



# StreamFolder 5152

## High-speed book signatures



*The StreamFolder 5152 solution  
for high-speed color inkjet printers  
includes the StreamFolder f50,  
Cutter c51, Stacker s52 and Buffer b50*

Empower your new high-speed color inkjet printing system with Tecnaú's fastest cut/stack solution. StreamFolder™ 5152 system features the StreamFolder f50 which plowfolds the printed web and advances it to the single-knife Cutter c51. With tack-gluing, jogging and pressing stations ensuring the creation of top-quality signature blocks, this system operates at up to 656 fpm / 200 mpm to take advantage of the latest generation of high-speed inkjet printers.

The StreamFolder f50 plow-fold module provides unprecedented reliability for short-run digital book printing jobs of varying run lengths, including "books of one". StreamFolder folds the web once or twice, enabling efficient use of a web-fed press at its maximum print width. This folded web is very strong as the paper is up to four times thicker and has demonstrated dramatic increases in system reliability feeding through the cutter and stacker.

- ✓ Speeds up to 656 fpm / 200 mpm
- ✓ Automation-assisted job changeovers
- ✓ Plow-folded signatures for book-of-one
- ✓ Superior book quality
- ✓ Long-life cutter blades
- ✓ Multi-location tack-gluing

When compared to book blocks created from single cut sheets, the StreamFolder system's signatures eliminate common problems coming from inevitable variations in paper quality. Slight changes in web width will not impact page registration with the StreamFolder's unique Z-fold design ensuring pages are always precisely registered to the spine edge. In addition, any paper curl is effectively canceled as pages are folded back against each other, resulting in very flat, premium quality books.

StreamFolder 5152 system is a member of Tecnaú's Revolution 50™ series, a family of products featuring high-speed operation, IoT compatibility, and media flexibility as required in today's demanding digital print environments. Tecnaú products increase productivity, cut labor and paper costs, and even make new applications possible – Tecnaú solutions truly empower digital print to help you do more with less.

## StreamFolder 5152

### High speed book signatures

The StreamFolder 5152 system operates in-line or near-line with web-fed digital inkjet printers at speeds up to 656 ft/min (200 m/min). The system delivers 1-up plowfolded signature book blocks from 2-up, 3-up, or 4-up print utilizing the Buffer b50, StreamFolder f50, Cutter c51 (or Cutter c52), and Stacker s52 or double-channel Stacker s54 modules.

All modules generate the exceptionally smooth paper flow required for high-speed operation. An included dynamic web aligner along with web guides and active tension control keep the web stable and on-track. The system incorporates Smooth-Web™ motion technology to synchronize operation of each module to gently transport paper from the printer to stacker.

StreamFolder 5152 includes automation features throughout the line for quicker job changeovers with less operator intervention. Duplicated control panels along the line allow easy operator monitoring and intervention wherever an operator is standing. Jogging, gluing and pressing stations work together to ensure exceptionally well-formed and well-stacked book blocks ready for offline binding.

### StreamFolder f50

The StreamFolder f50 folds the web once or twice lengthwise prior to cutting and stacking. The f50 enables a 1-up stack of folded signatures to be created from either 2-up, 3-up or 4-up print streams and supports automatic changeovers to final book size and paper width.

After printing, automatically-positioned perforating wheels and folding heads prepare the web to be accurately folded. For 2-up printing, one fold station is used to simply fold the web in half. For 3-up and 4-up printing, two fold stations are used to create a Z fold (or M fold for 4-up), guaranteeing

fixed page registration to the spine edge regardless of slight roll width variations. The Z and M folds force web width variations to the face edge which is cleanly trimmed during binding, producing a superior quality book.

Glue is applied within the folds, keeping folded webs together. Finally, folded edges are flattened with pressing rollers in the outfeed of the StreamFolder and infeed of the Cutter, so the ppi of signature book blocks remains the same as cut sheet book blocks ensuring compatibility with existing cover art.



### Stacker s52

Following the cutter, cut and folded signatures enter first an alignment section and then the jogging section of the Stacker s52 where they are gently decelerated. Signatures are aligned and glue is once again applied, this time to both up/down sides of the signatures, with gluing paused between book blocks. Glue spots keep loose sheets or signatures together for automated conveying to an inline perfect binder or other finisher, or to maintain book block integrity and registration during manual handling. Glued signatures slide smoothly onto the stack. A pressing unit holds pressure on the glued stack to create a solid book block able to be reliably handled. A semi-automated glue service station is included to facilitate

easy ongoing maintenance of the gluing nozzles and other gluing components.

Adjustments for changing jobs and sheet length are triggered automatically. Book blocks are delivered to the conveyor in small stacks or when the operator-programmed stack height is reached.

The Stacker s52 is ideal for running uncoated papers (particularly lightweight papers) at very high speeds. Perfect document quality is maintained by minimizing contact with the printed surface and preventing damage to the paper's sensitive edges.

### Buffer b50

After printing, the high-capacity Buffer b50 accumulates the paper web to ensure that stack deliveries never stop the printer, and feeds the paper via the dynamic web aligner on to the StreamFolder.

### Cutter c51 (or Cutter c52)

The Cutter c51 has one rotary knife for single cutting, as appropriate for output further processed through a three-knife trimmer. The intuitive, touch-screen display panel controls the entire line and common operator adjustments are done externally for easy operation. Intelligent document integrity control automatically recognizes non-data or waste sheets and diverts appropriately, while maintaining registration

to the first live printed page. The cutter's knife assembly extends and retracts on rails for easy servicing and quick jam recovery.

Alternatively to the single-cutting Cutter c51, customers may prefer the double-cutting Cutter c52. This cutter has dual rotary knives to sheet the web using single cut or variable double strip cut for full bleed color printing and/or inkjet flush line removal.

### IoT Enhancements

StreamFolder 5152 system includes Internet of Things compatible controls, motors and drives to enable an array of next generation diagnostic and analytical tools. Options are available for remote monitoring and diagnostics, automatic software updates, preventive maintenance aids and database analysis.

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### Optional Capabilities

#### Double Channel

The Stacker s54 is an alternative to the Stacker s52, to maximize throughput particularly for books containing fewer signatures. The Stacker S54 is equipped with a dual-channel feature, allowing the diversion of book-block

signatures from consecutive books onto two separate channels. This capability enables increased speed and facilitates small-scale production without halting the assembly line. Glue is applied to signatures on both channels for secure binding.

**NEW**  
PRODUCT

### Technical Specifications

#### Performance / Media

Speed max.	up to 656 ft/min	up to 200 m/min
Paper weight	35# - 85# text	50 - 120 gsm
	<small>max paper thickness in the cutter 300 gsm or 212# index above and below standard specifications requires testing</small>	
Roll diameter max	52"	1320 mm
Web width max	up to 22"	up to 560 mm
Page width	5.5" - 11"	140 - 280 mm
Page length	8" - 14"	203 - 356 mm
Stack height	up to 4.7"	up to 120 mm
Separation	glued book-blocks for easy handling	
Print streams	2-up (1 fold / 4 panel signatures) 3-up (2 folds / 6 panel signatures) 4-up (2 folds / 8 panel signatures)	
Job set-up	Perf wheel positioning automatic Fold head positioning automatic Glue gun positioning automatic Jogger positioning automatic Imposition changeover semi-automatic (ex. changing from 2up to 3up)	
Output	1-up stacks or single books	
<b>Electrical &amp; Air</b>		
StreamFolder f50	400-480 Vac, 15 A, 3-Phase, 50/60Hz	
Cutter c51	400-480 Vac, 25 A, 3-Phase, 50/60 Hz	
Stacker s52	400-480 Vac, 16 A, 3-Phase, 50/60 Hz	
Air	6 - 8 bar, dry and clean (ISO 8573-1 class 5)	

### Configuration Example

