

Servo Capping Continuous Motion

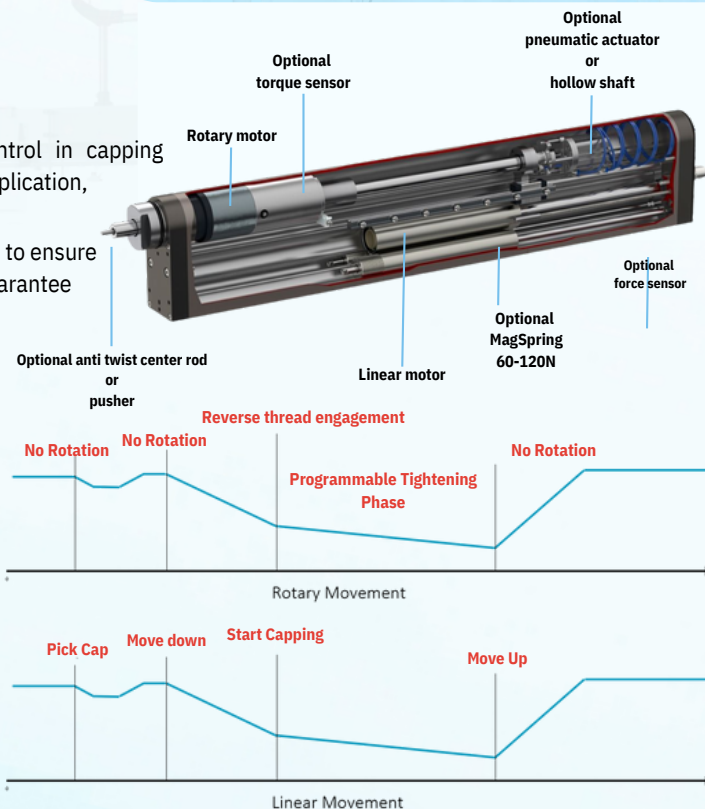
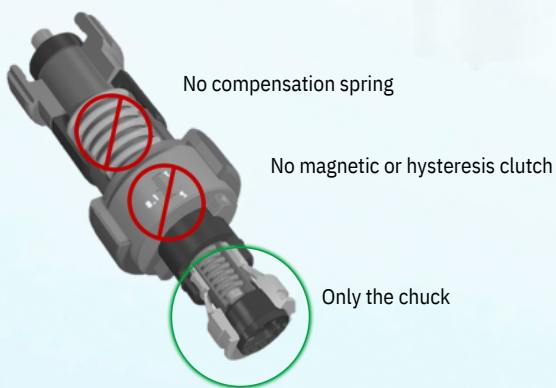


Advanced Servo Capping Technology

ATS servo capping technology uses linear motor technology for ultimate control in capping machines, allowing programming of the lift position and speed according to each application, in contrast to traditional machines that use mechanical cams.

The cap tightening head offers precise control over speed, angle, and data feedback to ensure accurate engagement and torque. With the torque sensor option, the system can guarantee accuracy of less than 1%,

which is **x10 better** than other motor current feedback systems available.



The machine's reverse thread engagement and Servo-Cam function provide consistent tightening at any line speed. Tightening data is electronically stored on the machine or factory network. Servo Capping Technology is applicable to both **Linear and Rotary capping machines**.

This advanced technology allows the machine to confirm if a cap has been applied correctly checking for:

- Cocked Caps
- Damaged / Missing Threads
- Application Torque

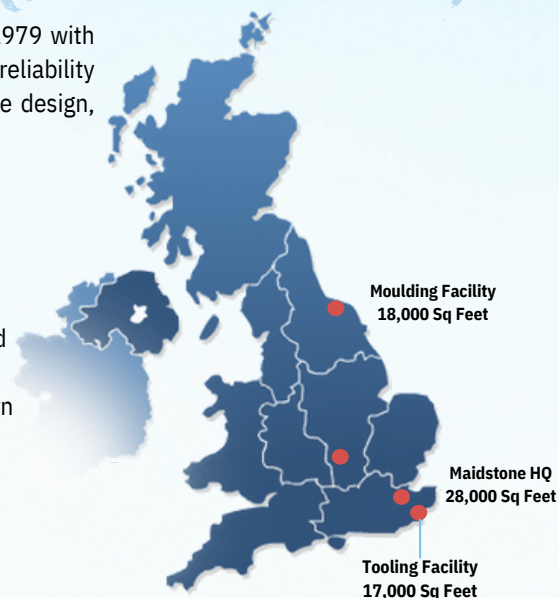


Asia Support Facility
Shenzhen, China.

About us

Advanced Tooling Systems UK Ltd is a privately owned company originally formed in 1979 with the Advanced Tooling Systems Group created in 2002. Our name is one of pedigree and reliability and we have 3-manufacturing facilities in the South East of England with satellite design, service and support facilities in the North of England and Asia

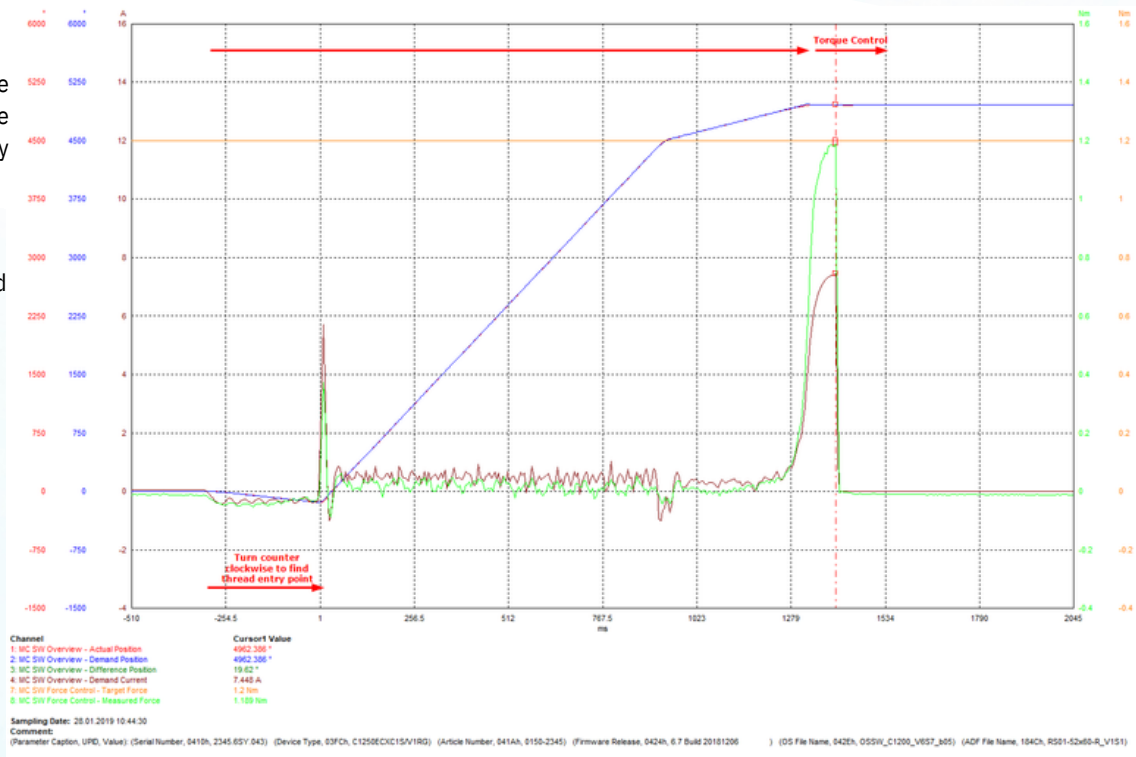
- We currently employ over 75-people throughout the group and continue to invest in equipment, people and skills.
- Our main focus is the production of advanced equipment for the packaging, automotive and aerospace industries.
- All equipment is designed, manufactured, assembled and supported from the United Kingdom.
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Data Acquisition and Analysing

For each cap tightened the following tightening data can be stored locally or factory networked

- Applied torque
- Number of rotations required to achieve torque
- Angle data
- Time stamp
- Calibration Check



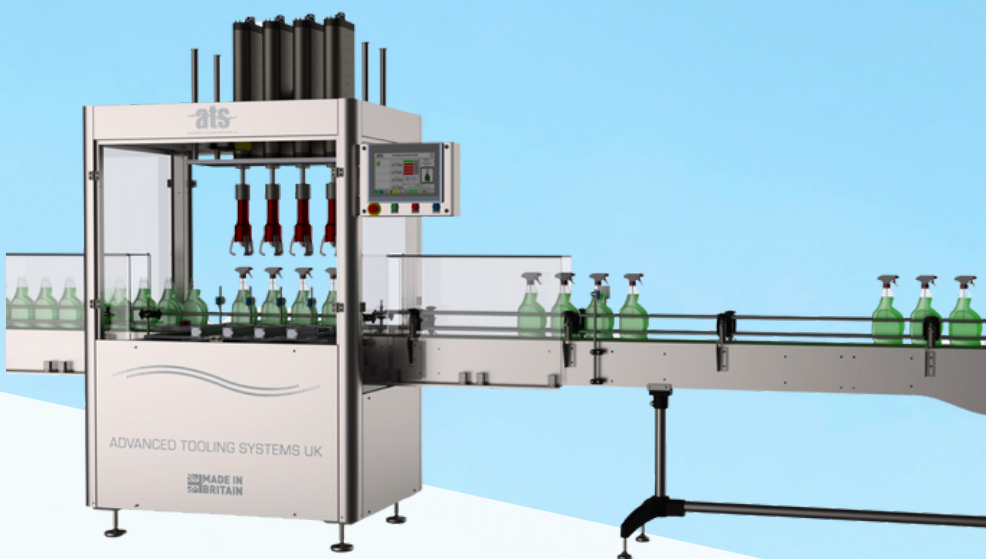
The results analyzer saves and analyzes raw data graphically to determine if a cap has been applied correctly, automating the decision-making process.



Scan ...



Linear Capping Machine

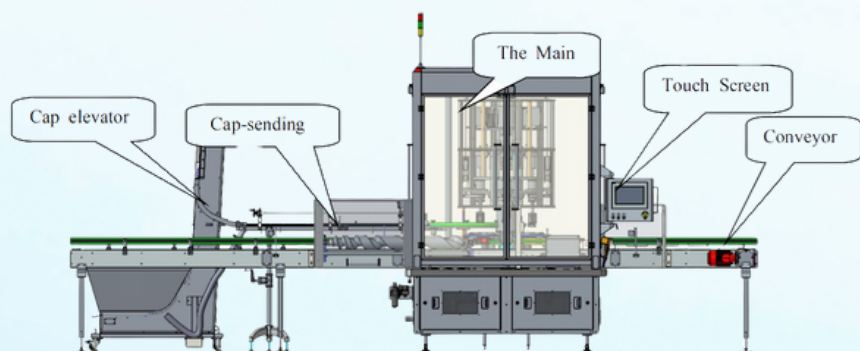
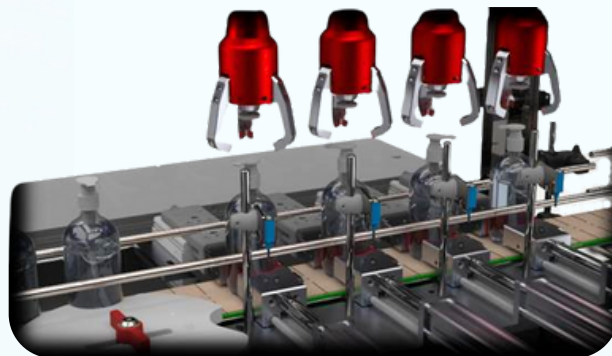


Linear Capping Machine

A new machine design eliminates the need for costly bottle change-parts, allows the machine to be mounted over an existing conveyor system, and is transferable between production lines.

With a range of bottle handling systems including:

- (PG) Pneumatic gate feeding
- (FS) Feed-worm scroll feeding
- (CM) Continuous move / transfer system feeding



Specifications

- | | |
|-------------------------|---|
| • Capping Technology | Magnetic clutch & Advanced Servo-controlled |
| • No of capping heads | 1-12 heads |
| • Output | 15-150 units per minute |
| • Maximum Torque | 2.2Nm |
| • Bottle Size range | 20ml - 5 L |
| • Bottle Height | 400 mm Max |
| • PLC | Siemens with Colour touch screen |
| • Electrical energy | 3x400V, 50Hz |
| • Supply | 6kVA, Current max- 32A |
| • Direction of Conveyor | Right to left/ Left to right |
| • Conveyor Length | 5m Approx |

Optional

- Cap sorting & Feeding system
- Bulk Hopper elevator
- Automatic Rejection system

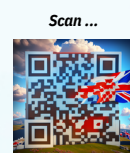
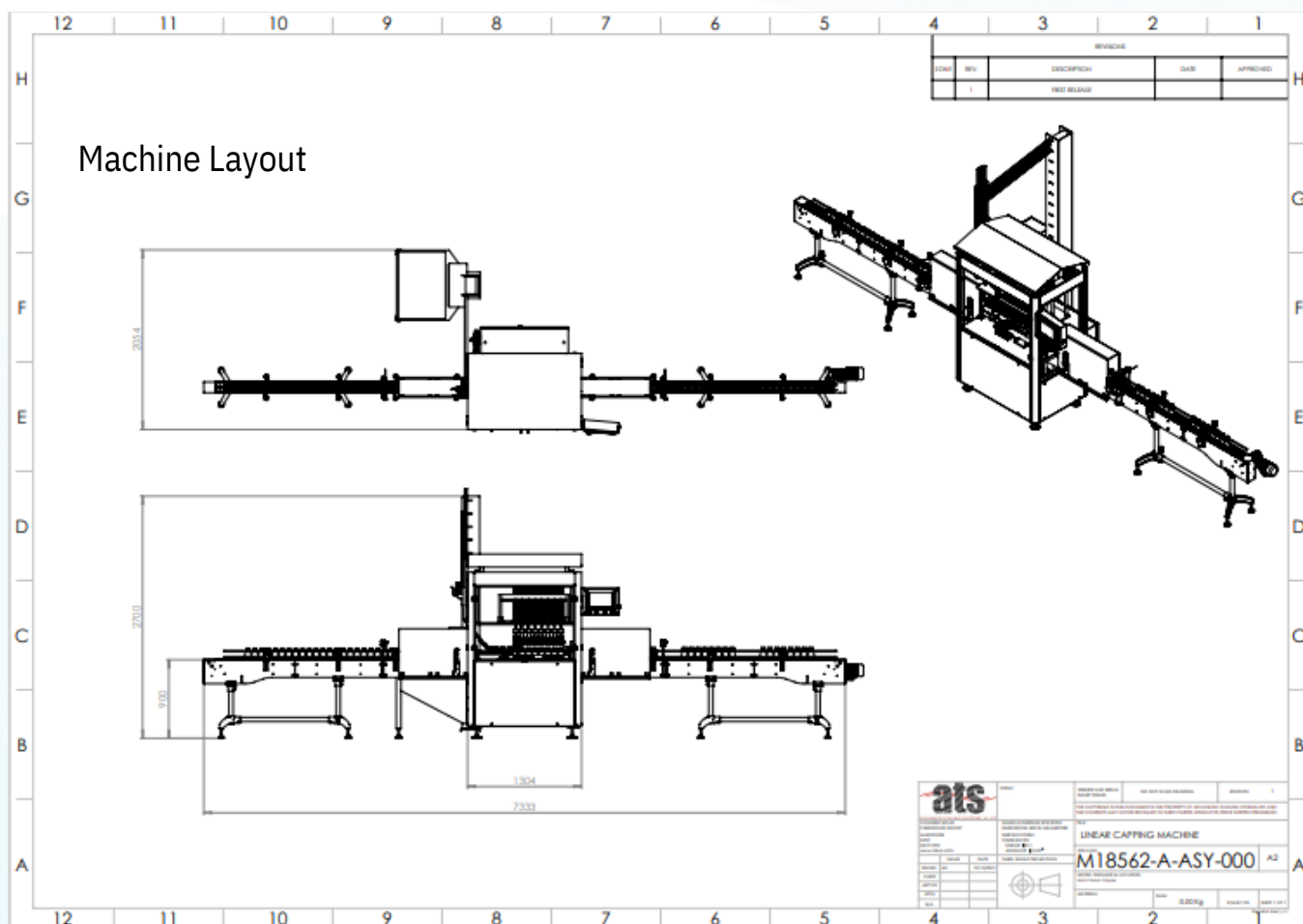
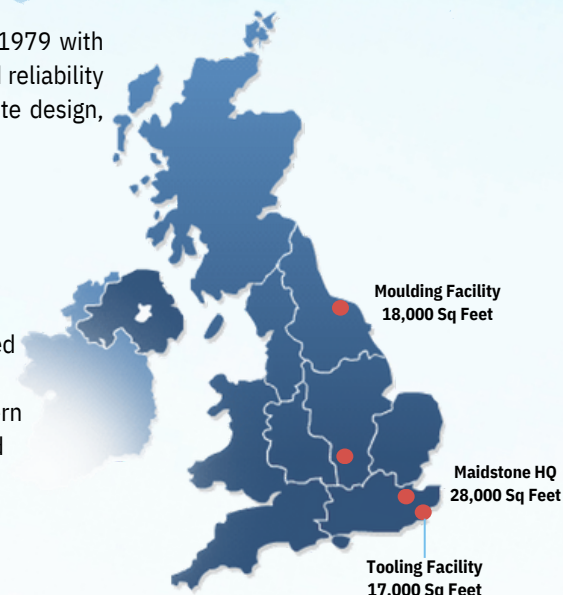


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Traditional Capping Continuous Motion

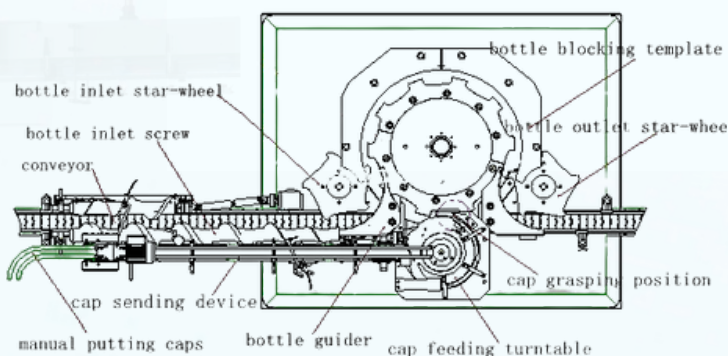


Traditional Continuous motion Capping Machine

In a traditional continuous motion rotary capping machine, the crucial lift position and speed control is carried out by mechanical cams. The tightening process utilizes **hysteresis magnetic clutches**, offering a torque range from **0.2 to 4.9Nm**.

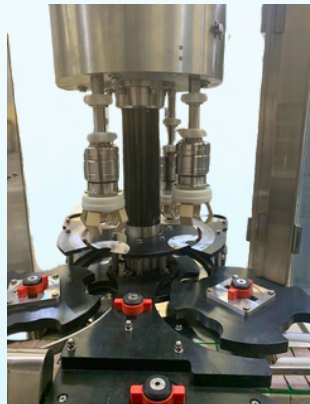
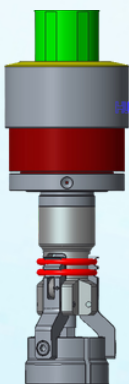
Caps are manually loaded into the bulk hopper and elevated as needed into the cap sorting system. Pneumatically actuated chucks collect caps from the cap plate.

Containers travel on a Delrin slat conveyor, guided by a feed worm (scroll), passing through infeed, center, and outfeed star-wheel turrets before returning to the outfeed section of the conveyor system.



Specifications

- Capping Technology Magnetic Clutch Tightening
- No of capping heads 1- 10 Heads
- Output Max 240 units per minute
- Maximum Torque Up to 4.9 Nm
- Bottle Size range 20ml - 5 L
- Bottle Height 400 mm Max
- PLC Siemens with Colour touch screen
- Electrical energy 415V,50HZ, three-phase five-wire power supply
- Supply 4kVA, Current max- 32A
- Air Supply 6-bar
- Direction of Conveyor Right to left/ Left to right
- Conveyor Length 5m Approx



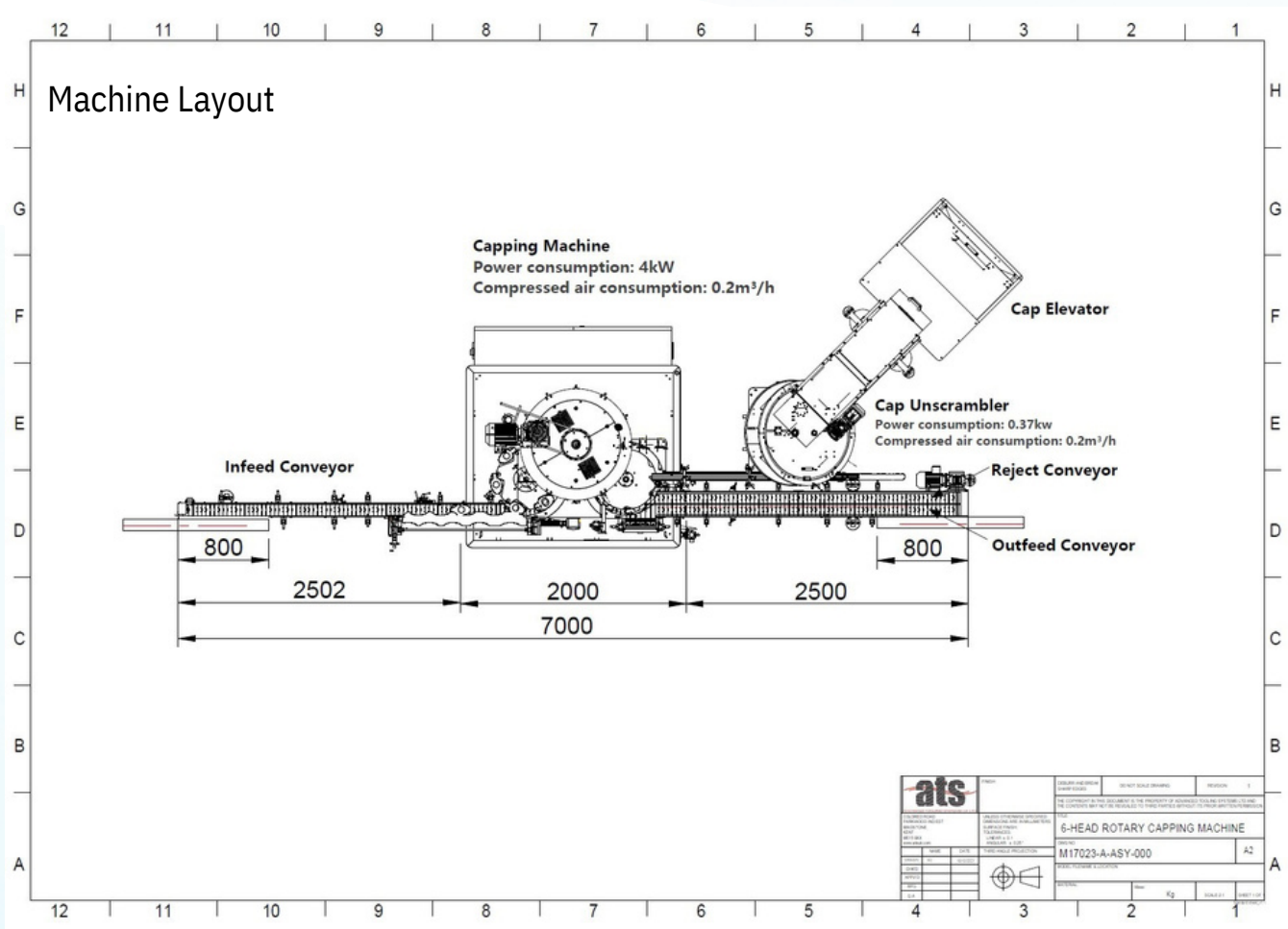
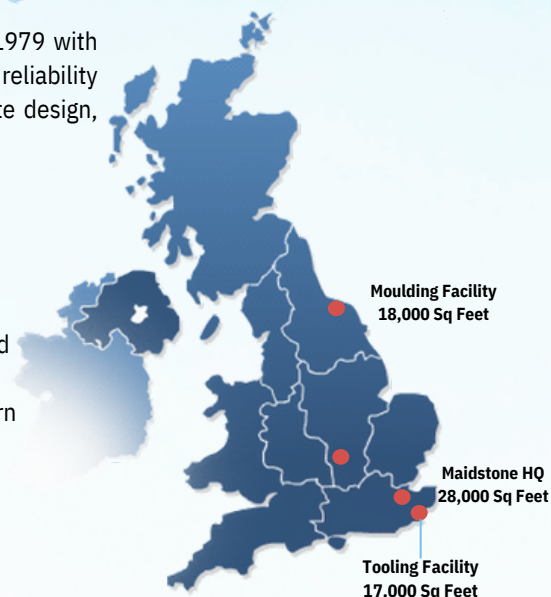
Optional

- Cap sorting & Feeding system
- Bulk Hopper elevator
- Automatic Rejection system

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Indexing Motion Capping Machine



Indexing motion Trigger capping Machine

A single/Double head intermittent motion / rotary indexing trigger tightening machine complete with fully integrated bulk hopper elevator and trigger sorting / feeding system.

Triggers are manually loaded into the bulk hopper and moved to the cap sorting system for feeding onto the trigger shuttle. A pneumatically actuated tightening chuck collects the triggers while twin servo-capping units control all vertical and rotary movements. Electronic torque control provides torque feedback on every tightened trigger and aligns with the container direction.

A Delrin slat conveyor and 6-position star-wheel turret are used to handle containers for a closing operation with torque feedback. A pneumatically actuated dip tube stripper system is also utilized to accommodate bent dip tubes or straws.



Specifications

- Capping Technology Advanced Servo-controlled & Magnetic clutch
- No of capping heads 1-2 Heads
- Output Max 45 units per Minute
- Maximum Torque 2.2 Nm
- Bottle Size range 20ml - 5 L
- Bottle Height 400 mm Max
- PLC Siemens with Colour touch screen
- Electrical energy 415V, 50HZ, three-phase five-wire power supply
- Supply 4kVA, Current max- 32A
- Direction of Conveyor Right to left/ Left to right
- Conveyor Length 5m Approx



Optional

- Cap sorting & Feeding system
- Bulk Hopper elevator
- Automatic Rejection system