Horizon

CUTTING AND CREASING

SmartSlitter

Crease, Perforate, and Cut in One Pass.

SHEET CUTTING, CREASING, AND PERFORATING IN ONE PASS.

A quality finishing process for digitally printed sheets.

BENEFITS

LABOR SAVING
The creasing, perforating and sheet cutting can be performed in one pass for various applications such as business cards, shop cards, invitation cards, greeting cards, laminated sheets, and covers for perfect binding.

APPLICATION FLEXIBILITY
The SMSL-PR optional perforation cassette enables skip perforation for various applications such as coupons, tickets and checks.

USER-FRIENDLY OPERATION
New high resolution color touch screen display for easy and intuitive operation.
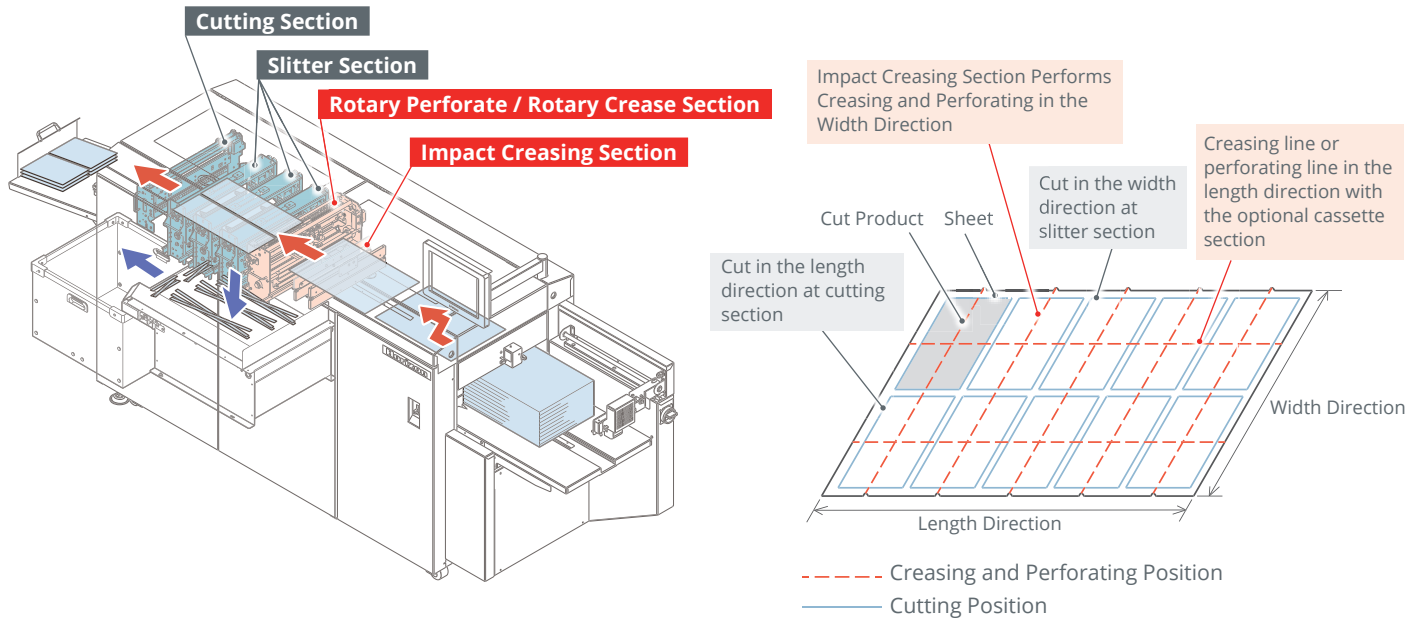
HIGHEST PRECISION
The camera device detects the print registration by reading the barcode or mark printed on the sheet. The position of the slitter, creaser, and cutting position are adjusted according to image shift.

MANAGE YOUR BINDERY WITH HORIZON'S BINDERY CONTROL SYSTEM
The system can be enhanced with automated workflow from upstream to postpress with iCE LiNK, which uses cloud technology, Horizon's post-press management system.
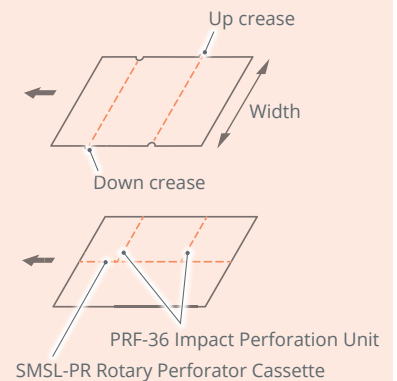
KEY FEATURES.

The SmartSlitter performs various finishing styles in a single pass including cutting, creasing and perforating.

Cutting Section
Slitter Section
Rotary Perforate / Rotary Crease Section
Impact Creasing Section

Impact Creasing Section Performs Creasing and Perforating in the Width Direction

Cut in the width direction at slitter section

Creasing line or perforating line in the length direction with the optional cassette section

Cut Product   Sheet

Cut in the length direction at cutting section

Width Direction

Length Direction

- - - - - Creasing and Perforating Position
———— Cutting Position
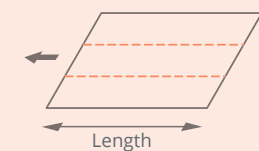
Impact Creasing Section

The creasing lines and perforating lines are made in the width direction.
Up and down creasing can be selected from the touch screen, depending on fold direction.

Perforation can be performed by using the PRF-36 perforation tool. Partial perforation can be also performed by cutting the perforation blade by the desired length.

Up crease

Width

Down crease

PRF-36 Impact Perforation Unit
SMSL-PR Rotary Perforator Cassette

Rotary Perforate / Rotary Crease Section

Creasing lines or perforating lines can be made in the length direction.
Either SMSL-PR rotary perforator cassette or SMSL-CR rotary creasing cassette can be used according to desired finish style.
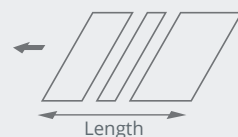Skip perforation is available with SMSL-PR perforation cassette.

Length

Slitter Section

The slitter blades cut each sheet into three parts at maximum in the width direction. (Single cut or gutter cut for image bleed)

Width

Cutting Section

The cutting knives cut each sheet in the length direction. (Single cut or gutter for image bleed)

Length

DETAILS FOR EACH DEVICE.
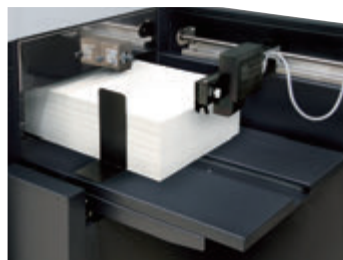
From start to finish.

1 OPERATION CONSOLE

Changeovers including sheet size, imposition, cutting position and processing type (creasing or perforating) can be done easily at the newly equipped high resolution touchscreen. Up to 200 jobs can be stored in memory for easy recall.

2 FEED SECTION

Uniquely designed suction belt feeding system enables stable feeding performance even with heavier sheets. An ultrasonic sensor ensures miss or double detection regardless of the print image or thickness of sheets.

3 TRANSPORT SECTION

The sheets will be aligned via the vacuum registration system during transport. The optional camera device detects the print registration by reading the barcode or mark printed on the sheet. The position of the slitter, creaser, and cutting position are adjusted according to image shift.

4 IMPACT CREASING SECTION

Up to 20 creasing lines can be made with the standard equipped creasing unit. The positive and negative creasing lines can be made in one pass. The creasing depth can be adjusted according to the sheet thickness. The creasing interval can be adjusted by 0.1 mm or 0.004".

5 ROTARY PERFORATION ROTARY CREASING SECTION

Select the SMSL-PR rotary perforation cassette or the SMSL-CR rotary creasing cassette according to the applications. Cassette removal designed for easy maintenance.

6 SLITTER SECTION

Six rotary slitters accommodate bleed trim or gutter-cuts for 3-up output. These cassettes are easy to maintain.

7 CUTTING SECTION

The cutting knives cut each sheet across the feed direction. Single cut or bleed/gutter cut is possible.

8 STACK TRAY

Processed sheets are delivered on the tray.

OPTIONS.

Performance Enhancing Options.

PRF-36 IMPACT PERFORATION UNIT

- Perforation lines can be made in the width direction by replacing the first creasing unit with the optional PRF-36.

IMPACT CREASING UNIT

- Different widths of creasing lines are available using this unit (Standard width is 0.8 mm or 0.031")
  - 0.5 mm or 0.020" (thin)
  - 1.3 mm or 0.512" (thick)
  - 2.0 mm or 0.079" (thick)

SMSL-CA CAMERA DEVICE

- This camera reads the print registration mark or barcode to adjust the cutting, perforating and creasing position according to image position. This camera is also used to read the barcode for automatic job set-up.

SMSL-PR ROTARY PERFORATION CASSETTE

- Perforation is performed in the direction of paper feeding.
- Two rotary perforation units are equipped. Skip perforation can be performed.

SMSL-CR ROTARY CREASING CASSETTE

- Creasing is performed in the direction of paper feeding.
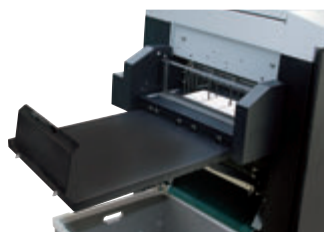- Two rotary creasing units are equipped.

SMSL-CV CONVEYOR

- The finished product can be delivered on the motor driven conveyor. Batch and pausing can be performed by the pre-set number set at the touch screen.

SMSL-ST STACKER

- Stacker delivery device. Suitable to receive small products such as business cards or greeting cards. Stacker tray height descends automatically.
- Maximum stack height: 90 mm or 3.54"

CSD-40SMSL CARD STACKER

- Stacks the pre-set number of sheets for easy handling of small applications such as business cards or greeting cards. Up to five count sensors ensure reliable offset stacking.
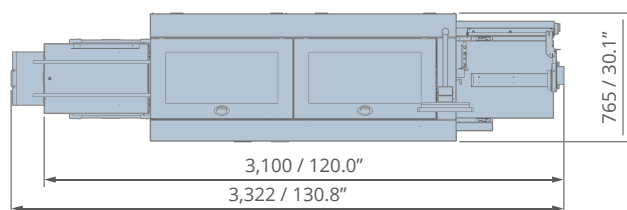- Maximum stack height: 40 mm or 1.58" for each stack
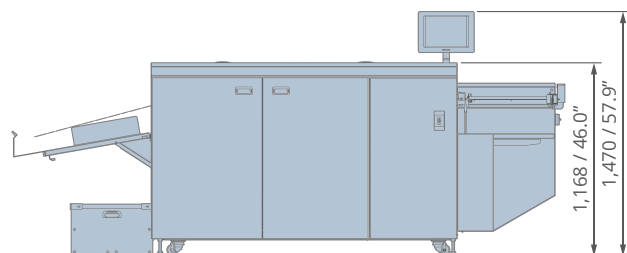
Delivery Roller (Option)
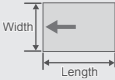DV-RL
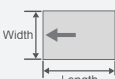
SPECIFICATIONS.

Machine Dimensions. (Unit: mm / inch)

(Top View)

(Front View)

SMSL-100	
Installation Type	Floor Model
Sheet Feeding System	Air Suction Feed Belt
Sheet Size	**Width x Length** Max. 370 x 670 mm or 14.565" x 26.375" Min. 200 x 200 mm or 7.875" x 7.875"
Finished Sheet Size	**Width x Length** Max. 370 x 670 mm or 14.565" x 26.375" Min. 48 x 50 mm or 1.890" x 1.970"
Sheet Weight Range	Normal Paper: 82 to 350 gsm Coated Paper: 105 to 350 gsm SMSL-PR Rotary Perforate Cassette / SMSL-MPR Manual Perforation Cassette / PRF-36 Impact Perforation Unit: Normal Paper: 82 to 209 gsm Coated Paper: 128 to 256 gsm
Feeder Stack Height	150 mm or 5.9"
Impact Creasing Mechanism	One positive, one negative
Number of Impact Creasing Lines	20 crease lines
Production Speed	54 sheets per minute (A4 short-edge feeding, two cuts, one crease line) 48 sheets per minute (JIS B3 short-edge feeding, two cuts, one crease line)
Voltage/Frequency	Single Phase 200 to 240 V, 50 or 60 Hz Single Phase 208 to 220 V, 50 or 60 Hz
Machine Dimensions	W3,100 x D765 x H1,470 mm or W120" x D30.1" x H57.9" (when the tray is used) W2,495 x D765 x H1,470 mm or W 98.2" x D30.1" x H57.9" (when the tray is folded) W3,495 x D765 x H1,470 mm or W137.6" x D30.1" x H57.9" (when the optional SMSL-CV is used)
Machine Weight	SMSL-100: 546 kg or 1,202.7 lb SMSL-CR: 14 kg or 30.9 lb SMSL-PR: 17 kg or 37.5 lb SMSL-MPR: 17 kg or 37.5 lb SMSL-CV: 27 kg or 59.5 lb SMSL-ST: 10 kg or 22.1 lb

CSD-40SMSL	
Connectable Devices	SmartSlitter
Sheet Size	**Width x Length** Max. 297 x 210 mm or 11.69" x 8.26" A4 Landscape Min. 80 x 50 mm or 3.15" x 1.97" Min. 50 x 80 mm or 1.97" x 3.15" *When the stack counter is used to count products, the imposition is limited.
Cycle Speed	Based on the SmartSlitter
Stack Height	Maximum 40 mm or 1.58"
Voltage/Frequency	Single Phase 200 to 240 V, 50 or 60 Hz (Supplied from the SmartSlitter)
Machine Dimensions	W1,618 x D710 x H1,054 mm or W63.7" x D28.0" x H41.5" (When the optional DV-RL is installed)

*The machine design and specifications are subject to change without any notice.
*Specifications may vary depending on the job, paper quality, environmental influences, and various other factors. Please do a test run before starting production.

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250313/CT00186-04