



RollMaster™
esi
by Northfield Automation

Bring out the best in your ESI flexible circuit drilling system investment

High productivity

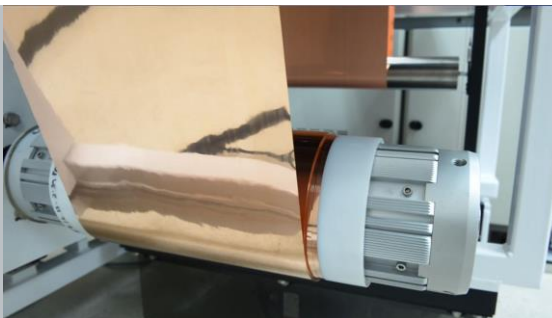
RollMaster™ extracts maximum performance out of your ESI flexible circuit laser drilling tools. Blaze through material using ESI Model 5335's maximum 1.5g stage acceleration with the RollMaster's proprietary lightweight dancer design and control. Reduce your cycle time with RollMaster's high-speed web indexing.

High quality output

RollMaster™ handles your delicate flexible circuit material with a soft touch. Its responsive ultra-light dancer design and dancer control avoids web wrinkle and reduces web distortion with even your thinnest flexible circuit materials. Air turn bars enable no-touch, no-damage motion even at the highest speeds and acceleration.

High flexibility

RollMaster™ adjusts to your processing needs. Move and replace the handler without realignment to enable fast transitions between panel and R2R production. Quickly shift between roll core diameters with its unique roller design. Further configure RollMaster™ with options such as splice stations, web cleaners, interleaf rollers, and more.



Industry-leading web handling

The RollMaster™ spindle and dancer move in concert with a closed-loop electronic control mechanism that mimics ESI's patented laser drill coordinated motion. The spindle delivers low-frequency motion while the dancer controls tension with fast-response, high-frequency motion. Together, they achieve unmatched laser drill y-stage tracking at up to 1.5g acceleration for minimum web flutter and no wrinkling at low web tensions even on the thinnest materials.

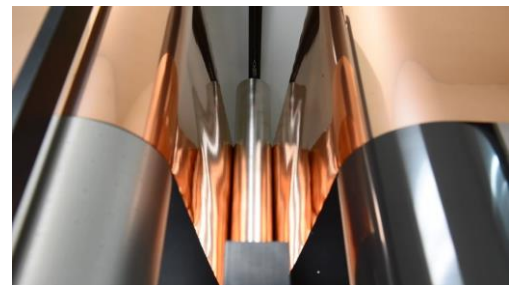
Performance Specification

Web width 150-520mm
 Edge guidance 100µm accuracy
 Feed rate 1.5g acceleration
 610mm/sec index speed
 Maximum index distance . 635mm
 Maximum roll weight 70kg
 Max. roll outer diameter ... 406mm
 Web tension 1-3kg or 2-5kg
 Dancer weight <1kg
 Spindle diameter Interchangeable 75 & 150mm



Standard Features

Unwind (feed) dims 1422x1413x1295mm (LxDxH)
 Rewind (takeup) dims 1168x1413x1295mm (LxDxH)
 Air turn bar Frictionless material transport
 Dancer control Electronic closed-loop
 Indexing clamp Drill-controlled for web advance
 Touch screen Provides system and diagnostic feedback
 Controls PLC controlled
 Electrical panel UL certified
 Language localization English, Korean, Chinese, Japanese, and Vietnamese



Site Requirements

Electrical 110 or 220VAC 1P or 220V 3P specified at time of order
 Compressed air 80psi regulated and filtered

Additional Options

Deionizer bars Unwind and/or rewind
 Splice station Unwind standard; rewind optional
 Web cleaner (rewind) Non-contact
 Others Programmable pause for quality check; Light table on rewind for quality check; Roll-end sensor on unwind; Tension monitoring on unwind; Casters on unwind

Ask an Expert! For facility guideline requirements or more information, please contact your local ESI office.



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