

Horizon

RD series

Rotary Die-cut System

**Simple, high quality,
compact rotary Die-cut system.**



Improve your die cutting process!

Easy change over the simple operation. Rotary Die-cut System allows flexibility across a wide range of products.

Features

1. **Rotary Die-cut System** - Rotary Die-cutter designed to meet the growing demand for short run product. The rotary die-cutters are light and compact compared to the normal die cutters.
2. **Flexible substrate** - Die-cut and Kiss-cut in various substrates for digital and offset printed sheets.
3. **One pass processing** - Feeding, die cutting, and separating are achieved in one pass.
4. **Save the cost of making die** - Uniquely designed servo motor controlled "Repeat Register" feature allows multiple-up applications from single-up die to minimize die cost.
5. **Simple and easy operation** - Reduces costly labor steps and increases productivity with easy setup and operation versus steel rule or mechanical dies.



Two types of Die-cut Systems

RD-4055

Rotary Die-cut System (Max. 400 x 550 or 15.74" x 21.65") Die-cut, Crease, Perforation, Slit, Hole punch and round corner in various substrates up to 0.5 mm or 0.019" (only for die cutting).



Sheet Feeder FFU-4055 + Rotary Die-Cutter RD-4055 + Separator SPC-4055

RD-3346

Rotary Die-cut System (Max. 330.2 x 550 mm or 13" x 21.65") Repeat function allows to process 550 mm sheets at maximum. Die-cut and Kiss-cut in various substrates up to 0.3 mm or 0.013".

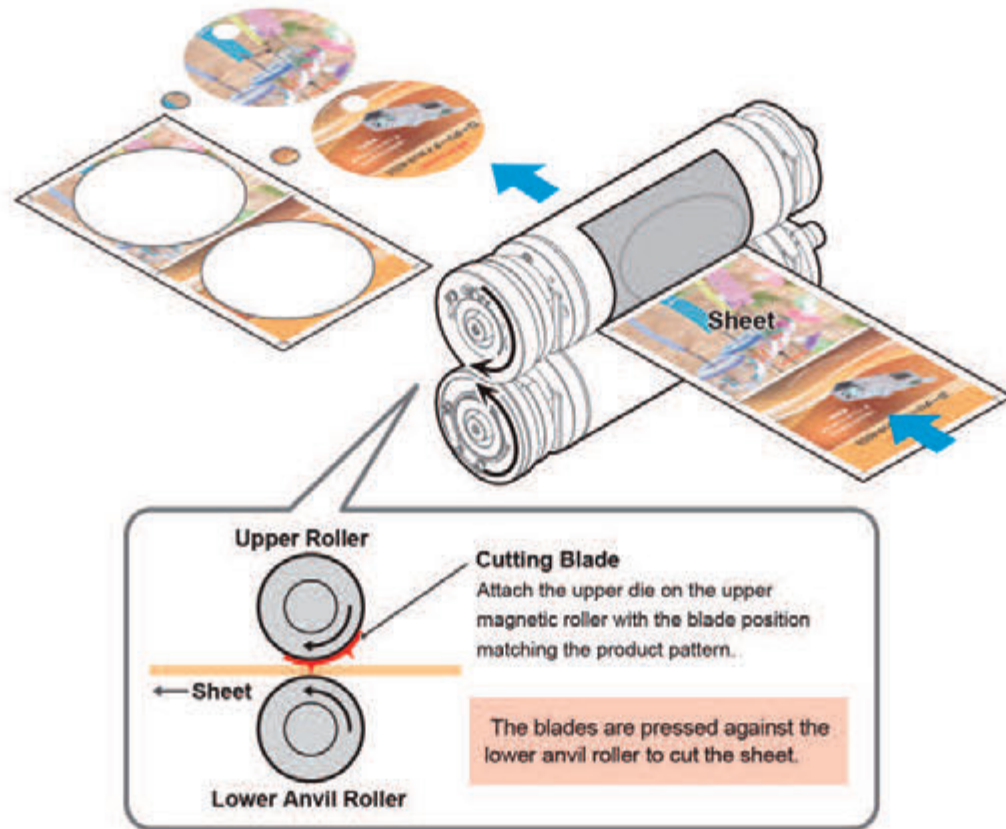


Rotary Die-Cutter RD-3346 + Separator SPC-3346

RD series Features

Die-Cutting Mechanism

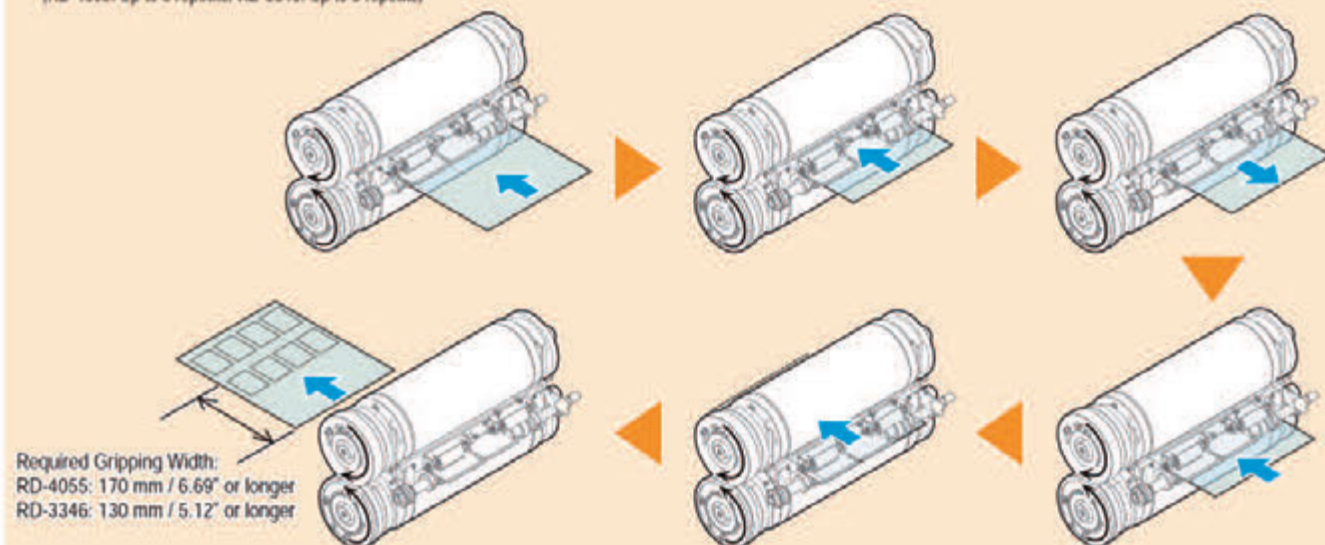
The sheet passes between the upper die and the lower anvil roller to cut.



Useful Function

Repeat Function

Repeat register function enables the running of multiple up imposed applications with a smaller die to reduce die cost.
 (RD-4055: Up to 5 repeats, RD-3346: Up to 8 repeats)

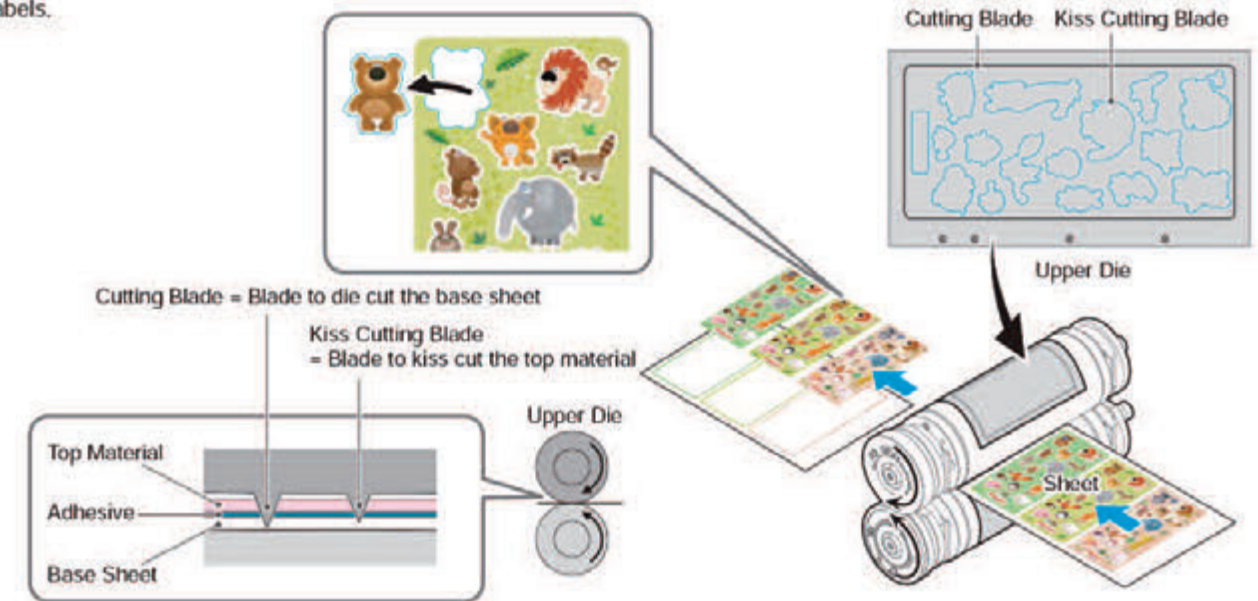


Various Substrate

Rotary Die-cut System is suitable for various types of processing.

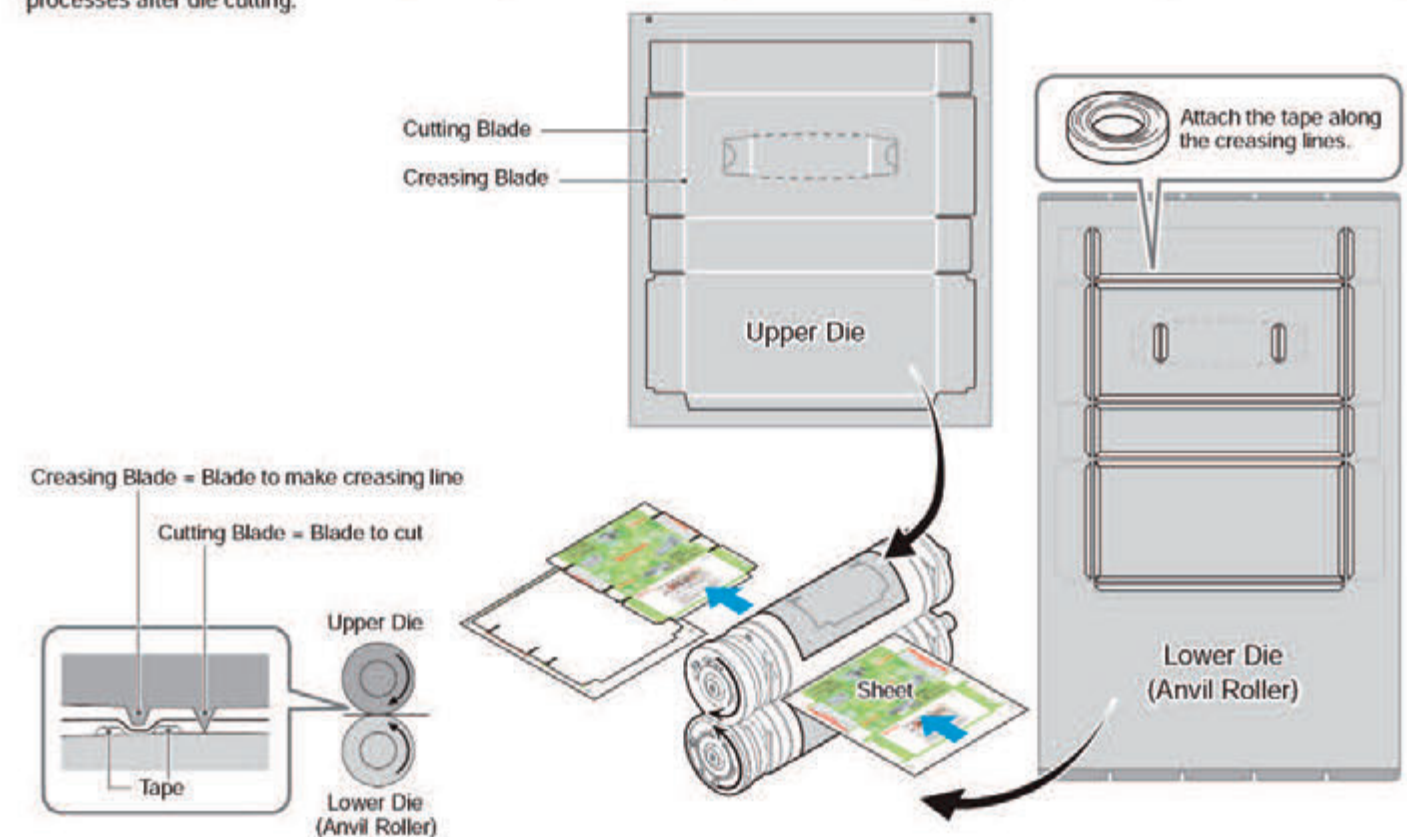
Kiss Cutting

Die-cutting and Kiss cutting can be performed at the same time by using a die which has two different blade heights. Ideal for making stickers and labels.



Creasing Only for RD-4055

Crease can be achieved to avoid image checking. Suitable for boxes, pocket folders and greeting cards which require an additional folding processes after die cutting.

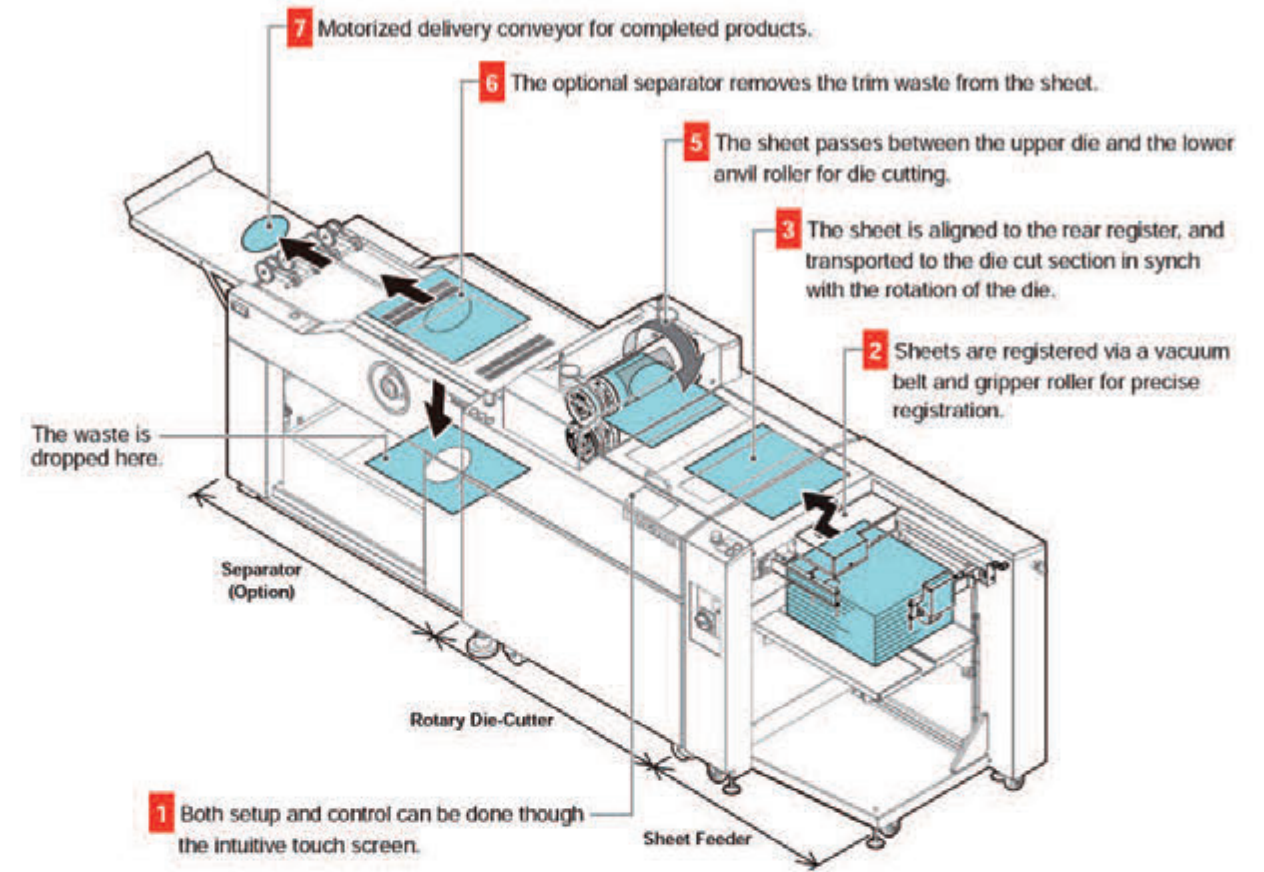


Details for Each Device



Sheet Feeder FFL-4055 + Rotary Die-Cutter RD-4055 + Separator SPC-4055

Sheet flow of Rotary Die-cut System



1 Operation Console

Both setup and control can be done through the intuitive touch screen. After setting upper and lower die, the system can be set up by simply inputting sheet size and product size. The graphical illustrations on the screen are simple and easy to understand.



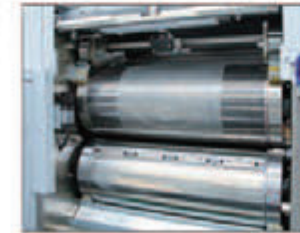
3 Transport Section

Sheets are registered by vacuum belt and position is firmly secured with gripper rollers for high quality finish. Servo motor driven gripper rollers ensure the die cut position without effecting processing speed.



5 Die Cutting Section

Rigid magnetic upper roller and solid lower anvil roller ensure high quality die cutting. Uniquely designed die cutting section enables easy and quick die setting.



6 Separator Option

The connected separator removes the waste from the finished product and delivers it to the waste bin. Air cylinder driven separator pins and air jets can be used depending on size of the waste.



2 Feed Section

Vacuum belt feeding enables superior feeding with easy setup and operation. An ultrasonic sensor is used for double feed detection on a wide range of substrates.



4 Mark Sensor Option

The optional mark sensor reads the mark printed in the leading margin of sheet. If the printing image is offset, the position is automatically calibrated to process the sheet accurately.



Attaching the Lower Die

*Only for RD-4055

For the RD-4055, the lower die can be attached to the lower anvil roller to make crease lines.



7 Delivery Section Supplied with the Separator

Finished products are delivered on the motorized conveyor. Intermittent conveyor movement maximizes the continuous operation in a small space. Gap can be adjusted depending on the size of the product for easy handling.



Performance Enhancing Options

ST-4055 Only for RD-4055

Stacker

- ST-4055 stacks a wider range of substrates and applications such as thinner sheets or complicated shapes which can be difficult to separate.
- Vacuum belt transport ensures smooth delivery without separating die cut pieces.

- Offset stacking function is available by pre-set number.
 - Maximum stack capacity: 170 mm or 6.69"
- * To connect the ST-4055, remove the SPC-4055.

Vacuum Transport Section

The vacuum transport belt is decelerated before the stock reaches the backstop for accurate stacking without damage to the die-cut stock.

Operation Console

ST-4055 can be set up by the touch screen at RD-4055. Icon based touchscreen ensures intuitive operation.



Stack Section

Delivery tray slides out for easy removal of finished pile. Offset function is available for easy job handlings.



Prepare the compressor to meet the following specifications:

| Specification for Compressor with ST-4055 | |
|---|----------------------|
| Rated Output of Prime Mover(Reference): | 0.75 kW |
| Maximum Operating Pressure | 0.8 MPa |
| Minimum Required Pressure | 0.6 MPa or more |
| Minimum Discharge | 85 Liters per minute |
| Type | Oil-free Type |

Other Options

| | | | |
|-----------------------------|--|------------------|---|
| Lower Die Tool Kit LDK-4055 | This kit includes the necessary tools and materials to help for preparing the lower die efficiently. | Nick Punch RD-NP | This optional nick punch is a tool to makes nick on the die easily. |
|-----------------------------|--|------------------|---|

BT-4055 Only for RD-4055

Bucket Receiving Tray

- BT-4055 is bucket receiving tray to deliver none separated die cut sheet in on the receiving tray.

Prepare the compressor to meet the following specifications:

| Specification for Compressor with BT-4055 | |
|---|----------------------|
| Rated Output of Prime Mover(Reference): | 0.2 kW |
| Maximum Operating Pressure | 0.8 MPa |
| Minimum Required Pressure | 0.6 MPa or more |
| Minimum Discharge | 20 Liters per minute |
| Type | Oil-free Type |



ST-3346 Only for RD-3346

Stacker

- Optional ST-3346 stacks a wider range of substrates and applications such as thinner sheets or complicated shapes which can be difficult to separate.
- Maximum stack capacity: 70 mm or 2.76"

* Connect the ST-3346 in-line with the SPC-3346 separator.

Prepare the compressor to meet the following specifications:

| Specification for Compressor with ST-3346 | |
|---|----------------------|
| Rated Output of Prime Mover(Reference): | 0.75 kW |
| Maximum Operating Pressure | 0.8 MPa |
| Minimum Required Pressure | 0.6 MPa or more |
| Minimum Discharge | 85 Liters per minute |
| Type | Oil-free Type |

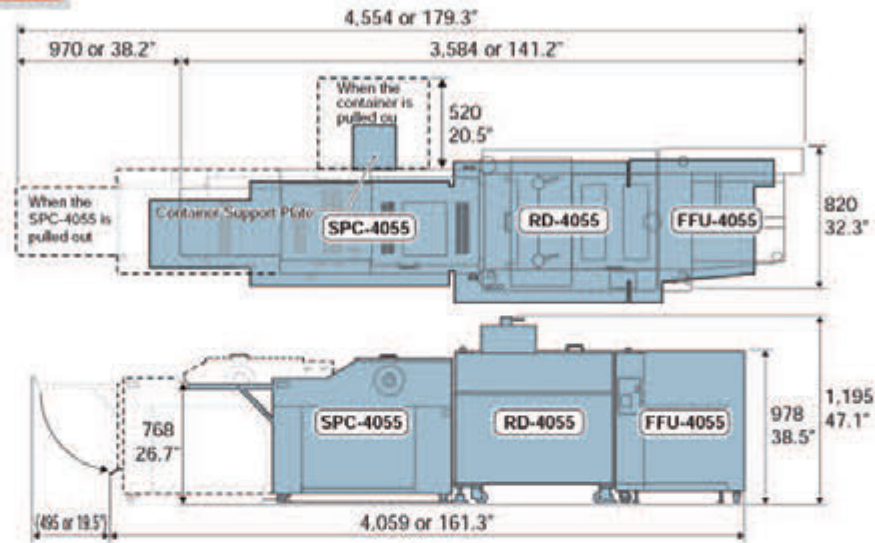


Specifications

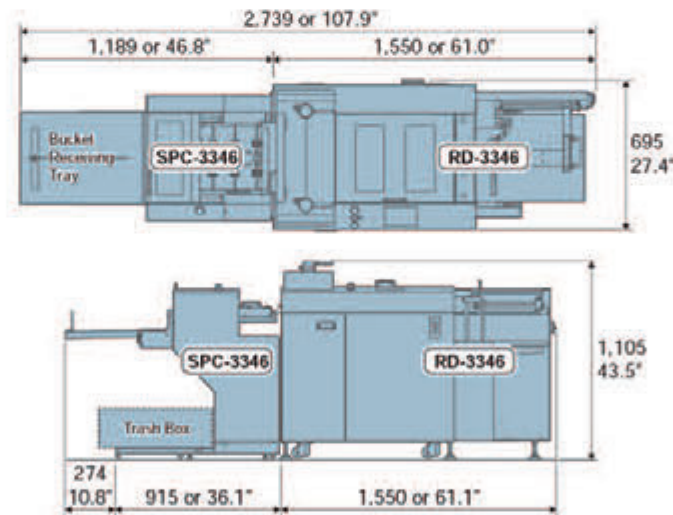
Machine Dimensions [Unit : mm or inch]

The available range of sheet size and sheet weight can be limited depending on the connected models. The production speed is affected by the combination of the models.

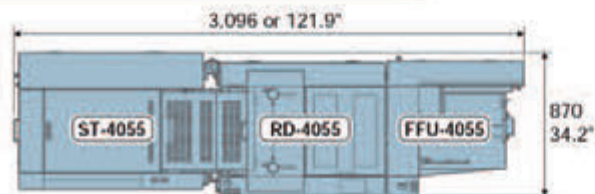
Dimension of RD-4055



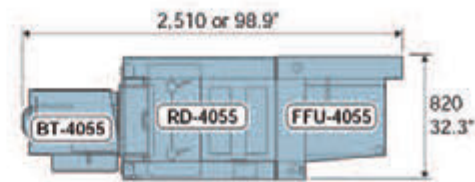
Dimension of RD-3346



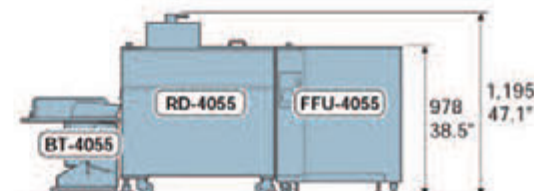
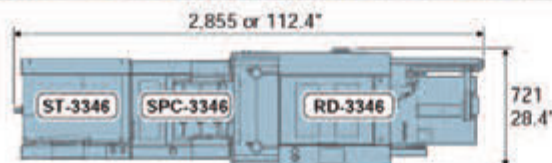
Dimension of RD-4055+ST-4055



Dimension of RD-4055+BT-4055



Dimension of RD-3346+SPC-3346+ST-3346



| Model | RD-4055 | | RD-3346 | |
|---|--|--|---|--|
| Sheet Feeding System | Air Suction Feed Belt | | | |
| Sheet Size (Before processing) | Width x Length | Max. 400 x 550 mm or 15.74" x 21.65" Min. 200 x 275 mm or 7.88" x 10.83" | Max. 330.2 x 550 mm or 13" x 21.65" *L400 to 460 mm or 15.75" to 18.11": The production speed is reduced to half. *L460 to 550 mm or 18.11" to 21.65": Repeat die cutting only. Min. 170 x 275 mm or 6.69" x 10.83" | |
| Cut Product Size *The size may be limited depending on shape and sheet weight range. | | With separator Max. 376 x 530 mm or 14.8" x 20.8" Min. 50 x 80 mm or 1.97" x 3.15" | Without separator (with ricks) Max. 384 x 530 mm or 15.1" x 20.8" Min. Depending on die shape | With separator Max. 306 x 440 mm or 12.04" x 17.32" Min. 40 x 60 mm or 1.58" x 2.37" |
| Processed Material | Normal paper, Coated paper, Cardboard | | | |
| Material Thickness | 127.9 to 400 gsm Die Cutting : Max. 0.5 mm or 0.019" (In case of blade height: 0.8 mm or 0.031") 0.3 mm or 0.011" (In case of blade height: 0.6 mm or 0.023") Creasing : Max. 0.4 mm or 0.015" (In case of blade height: 0.8 mm or 0.031") | | 127.9 to 270 gsm Max. 0.3 mm or 0.011" | |
| Feeder Stock Height | 500 mm or 19.68" | | 150 mm or 5.90" | |
| Die Size Upper Die | Max. 400 x 560 mm or 15.74" x 22.04" Min. 160 x 100 mm or 6.30" x 3.94" | | Max. 330 x 460 mm or 12.99" x 18.11" Min. 160 x 70 mm or 6.30" x 2.76" | |
| Upper Cutting Blade Height | 0.6 mm + 0.8 mm or 0.0236" + 0.0315" | | 0.6 mm or 0.0236" | |
| Production Speed | Die cut roller 6,000 cycles per hour (When the ST-4055 is connected, the number of processing sheet is 3,000 sheets per hour.) | | Die cut roller 5,000 cycles per hour (If the sheet length is longer than 400 mm or 15.75", the number of processing sheet is limited to 2,500 sheets per hour. When the ST-3346 is connected, the number of processing sheet is limited to 2,500 sheets per hour.) | |
| Voltage/Frequency | Single Phase 200 to 240 V, 50 or 60 Hz | | Single Phase 200 to 240 V, 50 or 60 Hz | |
| Machine Dimensions | With separator (FFU-4055+RD-4055+SPC-4055) W3,584 x D820 x H1,195 mm or W141.2" x D32.3" x H47.1" | Without separator (FFU-4055+RD-4055) W2,510 x D820 x 1,195 mm or W98.9" x D32.3" x H47.1" | With separator W2,739 x D695 x H1,105 mm or 107.9" x 27.4" x 43.5" | Without separator W2,150 x D695 x H1,105 mm or 84.7" x 27.4" x 43.5" |
| Recommended Air Source | When the SPC-4055 / ST-4055 is used Rated Output of Prime Mover(Reference): 0.75 kW Maximum Operating Pressure: 0.8 MPa Minimum Required Pressure: 0.6 MPa or more Minimum Discharge: 85 Liters per minute Type: Oil-free Type When the SPC-4055 is not used Rated Output of Prime Mover: 0.2 kW Maximum Operating Pressure: 0.8 MPa Minimum Required Pressure: 0.6 MPa or more Minimum Discharge: 20 Liters per minute Type: Oil-free Type | | Rated Output of Prime Mover(Reference): 0.75 kW Maximum Operating Pressure: 0.8 MPa Minimum Required Pressure: 0.6 MPa or more Minimum Discharge: 85 Liters per minute Type: Oil-free Type | |

| ST-4055 Specifications | |
|------------------------|--|
| Compatible Machines | RD-4055 |
| Sheet Size | Width x Length Max. 400 x 550 mm or 15.74" x 21.65" Min. 200 x 275 mm or 7.88" x 10.83" |
| Sheet Weight Range | Normal Paper, Coated Paper, Cardboard Material Thickness: Max. 0.5 mm or 0.02" 127.9 to 400 gsm |
| Production Speed | Offset Stacking: 3,000 sheets per hour In the stacking speed reduction mode: 3,000 sheets per hour Straight Stacking without speed reduction mode: 6,000 sheets per hour (This production speed is limited according to the sheet thickness, sheet size, and the number of ricks.) |
| Stack Capacity | Max. 170 mm or 6.69" |
| Voltage/Frequency | Single Phase 200 to 240 V, 50 or 60 Hz |
| Machine Dimensions | W1,490 x D830 x H1,030 mm or W58.7" x D32.7" x H40.6" |
| Recommended Air Source | Mover (Reference): 0.75 kW Maximum Operating Pressure: 0.8 MPa Minimum Required Pressure: 0.6 MPa or more Minimum Discharge: 85 Liters per minute Type: Oil-free Type |

| ST-3346 Specifications | |
|------------------------|--|
| Compatible Machines | RD-3346 |
| Sheet Size | Width x Length Max. 330.2 x 550 mm or 13.00" x 21.65" Min. 170 x 275 mm or 6.69" x 10.83" |
| Sheet Weight Range | Normal Paper, Coated Paper, Cardboard Material Thickness: Max. 0.3 mm or 0.01" 127.9 to 270 gsm |
| Production Speed | With speed reduction mode: 2,500 sheets per hour Without speed reduction mode: 5,000 sheets per hour (This production speed is limited according to the sheet thickness, sheet size, and the number of ricks.) |
| Stack Capacity | Max. 70 mm or 2.75" |
| Voltage/Frequency | Single Phase 200 to 240 V, 50 or 60 Hz |
| Machine Dimensions | W760 x D645 x H890 mm or W30.0" x D25.4" x H35.0" |
| Recommended Air Source | Mover (Reference): 0.75 kW Maximum Operating Pressure: 0.8 MPa Minimum Required Pressure: 0.6 MPa or more Minimum Discharge: 85 Liters per minute Type: Oil-free Type |



Change the **focus**

*The machine design and specifications are subject to change without any notice.

Horizon

HORIZON INTERNATIONAL, INC.

510 Kuze Ooyabu-cho, Minami-ku, Kyoto, 601-8206, Japan
Phone : +81-(0)75-934-6700 Fax : +81-(0)75-934-6708
www.horizon.co.jp

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 **STANDARD**

Standard Finishing Systems, 10 Connector Road, Andover, MA 01810
877-404-4460 978-470-1920 Fax 978-470-2771
www.standardfinishing.com