

STANDARD FEATURES AND OPTIONS

1. Table 'nearly full' and 'very full' visual and audible alarm.
2. Fixed table height is standard, optional electrical or manual table height adjustment.
3. Recipe of stored settings (bottles in row, number of rows) with AQS models.
4. Table sizes to suit application and space available
5. Bottle nesting for round containers (a.k.a. 'stagger packing')
6. Optional static electricity eliminators (sometimes necessary for PET)
7. Special bottle packing patterns as standard (start and finish on a full row)
8. Optional Integrated leak tester, check weigher, .
9. Tray inverter
10. Can operate with customers own conveyor, or we can supply conveyors to your requirements.

The most operator friendly control system

Realizing that even the most advanced 'star wars' technology is wasted if it is not user friendly gave us the motivation to produce a system that was easy to use but powerful enough to outperform all our applications. This purpose built unit integrates the processor, I/O, key-pad and screen in a stainless steel enclosure. Settings can be password protected and the diagnostic software makes troubleshooting painless. All the process results are stored for data download which is particularly useful for UN container traceability. Our well proven 'recipe' system allows you to recall all settings with a name of your choice 'P&G5lt', '2.5ltstock' A23637 etc....

The standard unit is always supplied with spare I/O so extra features (like automatic check weighing) can easily be added in the future.



BMC Controls Ltd.

Silk Mill Lane, Winchcombe, Gloucestershire GL54 5HZ, UK

Phone 01242 604040 Fax 01242 603987

E-mail sales@bmc-controls.co.uk

IMPROVING EFFICIENCY WITH

BOTTLE COLLATING SYSTEMS

All blow moulders would agree that hand carrying sacks of material up to the hopper is hopelessly inefficient and yet many seem to accept that hand carrying the finished product away from the machine is perfectly acceptable.

About 20 years ago a number of major UK companies realized that their only hope to stay competitive was to minimize the use of manual labour wherever possible, and this meant investing in equipment to automate down-stream operations such as leak testing and bottle collating.

Today, very few major companies still pack bottles by hand. The automation equipment we have supplied ranges from our basic 'flat bed' tables up to fully automated bottle tray/palletisers. In every application the equipment has given paybacks of significantly less than 12 months, and has frequently made the moulding area look better organized.

Container handling reliability

The most important design factor.....

From day one it was obvious that automation equipment would be a disaster if operators were constantly having to un-jam or manually stand bottles back up. For this reason we paid special attention to smooth bottle transfer, and the controlled acceleration and deceleration of all movements.

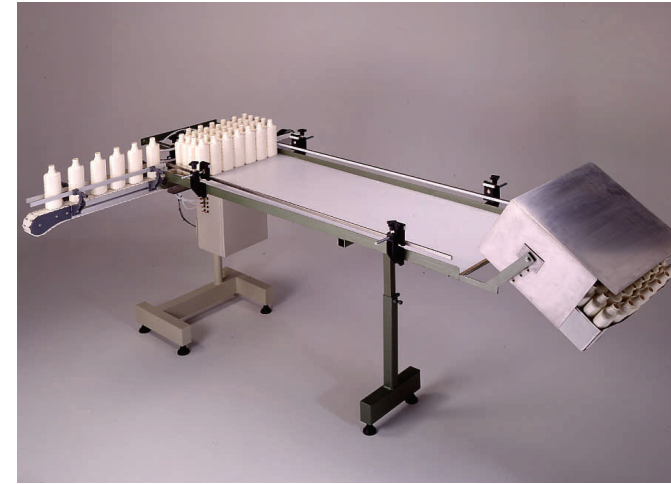
It was equally obvious that the equipment should be easy to use if it was to overcome initial operator reluctance. Ergonomic considerations such as awkward height tables, reaching over the table and RSI problems that can lead to user unfriendliness is considered on every system we supply.

We can provide bottle collating systems for virtually any size of container, tray or box size to work with single cavity/single station to high speed wheel machines. The examples on the following pages are a small selection of our range, but they represent the most popular types we have produced.



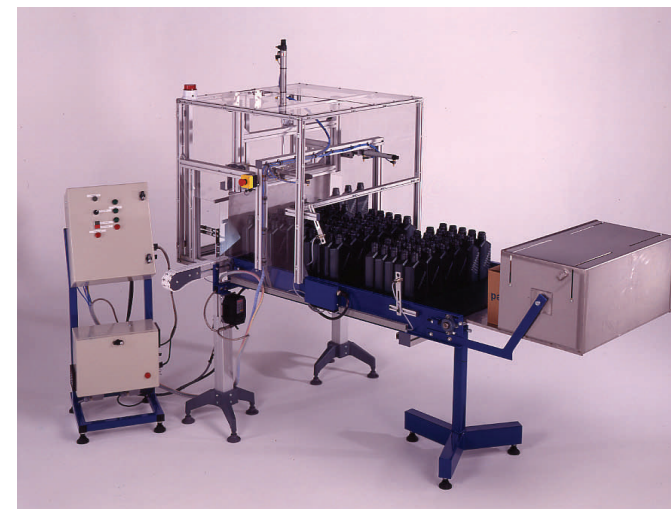
“FLAT BED” COLLATING TABLE—SIMPLE, RELIABLE, COST EFFECTIVE

Despite the obvious simplicity of basic collating tables even these can make a dramatic improvement to bottle packing efficiency. Like all our systems the model shown can be sized to pack quarter, half, and full pallet sized trays. The tray inverter enables operators to pack a full tray of bottles in less than 20 seconds. Although some degree of visual inspection is always lost with the introduction of automation, the unique human ability to ‘spot the difference’ tends to highlight neck and base defects because all the bottles are oriented, unlike the random view of a scrambled pile of bottles.



“INDEXING BELT TABLE” WITH BOTTLE SUPPORT PUSHER

Similar in operation to the “Flat Bed” this system has the advantage that the table is a wide conveyor that indexes forward after each row is pushed. This enables a wider range of bottle shapes to be packed reliably. Bottles are separated into ‘tray sized’ groups which helps the operator quickly place the tray in the correct position. Tall unstable bottles are handled more reliably as they are fully supported during the push transfer. Depending on bottle and tray type this system can be supplied to pack ‘neck up’.



“INDEXING BELT” COLLATING TABLE—BEST ALL ROUND PERFORMANCE

Using the simple push system onto an indexing belt table is a cost effective and very reliable bottle packing method. Its compactness enables the maximum utilization of available floor space, and is easy to set and operate. The ‘open’ design allows easy operator access, and the use of low force pneumatics eliminates the need for restrictive guarding.

The materials of construction have been specially chosen to minimize static electricity, and is easily user serviceable. All adjustments are ‘no tools’ for quick and easy change-over. Round and oval bottles can be nested to form a compact tight pack by our simple but 100% reliable automatic row indexer. The operator control panel enables fast changeovers with preset function keys and stored ‘recipes’ from previous set-ups.



Consider.....

1. The tables position should allow access for opening guards, mould changing, general maintenance, and be well clear of fork truck pathways.
2. Large tables minimize the time the operator has to attend the machine, so try and make space for the largest possible table.
3. Most machine layouts were done to win the prize for “how many machines can be crammed into the available space” - consider reducing the number of machines to improve profitability by making space for collating tables!