

COL-TEC OPTIONAL EXTRAS

Electro-Mechanical Miss and Double Detector System - Fitted as the standard detector system to all Col-Tec collators unless the electronic system is specified. Missed sheet detection takes place by means of vacuum switch, as the sheets are fed out of the feeding stations. Double detection is on exit, before the set is placed into the jogger. Both miss and double detectors are set-up by the operator, by stopping the collator in a certain position. Setting is carried out with thumbscrew adjusters, and aided by neon indicator lights.

Electronic Miss and Double Detection System (In addition to standard vacuum miss and mechanical double detectors) - This system has the advantage of being able to stop the machine for a double sheet, as it is fed out of the feeding station. The detectors are self-setting and can be re-calibrated at the touch of a button. Recommended paper weights range from 40 Grams to 220 Grams.

Deeper Standard Feeders (70mm Pile Height) – The standard pile height of a Col-Tec collator can be set at 35 or 50mm (the smaller the pile the faster the machine will cycle). This can be increased for a small additional cost to 70mm per station.

Deep Pile Feeding (500mm Pile Height) - Fitted in place of the standard depth feeding stations, whilst still retaining the 'Loading on the Run' feature. These stations are equipped with a pile height sensor, which controls the operation of an electric motor. The motor lifts the station, keeping the feeding station paper at the correct height. The operator can manually override the operation of the station.

Preparation to Retro-Fit Deep Pile Feeders - We have known clients purchase deep pile feeders at extra cost for fear that it would be the wrong decision not to. Some have found after running the collator that this was not really necessary and the extra money required was not well spent. As far as we know Col-Tec are the only manufacturers now offering clients the possibility to retrofit deep pile feeders to a standard pile machine. With Col-Tec's retrofit design feature these additional monies can be saved and the equipment ordered therefore truly represents top value for money. In the event the customer decides after running the machine in their production environment that deep pile would be a real advantage, they can choose to proceed with the retrofit option at any time.

Standard Jogger with Adjustable Height, Tilt & Speed Control - This unit is adjustable for height, can be tilted at various angles, and is fitted with variable jog speed control. Supplied with sheet receiving tray in sizes from SRA4 to A1. Operates from any 240 volts AC supply, and can be used with other manufacturers' equipment.

Criss Cross Attachment - For multipart sets greater than the capacity of the collator. Each collated set is kept separate by the reciprocating action of the jogger tray. The electronic drive is independent of the collator and can easily be switched between straight and criss cross jogging operations. The jogger tray is a different design to the standard jogger tray.

Programmer for Criss Cross Jogger - This device enables a stand alone criss cross jogger that is fitted to a collator without Advanced NC programming to be programmed to turn after a selected quantity of sets.

Delivery Conveyor Receiving 4 to 6 Stacks up to 70mm – An excellent alternative to the jogger and deep pile stacker. This conveyor will allow sets to be stacked up to 70mm in height before moving forward one position. Up to 6 stacks can be collected before the conveyor is full. Like the jogger, the stacks can be removed whilst the collator is running. The advantage

over the jogger is the greater amount of sets that can be stacked similar to a deep pile stacking unit. A deep pile stacker however, cannot be unloaded with the collator still running.

Inserting Conveyor – In conjunction with Col-Tec's collating machines it is now possible to collate a mixture of items and place

them inside a book or magazine using an inserting conveyor. This unit is fitted with an automatic feeder for the book or magazine which is then opened and the collated items placed inside. The book with inserts is then conveyed to a stacker at the end of the line.

Offset Facility for Delivery Conveyor – For multipart sets greater than the capacity of the collator, each collated set is kept separate by an offset of approximately 2 inches.

Dual Motion Machine – It is possible to build a machine and split the direction of the conveyor in two opposite directions at the same time. In other words a 10 station collator can be used feeding 10 stations to the exit at the right hand side on the machine or, 5 stations feeding to the right and 5 stations feeding to the left hand exit. In this way two different jobs can be collated on the same machine at the same time.

Jogger Bridge between Collator and Booklet Maker – Without this item the user would wheel away the booklet maker (supplied on lockable castors) when not in use and put a jogger in its place for collating only. As an alternative the bridge will allow the jogger and booklet maker to stay permanently fixed. The sets being delivered from the collator into the jogger or bypassing the jogger into the booklet maker with the aid of the jogger bridge.

Hand Feed Station - Fitted to any model in the range, this option allows the operator to increase the capacity of the collator. Normally used in conjunction with the criss cross jogger option, the top sheets of the set are collated into the criss cross jogger which keeps the individual sets separate. When the collator is loaded with the bottom sheets, the operator can place the top sheets on at the hand feed station. If the collator is supplied with a crash numbering system, the table of the numbering unit can double as a hand feed station.

Knock-up Device at Pay-Off Exit – This device knocks up the set from top to bottom before exiting the collating machine. Every time a sheet is added to the conveyor, a transport belt is activated to jog or knock-up the set left to right to achieve perfect registration and control of the collated set. This is particularly important when running straight into other in-line operations such as stitch, fold, and trim or on machines with many stations.

Air Blow to the side of the Paper Stack - Air is blown through the side of the paper stack to help separate sheets. This option is in addition to air blow at the front of the paper stack. It should be noted that air blow at the front of the paper stack is sufficient to help separate most paper stacks. This option entails fitting a larger compressor.

Two-Channel Programmer for Batching & Sheet Insertion - This unit is fitted to the right-hand feeding station and can be used for simple programming operations. Programme one will insert a sheet on the top of the collated set at a pre-determined number with the aid of a counter. The insertion is automatic and does not stop the collator at the double detector station. The other programme is for the batching of sets. When the pre-determined number is reached the collator stops and the operator re-starts it when the batch has been removed from the collator.

Automatic Exchangeover Device Between Two Stations -

This facility will allow two feeding stations to work in tandem. When the first station feeds its last product, the second station will also feed a sheet or card to maintain continuation of the collated sets. An example of this application would be when a product is being collated with a cardboard base. The stations with the card will empty more quickly than those with paper. To overcome this problem, two stations next to one another are loaded with card and will switch from one to the other.

Static Pinning – Used on occasions to hold smaller sheets in a desired position on top of a larger sheet. In other words once charged with static the smaller sheet will not move/lose position until the collation is complete. Examples of this could be for border strips on wallpaper sheets or half sheets within a finished booklet.

Reciprocating Stepped Conveyor - The standard Col-Tec flat bed conveyor with register knock up belts is recommended for most applications and will run at higher speeds. However there are occasions when a reciprocating stepped conveyor might be more appropriate. For example when the collated set is made up of a variety of different sheet sizes. Although slower running this conveyor will control/give better register of a set with a mixture of sheet sizes.

Extra Set of Magnets – When taking advantage of the double production mode feature (explained further on in this document) it is necessary to use additional magnets, usually 3 per station.

Rear Guarding – To comply with current CE regulations the collator must be installed with the rear of the machine against a wall or other object preventing casual access. As this is the case for most installations we do not fit additional guards as standard thereby adding to the cost. If the machine is installed in the middle of a room with open access to the back of the collator then some additional rear guarding is necessary.

Advanced Computer Controlled Programming Unit – Screen with guidance information for user. Automatic start-up of the feed stations and shut down when the job is complete. Insertion of sheets on one or all stations. With electronic detector fitted, automatic miss sheet correction without stopping the collator and the option for the collator to feed multiple sheets into the set from any of the stations. Option to pre-select the criss cross jogger at any pre-determined number of cycles. Production data statistics.

Automatic Miss Correction - The collator working through the computer and a de-clutching conveyor drive will self correct when the feeding stations miss a sheet. The conveyor is stopped - all correctly fed stations are turned off, leaving on the suction head which missed and which returns for the missing sheet.

Multiple Feeding for More Than One Sheet Per Station - The N.C. Programming Module can be expanded to perform complex collations such as cheque books, filo-fax production, credit card voucher receipts and general products used by companies engaged in high volume mailing and packaging. It is also possible to insert more than one sheet (multiple feeds) so that, for example, a finished collated set from a 10 station machine may contain more than ten sheets. The programming module can be fully networked to a clutched conveyor and faulty set ejection tray.

Double Set Ejection Tray - This unit is designed to give the user continuous production. Adjacent to the standard double detector station, and placed over the jogger, is a receiving tray. When the detectors are triggered, instead of stopping the collator, the receiving tray is powered into a down position and receives the faulty set from the pay off. Not recommended for machines with more than 20 stations.

Double Stroking Conveyor Drive for Double Output Speed – The collator can be loaded with the same job twice, i.e. collator running at approximately 2,000 cph will deliver two complete sets into the booklet maker running at 4,000cph. To achieve a

production speed of 4,000 sets per hour (assuming no stoppages) the collator would normally have to cycle at 4,000cph. Using the Flex drive the collator can cycle at half that speed whilst still achieving 4,000 sets per hour.

Dual Direction for Moving the Conveyor to the Left or Right

- At the flick of a switch, the collator can be used running to the right side exit into a booklet maker and to the left side exit for collating only. In this set-up, the operator is not required to move the booklet maker or jogger at any time.

Interface to Other Products such as Polywrapping Machines

- Col-Tec now manufacture a range of conveyors for various applications such as feeding collations into shrink-wrap lines, plastic strapping machines, drilling operations and punch binding lines. These conveyors are manufactured to the same high standards as the collator and range from a simple flat belt conveyor to sophisticated 2 or 3 drive sections operated electronically. The Sales Office can supply more information on these conveyors.

Special Colours of Individual Choice – We think Col-Tec colours of royal blue and silver white look very nice. However if you prefer a different colour to match an existing colour scheme within your factory we are happy to accommodate such a request. The price quoted will represent 0.75% of the equipment purchased i.e. £375 against a £50,000 machine order.

Split Machine for Installation – When the collator is ready for installation, large machines may have been assembled using one or more frames (depending upon specification). If a customer requires us to split the collator for installation by disconnecting the frames, this involves extra work on our part and a small additional charge will be made. It should be noted that in most cases the equipment can be installed in one piece.

In-line Pneumatic Crash Numbering System - This option allows the numbering in line of NCR sets. Normally an A4 collator would work with a maximum of two heads and an A3 unit a maximum of 4 heads. This unit is normally supplied with its own compressor to provide the pneumatic air pressure or can be supplied ready for fitting to a customer's factory air line system at a reduced price. The crash numbering heads have a 4-roller inking system and the numbering box is manufactured by Leibinger and is normally supplied with prefix wheel and 6 digit wheels backward running. Special numbering box configurations can be supplied upon request.

Ultra-Sonic Welding - An alternative option to more familiar methods of binding such as in-line gluing, stitching and Wire-O bind. Already used successfully for the production of credit and identity cards.

Stitch, Fold, Trim Unit (Advanced Model)– This booklet making attachment is constructed as one. Two Hohner or Deluxe Bostitch stitching heads are supplied as standard and up to 6 can be fitted if required. The unit is designed to be used both on-line and off-line with the collator. However, the construction is such that it could be used in-line with competitive collating equipment. The stitch position is very accurate and built in compression rollers help to give a crisp flat presentation to the finished booklet up to 6mm in thickness. Maximum speed up to 4,000 cph.

Heavy Duty 3 Knife Trimming Unit - In addition to the fore-edge trimming attachment, which trims the second and third edges. Can be purchased and fitted at a later date and also available with a centre knife trim option. It is used where customers demand that all three edges be trimmed. Centre knives to produce 2 or 3 booklets in one pass can be added.

Stitch, Fold Trim Unit (Economy Model) – Unlike the advanced model it is possible to supply just a Stitching and Folding unit without trimming. The speed of the line is slower at 2,500cph and the thickness of the finished booklet has a maximum of 4.5mm. The line is less expensive and still provides an excellent result.

Loop Stitching Heads - Offered as an alternative to flat stitches, loop stitches are sometimes used to hang the booklets or calendars on the wall.

Corner Stitching Unit - Supplied as an option to the collator, which must include a hand feed station. The stitching head is of the Interlake 'Magnatek' type and could be supplied with a 'former' plate or with movable clinchers, the clinchers producing a flatter stitch. The stitching unit inserts a staple at 45 degrees in the top left hand corner of the set, and has marginal adjustment. The unit can be fully retracted from the hand feed station when not in operation.

Head Stitching Unit and Hole Punching - Normally fitted as an attachment to the hand-feed station it enables the user to put a row of stitches along the top edge of the sheet. The unit comes complete with two Interlake 'Magnatek' stitching heads, which have a maximum capacity of 6mm and there is a choice whether formers or movable clinchers are used. The clincher option produces a flatter stitch. Hole punching, a recent addition to the range of Col-Tec optional extras, can currently be supplied to perform with a maximum capacity of 3mm.

In-Line Fold Unit - A knife fold unit which allows a single fold to be made on the collated material. This is most suitable for the production of newspapers or large format books. A cross fold unit is also available for a second fold in the opposite direction.