



Stack 5251/Stack 5151

High speed cut and stack



The Stack 5251 & Stack 5151 cutting and stacking solutions for high-speed color inkjet printers include the Cutter c52 or Cutter c51, Stacker s51 and Buffer b50

- ✓ **Speeds up to 656 fpm / 200 mpm**
- ✓ **Broad application range**
- ✓ **Merging option**
- ✓ **Long-life cutter blades**
- ✓ **Document integrity control**

Empower your new high-speed color inkjet printing system with an efficient cutting/stacking solution. Featuring the double-cutting Cutter c52 or single-cutting Cutter c51, TecnaU's Stack 5251 and Stack 5151 reliably operate as fast as 656 fpm/200 mpm to take advantage of the emerging generation of high-speed inkjet printers.

Cutting and stacking high-resolution print at these speeds requires a stable web of paper with minimal touchpoints. The taut-web Stack 5251 & 5151 never let go of the web, keeping control for reliable production. The Stacker s51 module produces 1-up, 2-up, 2-up merged, 3-up or 4-up stacks, utilizing a transport technology which matches well to a broad range of applications, from transactional to high-quality publishing & graphic arts. North/south job offsetting ensures high-speed operation even for consecutive small set/book-block jobs.

Stack 5251 & 5151 feature next generation controls for compatibility with the "Internet of Things" (IoT). The system includes natural-language error reporting on the user screen and onboard diagnostics to help keep the system up and running. IoT options are available for remote monitoring and diagnostics, automatic software updates and preventive maintenance aids.

These systems are members of TecnaU'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. TecnaU products increase productivity, cut labor and paper costs, and even make new applications possible – TecnaU solutions truly empower digital print to help you do more with less.

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The Stack 5251 and Stack 5151 systems operate in-line or near-line with web-fed digital inkjet printers at speeds up to 656 ft/min (200 m/min). The systems deliver 1-up, 2-up or 3-up offset stacks with variable full bleed cuts utilizing the Buffer b50, Cutter c52 or Cutter c51, and Stacker s51 modules. The optional Merger m50 allows 2-up print to be delivered in a single collated stack ready for inserting.

All modules operate in taut web to generate the exceptionally smooth paper flow required for high-speed operation. An included dynamic web aligner keeps the web on track to eliminate the need for an alignment deck with its multiple friction points. The system incorporates Smooth-Web™ motion technology to synchronize operation of each module to gently transport paper from the printer to stacked output.

IoT Enhancements

Stack 5251/Stack 5151 systems include 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.



3 Stacker s51

Following the cutter, sheets enter the Stacker s51 where they are precisely aligned and separated with sheets deposited gently onto the stack. The Stacker s51 features “north/south job offsetting”, offsetting sets/book-blocks back & forth in the direction of travel to maintain full speed even for multiple consecutive small sets.

The Stacker s51 builds up to 10”-tall stacks of sheets and has an integrated buffer for non-stop deliveries. Each job can be delivered to the conveyor one at a time, individually offset within the stack or delivered when the operator-programmed stack height is reached.

Another version of this stacker, the Stacker s51L, is available to stack sheets in lengths up to 30”.

2 Cutter c52 or Cutter c51

The Cutter c52 has dual rotary knives to sheet the web using single cut or variable double strip cut for full bleed color printing. Alternatively, the Cutter c51 has one rotary knife for single cut only, as appropriate for operations printing scattered dots for head cleaning, rather than a flush line, or for where output is further processed through a three-knife trimmer. Center slitting is performed for 2-up or 3-up print streams.

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.

1 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 cutter.

Optional Capabilities

Slit Merge

The Merger m50 option allows a 2-up printed web to be slit and merged into a single, collated paper stream. Attached to the input side of the cutter for reduced footprint, the web enters the Merger m50 and is slit in the center. A sensor continuously monitors the web for side-to-side variations or movement and the slitter automatically adjusts to cut precisely at the center of the web. The resulting two webs are then merged right-over-left or left-over-right, depending on the requirements of the application. The Merger m50 features a patented strip removal technology to eliminate jamming due to inadequate strip removal.

In-line Finishing

The Transport t50 delivers individual sheets from the cutter to a third-party finishing device such as a saddle-stitcher or signature folder. It may be installed in conjunction with the Stacker s51 to also allow normal offset stacking, thus providing users with high finishing flexibility. Application review is required.

Automatic Imposition Setup

Revolution 50 - Cutter c52 AutoSetup adjusts with no operator intervention to the right imposition, automatically changing on-the-fly position of gutters, side trims and strip cut lengths for full bleed variable applications printed on the roll.

NEW
PRODUCT

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Technical Specifications

Performance / Media

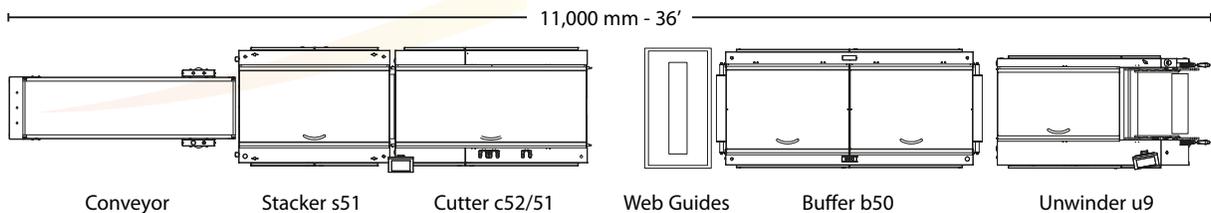
Speed max.	up to 590 ft/min <i>Up to 656 fpm (200 m/min) with speed kit option – application dependent</i>	up to 180 m/min
Paper weight	12# Bond - 165# Index, 40 - 300 gsm <i>(paper and speed dependent, outside 60 - 250 gsm requires application review)</i>	
Web width max*	up to 22.5" ** <i>* Up to 23" (584mm) upon request</i>	up to 570 mm ** <i>** Web width max on Stacker s51 is 22" (560mm)</i>
Sheet length max	5.5" - 20"	140 - 508 mm
with Stacker s51L	5.8" - 30" <i>below 8" (203 mm) with speed reduction; with double cut min. 5.8" (148 mm)</i>	148 - 762 mm
Strip cut		
<i>Cutter c52 only</i>	1/4" - 1"	6.4 - 25 mm
Gutter cut		6, 8, 10, 12 mm
Stack height	10"	250 mm
Offset	0.6" - north/south	15 mm - north/south
Imposition	1-up, 2-up, 2-up merged or 3-up stacks <i>4-up upon request (requires application review)</i>	
Electrical & Air		
Cutter	400-480 Vac, 25 A, 3-Phase, 50/60 Hz	
Stacker s51	400-480 Vac, 16 A, 3-Phase, 50/60 Hz	
Air	6 - 8 bar, dry and clean	

Web direction



Book-blocks
with north/
south offset

Configuration Example



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