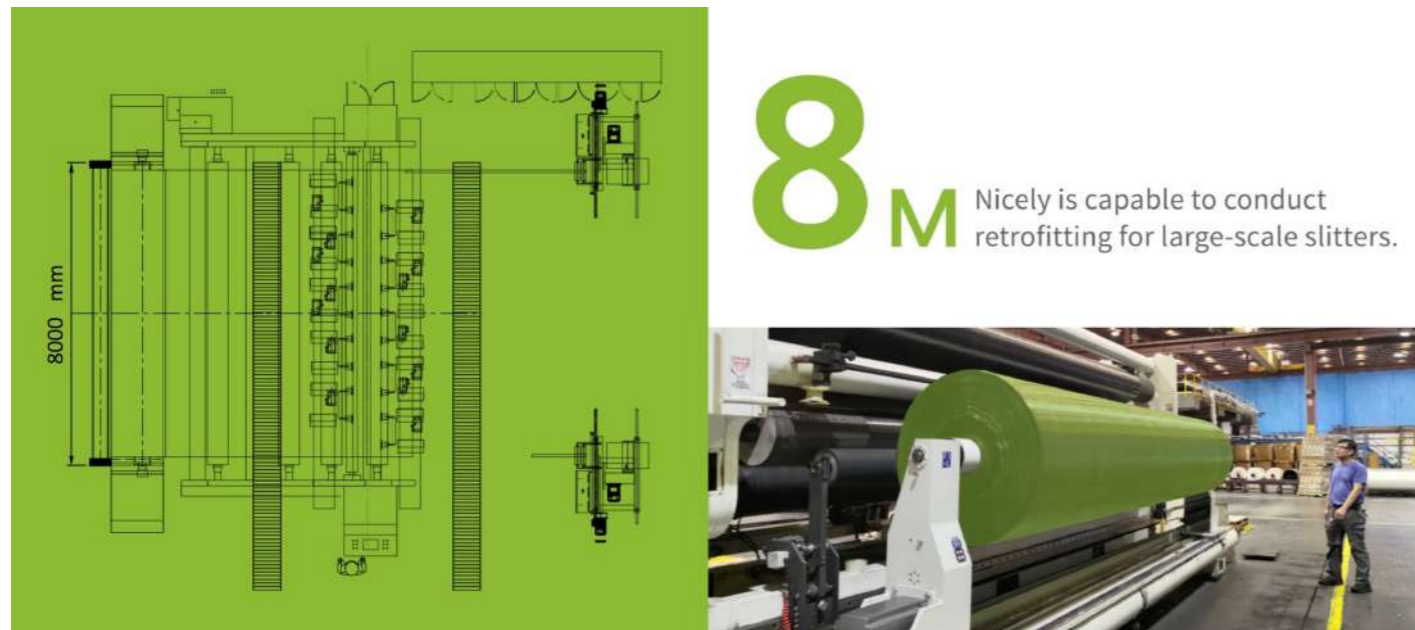


- 05 Changes to Structure and Material Specifications**
Upgrades were made to accommodate larger reel diameters, increased roll widths, and faster running speeds to meet expanded production needs.
- 06 Safety Standard Enhancements**
Installation of local sensing devices, safety fences, and emergency stop switches, with adjustments to mechanical and electrical controls to comply with local regulations, improving **operational safety**.
- 07 Regular Maintenance and Servicing**
Nicely provides equipment maintenance training and periodic maintenance contracts to ensure machines maintain optimal performance and enhance **operational safety**, reducing concerns related to staff turnover.

Upgrades Beyond the Original Manufacturer

It's important to note that while many companies initially turn to the original equipment manufacturers for upgrades, this strategy often proves unfeasible for older machinery. Upgrading outdated equipment typically requires more detailed assessments and professional evaluations, which many original manufacturers may hesitate to perform due to the risks associated with aging equipment.

As components wear out or become discontinued in the market, third-party manufacturers like Nicely Machinery, with expertise in industrial automation and system upgrades, offer customized upgrade solutions. In contrast, original manufacturers might suggest replacing the equipment entirely.



8M Nicely is capable to conduct retrofitting for large-scale slitters.

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Articles You May Be Interested In

Nicely Showcases Narrow Slit Winding Technology in C2 Magazine



 The EG-7003BF and EG-9000 series, featuring flexible winding and customization, excel in copper foil and insulation processing, boosting productivity and quality.


10 Key Maintenance Tasks for Your Slitter Rewinder



 The Key to Efficient Slitting Machines Regular maintenance and tailored solutions from experts ensure smooth operations, less downtime, and higher output.

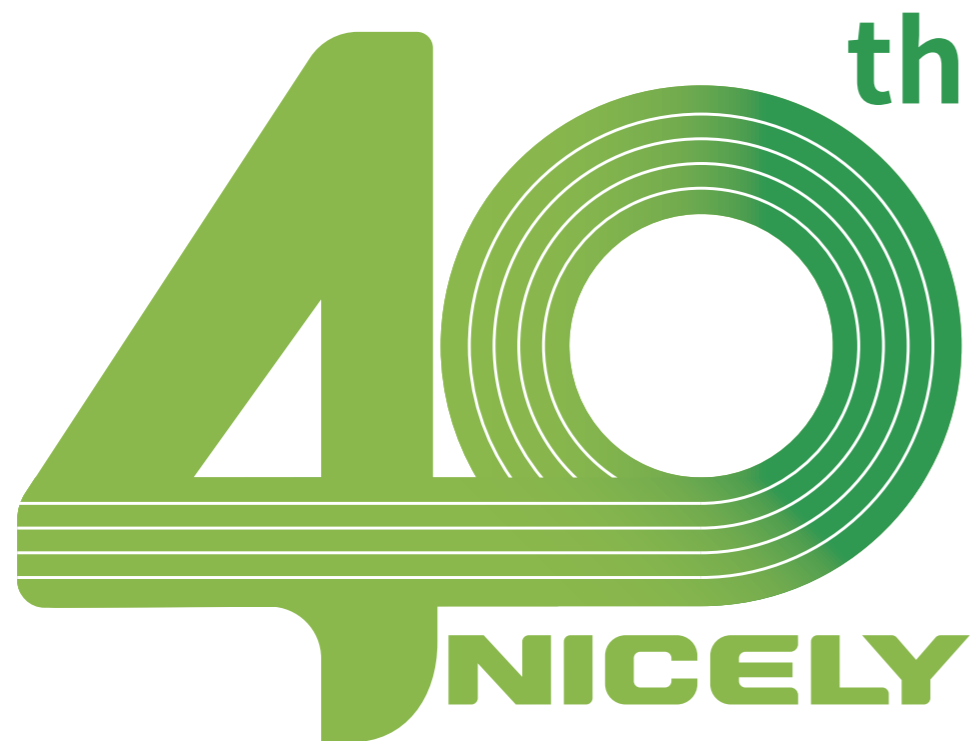
EG-7001 Turret Slitter Rewinder – Enters Mexico for Growing Demand on Food and Pharmaceutical Packaging



 EG-7001 Slitter Debuts in Mexico, Partnering with Axisplast, it enhances food and pharma packaging efficiency through precise slitting and reduced downtime.

SINCE — 1984

NICELY MACHINERY
#FROM TAIWAN



INNOVATION AND GROWTH NICELY'S JOURNEY FORWARD.

Nicely's core value has always been to provide tailored machines that meet customers' needs from the start.

We thank you for your continued support. Moving forward, Nicely is committed to growing with partners and achieving greater success together

NICELY MACHINERY DEVELOPMENT CO., LTD.



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NICELY MACHINERY
DEVELOPMENT CO., LTD.

Address
24 Tayu St. Luchu, Taoyuan
City, Taiwan 33842

Email
marketing@nicely.com.tw

Phone
+886-3-324 9020

Fax
+886-3-324 9026

Website
www.nicely-slitter.com

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