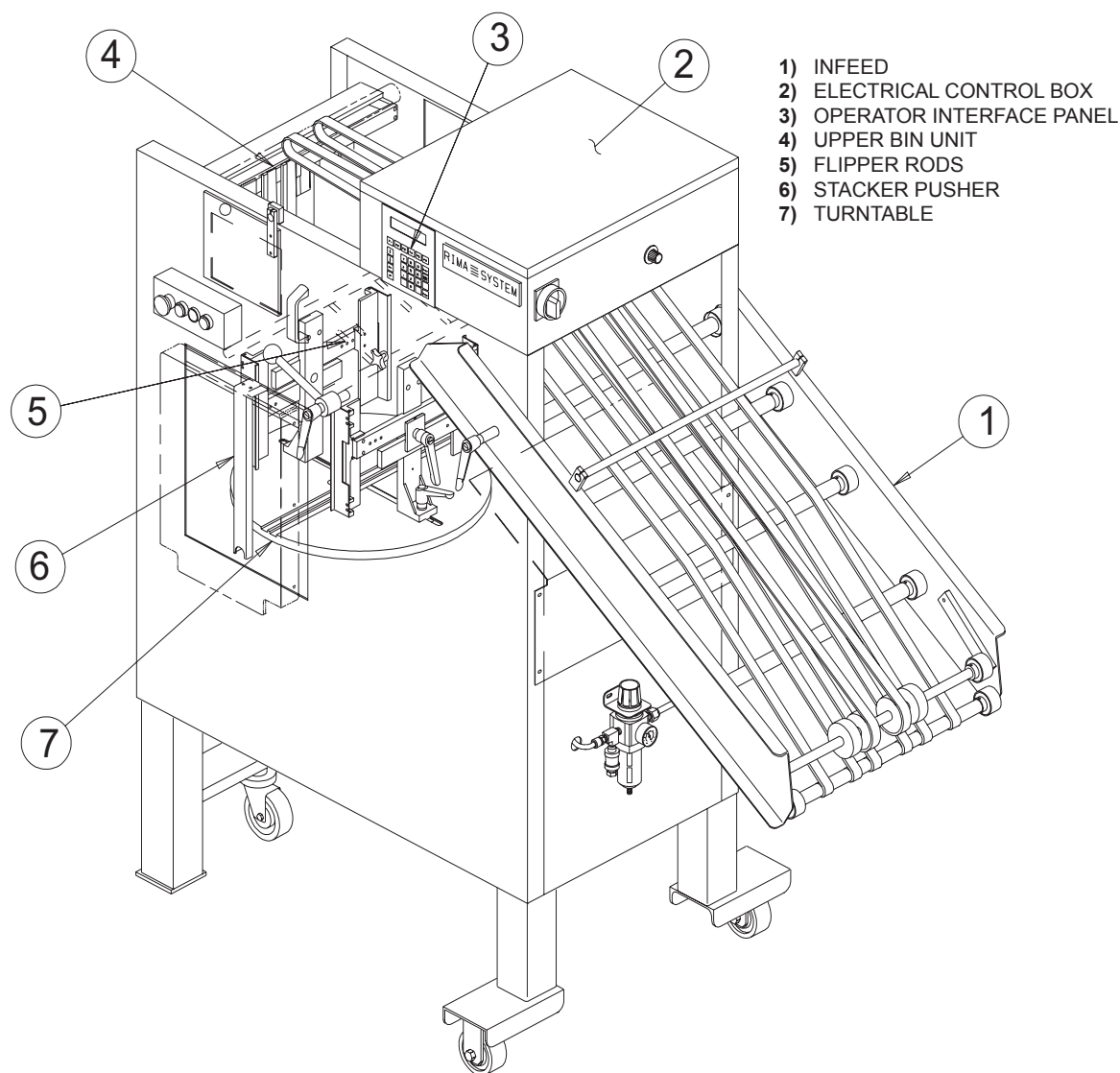


Machine: Compensating Counter Stacker

Model: RS-10S



## Application

The RS-10S Compensating Counter Stacker integrates counting, jogging and compensated stacking into a single automated operation to minimize manning requirements. It works behind saddle stitchers, perfect binders, and inserters with simple and quick non-tool setup or change-over regardless of product size, thickness and running speed (within specifications). The output stacks are of excellent quality, ready for packing into boxes, shrink-wrapping, etc.

## Function

Individual, side-by-side, or stacks of products are delivered from an upstream system, preferably with the spine leading, and is conveyed by the positive control belt system on the inclined Infeed. The products, or stacks of products are accurately counted just prior to entering the upper bin.

Products accumulate in the bin up to a maximum quantity as selected during the setup procedure. When the "bin count" is reached, the flipper rods in the bottom of the bin rotate and release the products down into the basket on the turntable.

If compensation is desired, the turntable will rotate 180° while products continue to accumulate in the upper bin unit. These operations are repeated until the total number of products selected for the stack is reached. When the stack is complete, it is pushed out (ejected) on to the delivery table.

## Features

- Heavy duty steel design
- Caster-mounted for easy transport
- Inclined Infeed ramp with belts and height adjustment
- Photocell product counter
- Minimal drop distance (127mm/5.00") of products into the (upper) bin unit, improving stack integrity
- Upper bin unit product jogger
- Pneumatic Stack ejector (pusher), adjustable in speed
- Pneumatically actuated gates on the turntable basket (optional)

## Advantages

- Excellent quality stacks
- Manpower reduction
- Low space requirement
- Very open for viewing product flow and ease of maintenance
- Large, satisfied customer base
- Minimal marking
- Mobile
- Accurate product counts
- Low maintenance
- Time proven design
- Operator interface panel and high speed industry standard PLC. Simple text prompt to set counters and timers. Job parameters such as counter and timer values may be assigned a job number and stored on-line for recall when the same format is run again. Screen displays running speed and totalizer.



*RIMA ENTERPRISES does not warrant operating capabilities of equipment. The equipment described herein is powered to cycle mechanically as indicated. However, it must be understood that actual operating capabilities vary under different conditions for which RIMA ENTERPRISES can assume no responsibility. The warranties contained in RIMA ENTERPRISES standard terms and conditions are the only warranties applicable to this equipment. RIMA ENTERPRISES reserves the right to change the specifications of this equipment without notice.*

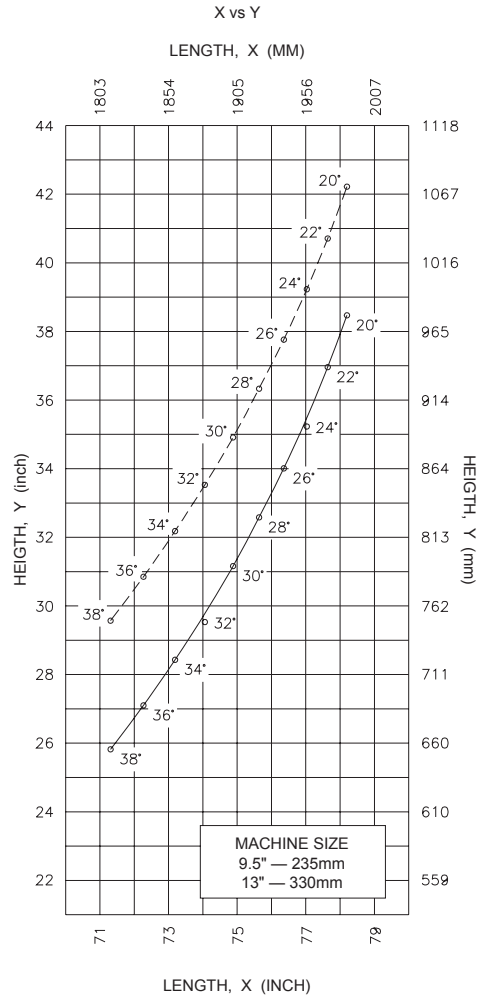
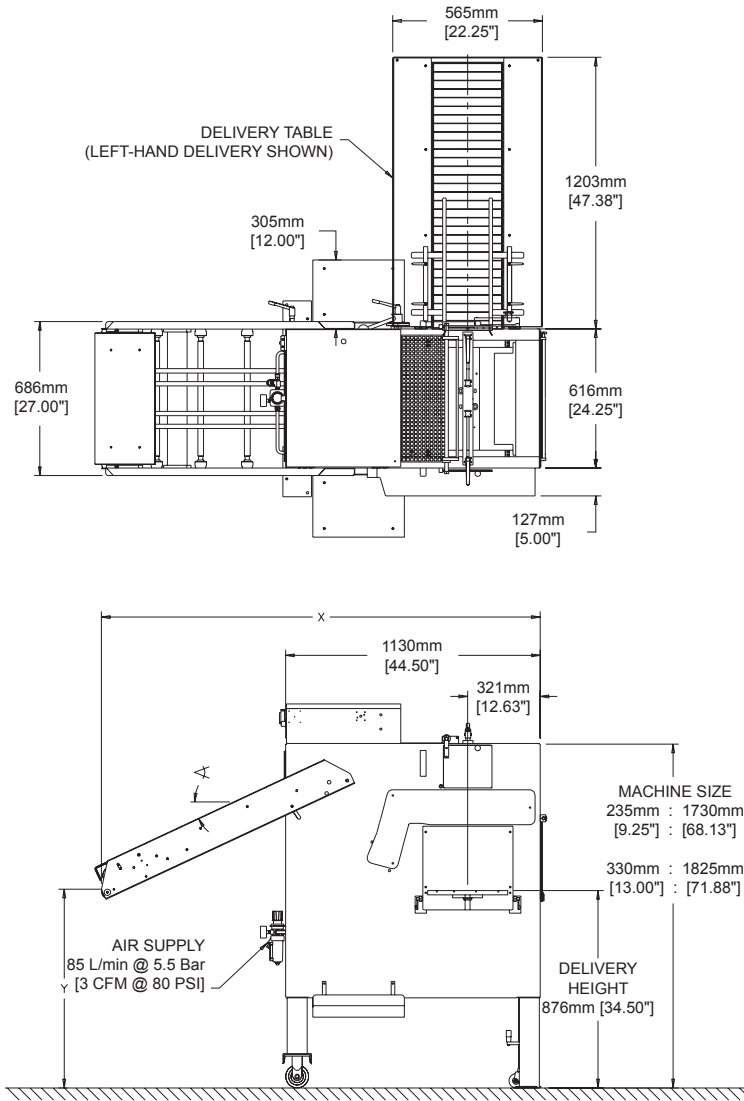
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### Floor Plan

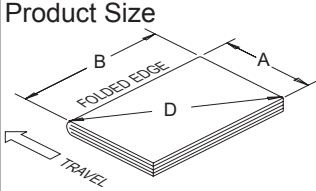
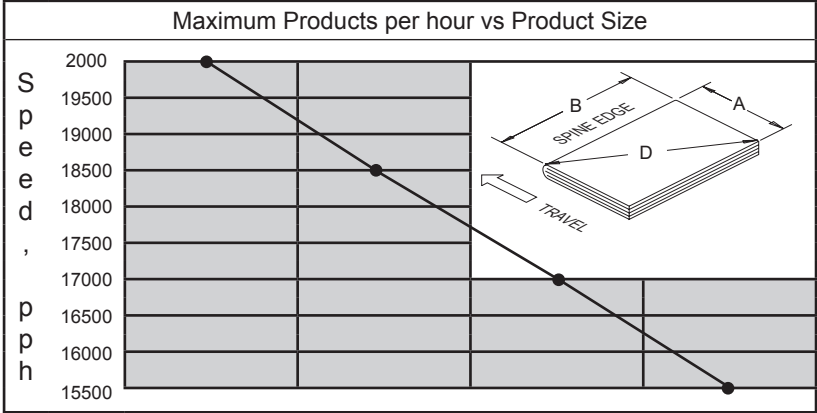
Dimensions and infeed angles of the RS-10S are shown below.

Suggested infeed angles are based on length (X) and height (Y).



**Machine: Compensating Counter Stacker**

**Model: RS-10S**

		<b>Minimum</b>	<b>Maximum</b>	
	"A" Dimension Standard Option	102mm (4.00")	320mm (12.63")	
	"B" Dimension Standard Option	152mm (6.00") 127mm (5.00")	470mm (18.50")	
	"D" Dimension Thickness	Limited by "A" & "B" 1mm (0.04")	520mm (20.50") 32mm (1.25")	
	Stack Height (Maximum)		Size 235mm (9.25")	Size 330mm (13.00")
Upper Bin		127mm (5.00")	127mm (5.00")	
	Total Stack	235mm (9.25")	330mm (13.00")	
Infeed Height (See Floor Plan)	Minimum	660mm (26.00")	750mm (29.50")	
	Maximum	990mm (39.00")	1079mm (42.50")	
Delivery Table Height	876mm (34.50")			
Product Orientation	Spine Leading (Preferred)			
Input Power (Standard)	1.5 KVA 50/60 Hz 240/280V, 380/400/416V			
Input Power (Servo)	3.0 KVA			
Air Requirement	Normal:	45 L/min 2 5.5 bar (1.6 CFM @ 80 psi)		
	Maximum:	76 L/min 2 5.5 bar (2.7 CFM @ 80 psi)		
Weight	500 kg (1,100lb)			
Operating Speed				
	Stack Cycle Rate (Max)		Books/Stack vs. Cycling Speed (Max)	
	Stack/minute	Compensation	4 Books	9,000 pph
	38	none	5 Books	11,000 pph
	19	one	6 Books	13,500 pph
	12	two	7 Books	15,750 pph
		8 Books	18,500 pph	
Noise Level DIN 45635 Section 27	85 dB(A) Maximum			

Machine: Compensating Counter Stacker

Model: RS-10S

## Specification Numbers

### Must Select One

<b>RS-1012S</b>	<b>Counter/Stacker</b> <b>Counter/Stacker</b> 235mm (9.25") stack height with 127mm (5.00") upper bin capacity, single eject system (left or right), caster-mounted, programmable controller, AC drive.
<b>RS-1013S</b>	<b>Counter/Stacker</b> 330mm (13.00") stack height with 127mm (5.00") upper bin capacity, single eject system (left or right), caster-mounted, programmable controller, AC drive.
<b>RS-1015S</b>	<b>Counter/Stacker (Front Delivery)</b> 235mm (9.25") stack height with 127mm (5.00") upper bin capacity, single eject system (straight-out only), caster-mounted, programmable controller, AC drive. Size restrictions apply. Minimum "A" dimension 152mm (6.00"); "B" dimension 127mm (5.00"). Maximum "A" dimension 320mm (12.63"); "B" dimension 320mm (12.63"). (See page 4 for product orientation)
<b>RS-1016S</b>	<b>Counter/Stacker (Front Delivery)</b> 330mm (13.00") stack height with 127mm (5.00") upper bin capacity, single eject system (straight-out only), caster-mounted, programmable controller, AC drive. Size restrictions apply. Minimum "A" dimension 152mm (6.00"); "B" dimension 127mm (5.00"). Maximum "A" dimension 320mm (12.63"); "B" dimension 320mm (12.63"). (See page 4 for product orientation)

**Standard Features:** *Pneumatic Stack Eject system (Pusher), Single stage Upper Bin, PLC Control with Operator Control Panel, AC Main Drive, caster mounted.*

## Basic Configuration

### Must Select One

### Input Power

**Note:** *When S- Servo Option is selected, double the Amperage (3.0KW)*

<b>RS-1000-001</b>	208V, 3~, GND, 50/60 Hz
<b>RS-1000-002</b>	480V, 3~, GND, 60 Hz
<b>RS-1000-003</b>	200V, 3~, N, PE, 50/60 Hz
<b>RS-1000-004</b>	380V, 3~, N, PE, 50/60 Hz
<b>RS-1000-005</b>	416V, 3~, N, PE, 50/60 Hz
<b>RS-1000-007</b>	400V, 3~, N, PE, 50/60 Hz
<b>RS-1000-008*</b>	115V, 1~, GND, 60 Hz
<b>RS-1000-009</b>	240V, 3~, GND, 60 Hz
<b>RS-1000-020</b>	220V, 3~, GND, 60 Hz

*\*Not Available with the RS- Servo Options.*

**Machine: Compensating Counter Stacker**

**Model: RS-10S**

**Must Select One**

RS-1000-028

RS-1000-029

**Scales**

Inch

mm

**Must Select One**

RS-1000-080-01

RS-1000-080-02

RS-1000-080-03

RS-1000-080

**Color**

**Light Gray**

RAL7035

**Dark Gray**

RAL7011

**Light Two-tone Gray**

Heidelberg ST Series Bindery Equipment

**Special**

Other than RAL7035 or RAL7011—*Sample may be required.*

**Must Select One**

**Delivery Direction**

**Note:** *Direction is relative to the product flow into the stacker. If no Delivery Direction is specified, LEFT will be selected.*

RS-1000-050

RS-1000-051

**Delivery to the Left**

RS-1012S or RS-1013S only.

**Delivery to the Right**

RS-1012S or RS-1013S only.

**Must Select One**

RS-1000-019

**Nameplate Language**

Available in English and EU required languages.

**May Select Any**

**Manual—Operation/Maintenance**

**Note:** *One Hard Copy of the Operation/Maintenance Manual is provided at no charge. Available in English and EU Required Languages. Other Languages can be provided on a per quote basis.*

RS-1000-150

RS-1000-150-CD

**Manual—Operation/Maintenance**

Additional Hard Copy

**Manual—Operation/Maintenance**

CD with Digital Copy in PDF format.

## Optional Features

### May Select Any

### Delivery Table

See the RS-16 Specifications for Delivery Table Options.

### May Select Any

### Infeed Options

The standard RS-10S Infeed height Range can be found on Page (5)

#### RS-1000-030

#### Stacker power cord

Power cord with 8 Pin Cam-Loc plug. Includes Stacker RUN output signal.

#### RS-1000-031

#### Interface–Mail Control (Townsort)

Standard 120V mail control. The Mail Table controls the Drop, Compensate and Eject Totals. Includes a Stacker Infeed Belt Encoder Pulse for the Mail Table to track the book up the stacker Infeed. Includes a 2.7M (9') Communication Cable with Amphenol Plug (3106A-28-12S, Female, 26 Pin). Non-Heidelberg applications includes RS-1000-030 power Cord with Cam-Loc Plug. Includes Stacker Stopped Light. Recommend: RS-1000-043 Divert Gate– 110V (Controlled Externally)

#### RS-1000-031-24

#### Interface–Mail Control

24V DC mail control. The Mail Table controls the Drop, Compensate and Eject Totals. Includes a Stacker Infeed Belt Encoder Pulse for the Mail Table to track the book up the stacker Infeed. Includes a 2.7M (9') Communication Cable with Amphenol Plug (208547-1, Female, 24 Pin). Non-Heidelberg applications includes RS-1000-030 power Cord with Cam-Loc Plug. Includes Stacker Stopped Light. Recommend: RS-1000-047 Divert Gate– 24V DC (Controlled Externally)

#### RS-1000-031-A

#### Shift Register Townsort–Mail Control

End of bundle control only. Output from the Mail Table or Camera is received as the books start up the stacker Infeed. The stacker tracks the book and Ejects at the preset Belt Travel Distance (Shift Register). When no Eject signal is received, the Stacker runs off the preset Counters in the Operator Interface. Not for use when the stack needs to be Compensated. Includes Communication Cable and Connectors. Recommend: RS-1000-047 Divert Gate– 24V DC (Controlled Externally)

#### RS-1000-032

#### Stacker Power Cord

2.7M (9') Stacker Power Cord without Connector or Receptacle.

#### RS-1000-033

#### Interface - Connection to standard McCain trimmers

Consists of special infeed extension. When used with infeed divert gate option, RS-1000-043 maximum "B" dimension is 356mm (14.00").

#### RS-1000-034

#### Cam-Loc Receptacle

8 Pin Cam-Loc Receptacle for use with RS-1000-030

#### RS-1000-035

#### Infeed Extension

Omega II saddlebinder.

#### RS-1000-036

#### Press-Heating (Belt Splicing)

110 Volt

#### RS-1000-036-220

#### Press-Heating (Belt Splicing)

220 Volt



**Machine: Compensating Counter Stacker**

**Model: RS-10S**

**May Select Any**

**Upstream Interface Options**

**Note:** *All RS-10S Stackers have an available STACKER RUN SIGNAL. A cable and connector assembly is provided at no charge when required (see Townsort Options for exclusions). In Heidelberg applications, the Stacker Run Signal is hadled through Cable 2×3 (see RS-1000-037).*

**RS-1000-037**

**Interface with Heidelberg ST-90/100/350/400/450**

Includes Power Cord (2×4), communication Cable (2×3) and a panel mounted Stacker Stop Light. Does not include the RS-1000-085-05 Upstream Communication Cable (2×9) required for the ST-400 and ST-450 with Motorized Adjustment.

**RS-1000-037-10**

**Interface with Heidelberg ST/Non-Heidelberg Applications**

Includes the 2×3 and 2×4 Cables plus the required hardware to operate the stacker as a stand-alone unit.

**RS-1000-035M**

**Infeed extension (ST-90)**

645mm (16") Long × 508mm (20") Wide Extension.

**RS-1000-040**

**Multiple Up Products**

Two-up Option. Includes extra Top Belts and Hardware, Divider Blades and RS-1000-039 Basket Guides.

**RS-1000-041**

**Air-Operated Gates**

Especially useful when operating with low bundle heights.

**RS-1000-042**

**Side Jogger**

Results in better stack quality, especially when operating with thin products.

**RS-1000-043**

**Infeed Divert Gate**

110V externally controlled, blade style Divert. Simple divert device which drops books on floor or takeaway system. 12mm Max Thickness. 20000 per Hour

**RS-1000-044**

**Book Orientation Device (pneumatic)**

Control for how the stack is delivered to the downstream equipment (the stack can be turned 180 degrees before being ejected). Books coming into the Stacker Spine Leading can be delivered to either Right or Left with either the Head or Foot Leading.

**RS-1000-044-01**

**Book orientation (Servo)**

Control for how the stack is delivered to the downstream equipment (the stack can be turned 90 degrees before being ejected). Includes the RS-1400-044 Book Orientation. Books coming into the Stacker Spine Leading can be delivered to either Right or Left with either the Head or Foot Leading.

**RS-1000-044-02**

**Book orientation (Servo–Alternating Orientation)**

Includes the RS-1400-044-01 Book Orientation. Books coming in the stacker Spine Leading can be delivered to either Right or Left with either the Spine Leading or Trailing.

Machine: Compensating Counter Stacker

Model: RS-10S

**May Select Any**

**Optional Features**

RS-1000-047

**Infeed Divert Gate 24V DC (RS-10)**

24V DC externally controlled, blade style Divert .

RS-1000-046

**Split Infeed Divert Gate (twin divert)**

(See page 5 for limitations)

**NOTE:** RS-1000-046 can be used with RS-1020S twin pusher stacker only.

RS-1000-052

**Straight-Out Delivery (28.00")**

Used for pushing stack into downstream equipment (RS-1015 and RS-1016 only). Limits infeed height.

RS-1000-053

**Extended Pusher Delivery 711mm (28.00")**

Useful when pushing stack into downstream equipment. (Increases cycle time). For RS-1015S or RS-1016S only.

RS-1000-054

**Pneumatic pusher, two-piece**

Allows left, right, or straight-out delivery. Requires RS-1000-058 Servo Turntable. Infeed height restrictions apply.

RS-1000-056

**Dual eject pusher**

Left, right or alternating operator interface panel select. RS-1012S and RS-1013 stackers only.

RS-1000-057

**Servo Pusher—Straight-out High Speed**

Allows straight-out delivery. Servo motor driven – faster, quieter operation. Reduced cycle times. Precise speed and push out distance control.

RS-1000-059

**Servo pusher — two-piece**

Allows left, right or straight-out delivery. Servo motor driven — faster, quieter operation. Reduced cycle times. Precise speed and pushout distance control. Requires RS-1000-058 Servo Turntable.

RS-1000-076

**Servo pusher — left, right or alternating delivery**

Precise speed and pushout distance control through Operator Interface. (RS-10 style, belt driven).

RS-1000-058

**Servo Turntable Drive**

Turntable can move in 90 degree increments between 0 and 270 degrees. Includes RS-1400-044-01 Book orientation.

**Note:** Requires a 3.0KW Transformer and will double the Amperage requirement of the basic Stacker.

RS-1000-087

**Table pick-up option**

Turntable rises to meet product, decreases the drop distance into the basket assembly.

**Machine: Compensating Counter Stacker**

**Model: RS-10S**

<b>RS-1000-120</b>	<b>RS-10 "B" Dimension</b> 127mm (5.00") RS-1012S/RS-1013S
<b>RS-1000-122</b>	<b>Minimum "B" Dimension 95mm</b> Special Gate Assemblies to reduce the Minimum B Dimension to 95mm (3.75").
	<i><b>Note:</b> This option reduces the Maximum B Dimension to 445mm (17.5")</i>
<b>RS-1000-141</b>	<b>Stack Side Guides—Product Delivery</b> Attaches to the Gate Support Plates to help bridge the gap between the Gates and the Delivery Table when running small "B" dimension products.
<u><b>May Select Any</b></u>	<b>Advanced Software Control</b>
<b>RS-1000-250</b>	<b>Software—Computer to PLC</b> Allows PLC program Monitoring for troubleshooting and maintenance. Includes programming Cable.
<b>RS-1000-260</b>	<b>Software—Computer to Operator Interface</b> Includes Programming Cable.
<b>RS-1000-226-01</b>	<b>Operator Interface</b> External right mount
<b>RS-1000-226-02</b>	<b>Operator Interface</b> External left mount
<b>RS-1000-226-03</b>	<b>Operator Interface</b> External back mount
<b>RS-1000-302-2</b>	<b>RS-10 "A" Minimum .89mm (3.50")</b>
<b>RS-1000-306</b>	<b>Turntable (stack compression).</b> Provides stack compression in the basket assembly. Improves stack quality.
<b>RS-1000-307</b>	<b>Alarm Light—Stacker Stopped</b> Included with RS-1000-031 and RS-1000-031-24 Townsort options.
<b>RS-1000-341</b>	<b>Turntable</b>
<u><b>May Select Any</b></u>	<b>Special Options</b>
<b>RS-1000-360</b>	<b>Cooling Fan/ Vent Control Box</b> Included with RS-1000-058 Servo Turntable Drive, RS-1000-076 Servo Pusher.
<b>RS-1000-210</b>	<b>UL-Electric Code 508A</b>

## Motorized Product Size Adjustments

**RS-1000-041-201****Motorized Adjustment**

Allows the turntable basket to be adjusted for different product sizes in the "A" and "B" dimensions while the stacker is in operation. The turntable basket size is adjusted through the Operator Interface panel by entering the product size or increment/decrement keys for smaller adjustments. Applies to all bindery stackers without table pickup.

**RS-1000-085-01****Bin Unit (motorized size adjustment)**

Allows the bin unit to be adjusted for different product sizes in the "A" dimension while the machine is in operation. Adjustable through the Operator Interface.

**RS-1000-042-02****Side Jogger (motorized size adjustment)**

Controls the Upper Bin "B" Dimension. Requires RS-1400-041-201 Turntable Basket Motorized Size Adjustment.

**RS-1000-085-05****Up-Stream communication for size adjustment**

RS-422 Communication Cable (2×9) for Heidelberg ST-400 and ST-450 applications.

## Spare Parts

Spare parts kits are defined for various models. Because of revisions and improvements in the basic stacker, spare parts are subject to change without notice.

Spare kits for some models are defined as Level I, Level II and Level III. Level I is a minimal kit, while Level III is a comprehensive set. Every stacker is equipped with the very basic spare parts required for operation.

**RS-1000-100**

Spare Parts for RS-1012S/1013S – Level I

**RS-1000-101**

Spare Parts for RS-1012S/1013S – Level II

**RS-1000-402**

Spare Parts for RS-1012S/1013S – Level III



*Delivery table is no longer supplied with machine and, therefore, must be ordered separately. See specification sheets for details on delivery tables (RS-16) and conveyors (RS-26).*

## Revisions

Date	Revision		Description	By:
Jan '94			First issue	
Apr '96	B	Page 8:	RS-1000-037 added.	jl
		Page 9:	RS-1000-046; -052; -060 revised	
		Page 9:	RS-1000-260 deleted.	
		Page 3:	Dimension change on infeed arm of stacker.	
		Page 9:	RS-1000-080 moved from page 10.	
		Page 5:	Product Size diagrams revised.	
Jan '98	C		Date revised (Header)	jl
Feb '98	D	Page 3:	Graph revised.	jl
		Page 4:	Infeed Height dimensions (Minimum and Maximum) revised.	
Jan. '01	E	Page 9:	Added Motorized Turntable Basket Adjustment section	jl
Jun '01	F		Date revised (Header)	sa
		Page 3:	Updated Floorplan	
		Page 4:	Added "Servo Input Power" to "Standard Specifications" table.	
		Page 6:	Changed DC to AC, (all)	
		Page 7:	Updated "Input Power" format	
			Added: RS-1000-015, Nameplate Language—Dutch	
			Added: RS-1000-016, Nameplate Language—Portuguese	
Aug '01		Page 8:	Added: RS-1000-030, RS-1000-031, RS-1000-031-A, RS-1000-034	
			Added: RS-1000-042, RS-1000-043, RS-1000-047	
			Added: RS-1000-042-02, RS-1000-044-01, RS-1000-044-02	
			Added: RS-1000-044-01, RS-1000-044-02	
			Added: 110V to RS-1000-043 text,	
		Page 9:	Added: RS-1000-050, RS-1000-051, RS-1000-054, RS-1000-056	
			Added: RS-1000-057, RS-1000-058, RS-1000-059, RS-1000-087	
			Added: RS-1000-120, RS-1000-302-2, RS-1000-360	
		Page 10:	Added: RS-1000-306, RS-1000-341	
			Added: RS-1000-226-01, RS-1000-226-02,RS-1000-226-03	
Sep '01		Page 9:	Removed: "Must be used with RS-1000-62 (90° turn) or RS-1000-058 servo turntable." from option RS-1000-056	
Jan '02	G	Page 8:	Added Nameplate languages: RS-1000-017-01 — Danish,	sa

**Machine: Compensating Counter Stacker**

**Model: RS-10S**

			RS-1000-017-02 — Swedish, RS-1000-017-03 — Finnish,	
			RS-1000-017-04 — Greek	
May '06	H	Pages 1-14	Re-linked all missing EPS images, updated fonts, removed missing fonts, changed page formats, live text, live tables, added new product numbers.	ga
july '08	I	All	Applied new standard formatting and added parts/descriptions from price list. New floorplan drawing with roller table (page 4). RS-1000-041-201 (Motorized Adjustment) description updated.	ga