Compact Labelling Systems Pty. Ltd.

COMPACT-a-Pad User Manual

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Compact-a-Pad User Manual

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INTRODUCTION

Firstly, thank you for purchasing a Compact Self-Adhesive Label Applicator.

While both powerful and flexible, the Labeller is also easy to use,

Without any tedious machine setup – simply load the labels, dispensing and the labeller is ready to go.

Compact labelling equipment is designed to use labels supplied on a roll and presented one at a time (one-up). The labels need to be die-cut with approximately 3mm (1/8") separations between the labels and waste removed. A standard size roll usually has a 76mm (3") inside diameter core and an outside maximum diameter of 300mm (12"). Labels can be obtained in a large variety of shapes and sizes, most of which can be applied with Compacts' quality equipment. Compact and label suppliers should be consulted for suitability of labels for specific applications.

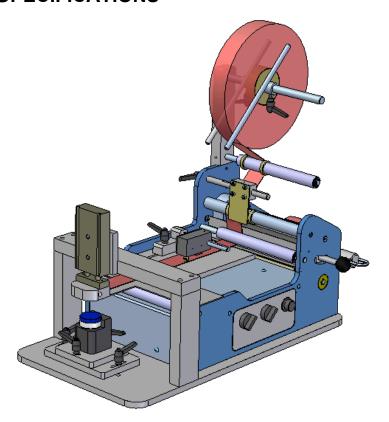
Installation

Installation of the Compact-a-Pad is easy and can be done by the purchaser.

SOP – Standard Operating Procedures

Besides this User manual it is important that your company assesses the machine and that a Risk Assessment and Standard Operating Procedures are prepared.

SPECIFICATIONS



Standard Machine Details:

Maximum Label Roll 300mm (12") Diameter

Label Roll Core 76mm (3") Diameter

Web Width Max' $180 \text{mm} (7'') - \text{Min } 10 \text{mm} (\frac{1}{2}'')$

Preferred Label Gap $\sim 3 \text{mm} - (1/8)^{\circ}$

Label Roll Direction Labels Rolled Out

Standard RIGHT-hand use label roll position 3 – Right edge leading

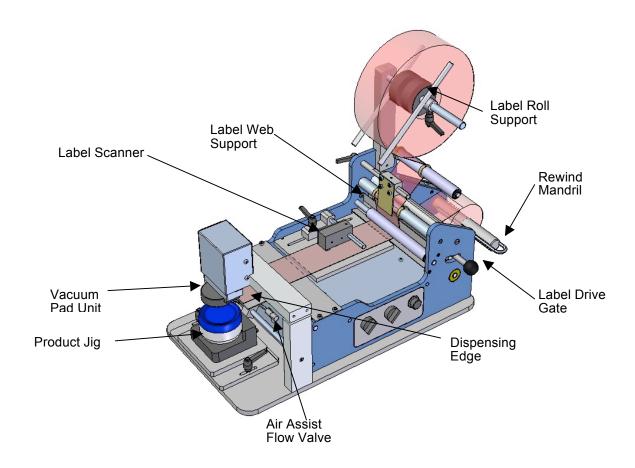
Can also operate - LEFT-hand use label roll position 4 – Left edge leading

Typically **Position 3** (Right Hand - Right Edge Leading) is used and is shown in above sample images.

Position 4 (Left Hand - Left Edge Leading) is used if the stop moved to the opposite side of the machine.

Also there is a standard "Roll Direction Chart" for further details available from Compact Labelling Systems.

COMPONENT PART DESCRIPTION



Understanding Label Application

When high volumes and labelling on conveyor lines are needed, a fully automatic applicator is the machine of choice. The machine you have chosen (Compact-a-Pad) is what is called a Semi-Automatic because no conveyor is involved.

Lets consider what are we trying to achieve, when we say we are going to apply a label to a product.

- 1. A neatly applied label no wrinkles, no creases, no air entrapment and it should be in a pre-determined position on the container.
- 2. Consistency to apply into the same position on each product.

These two criteria, you would say are obvious, likewise most of the time when trying to apply labels and the above two items do not occur, the solution is obvious.

But before we look at the machine, there are two other items that form the major parts of the labelling process, the label and the product.

The Label's: obviously have to be right for the application. Material, adhesive, size and shape are all important and are often overlooked by saying, "it's just a label". There are also several ways to make a label so it presents itself on the product well and any miss-alignment is not noticeable.

Label Material and Adhesive: Can be discussed with the label supplier, understanding that the standard label sensor reads opaque labels and some clear labels. The main point of interest with the label adhesive is to have "good initial tack", this can be discussed with your label supplier.

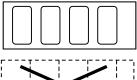
Labels can be made from a variety of materials. The one you would use depends upon the particular environment that the label will exist in and how durable you want the label to be. Price must also be considered in your selection.

The benefits are numerous and the different materials available and range from Paper – Uncoated or High Gloss, Vinyl, Acetate, Mylar / Polyester & Foil

Label Size and Shape: The size is important in more ways than one; many companies try to fit the label exactly into a specific space, or try to match the product shape. For example, if you have a square lid, do not design a label that will fit on the lid with 1-2mm to spare and with the same shape. If this label is placed 0.5mm off position it will look poorly labelled.

Also the label should not be too big, that is, it should be several millimetres smaller per/side than the surface it is to be placed onto. The labelling surface must be flat or curved in ONE direction only, therefore do not allow the label, or think the label will be applied around the shoulder of a bottle, it can't. You can not apply a label to a tennis ball or the inside of a spoon. (see THE PRODUCT below)

The labels must be **Die-Cut** not Butt-Cut



Die-cut labels can be shaped and have spacing between each label on the roll.



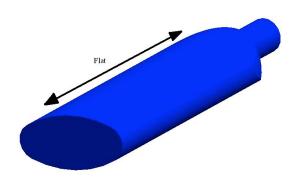
Butt-cut labels have square corners and no spacing between each label.

Please discuss any strange shaped containers with Compact before you have the labels made or you take on any contracts.

The label backing stock or web, is coated with silicone or a similar material and is slippery. In a work environment backing paper discarded onto the work floor is a potential slip hazard. most backing papers are also flammable. Discard properly.

What determines the price of a label? Square surface area, Type of material, Number of colours and other embellishments, Total quantity of order and number of variants.

The Product: as just discussed, must be Flat in one direction and have no concave or convex nature, you can not apply a label to a tennis ball, or inside a spoon, this bad label surface will cause bad label placement with probable air entrapment and wrinkles, again providing a poor result.



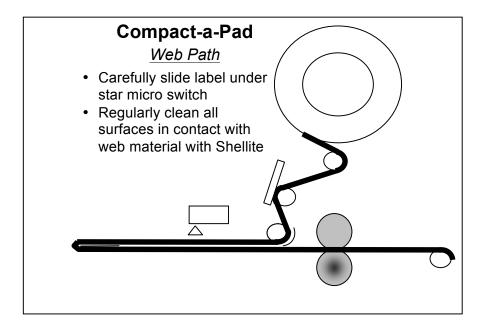
You can only get good, consistent label placement if you have good, consistent product to be labelled. The quality of the labelling application is directly proportional to the quality of the product. The label application tolerance is accumulative with the product tolerance.

Therefore if every product is not satisfactory for labelling, demand better product from the product supplier

SETTING UP WITH A NEW LABEL

Thread Label Web

It is important to ensure the label web is threaded correctly, this is why a copy of this web-path diagram is attached to the labeller.

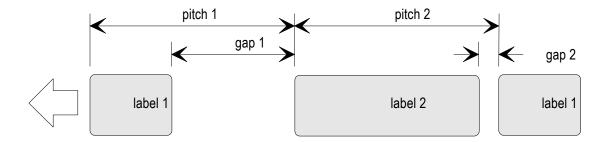


Label Web-Path Diagram

Label Sensor Setting

The label scanner is simple to set by just sliding it back and forth until the label is predispensed into the correct position.

Of-course the question is what is the correct position.



Firstly we must determine if you are applying one or two labels – if one label, jump down to **Label Setting** below. If you are applying two labels and both labels are the same size then jump down to **Label Setting** below.

This leaves the application of two labels, where both labels are of differing width. It is important that the micro-switch label sensor is about to ride over the same label that is about to be dispensed; therefore 2 or 4 labels back, not 3 or 5.

Flow Valve

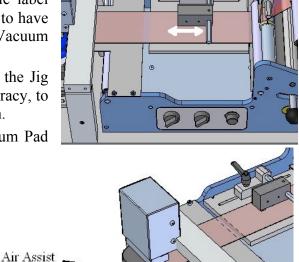
Jig Adjustment Screws

Label Setting

- 1. Turn on Power and Air
- **2.** To adjust the label position / label scanner position, simply loosen toggle screw and slide the whole label scanner mechanism forward or back. The aim is to have the label off the dispensing edge and on the Vacuum Pad.
- **3.** Operate the Unit by placing the product into the Jig Dispense several labels to test the repeating accuracy, to ensure you have the sensor in the correct position.
- **4.** Check that the label is sitting onto the Vacuum Pad Unit correctly if not, you may need to adjust the 'air assist flow valve' to blow the label upwards onto the Pad

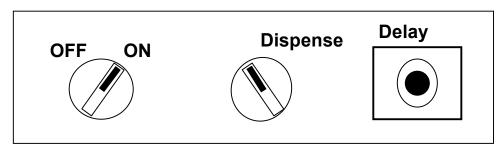


Next move the Jig to Position the label in the correct position on your Product using the Jig Adjustment Screws (note on some models these screws are hex head screws not ratchet handles)



OPERATIONAL SWITCHES

The unit is fitted with 2 knobs and a Potentiometer for ease of setup and operation In the compact a pad we use only the ON/OFF



ON/OFF

This switch is obvious and supplies power to the unit. This switch should be in the OFF position when unit is not in use.

Dispense

Dispenses one label when turned

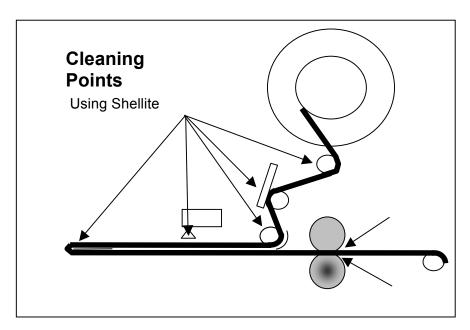
Delay

Pad down time for jobs needing longer press down time

Maintenance

Trouble free Day to Day Operation

Of all the service enquires received by Compact Labelling Systems, 90% of them reference problems related to lack of care – cleaning.



The End of Day

At then end of a days production

- 1. Switch the Power On / Off switch to OFF
- 2. Open Snap gate between pinch & drive rollers
- 3. Clean the labeller

The Next Day

Simply snap the drive gate closed (between pinch & drive roller) and switch power On, Place Product into jig 1 or 2 times then check labels (to ensure positioning is correct and you are ready to go.)

TROUBLE SHOOTING - LABEL APPLICATION

Problem	Possible Cause	Explanation & Possible Solution
Backing paper tears at pinch and drive roller	Label Roll Supports to tight	The label roll supports are, as stated, supports they are not meant to clamp the roll of labels. Loosen the supports so the label roll is free to spin.
	Pinch & Drive roller not gripping firm enough	Over time the pinch and drive rollers will wear, these need to be tightened. Undo grub screw on side plate and turn eccentric in pinch roller
Labels continually feed	Label Gap Sensor	The micro switch in the centre of the machine fitted with a Starwheel is the device that activates the dispensing of labels.
	Several things could be incorrect.	Several things may need to be corrected.
	The label roll may be out of position and the Starwheel is not catching on the label	1. Move the label roll or the sensor
	2. The sensor may have been pushed down so now the sensor is not activating at all.	2. Ensure that when the Starwheel rolls over the micro switch activates. Sensor may need to be tilted up or down.
	3. Starwheel is sticky and is not spinning freely	3. Clean with Shellite / Acetone / WD40

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