Button Sewing Process









Wrapping

Exchangeable Button Holders





Exchangeable Tongue Extension







V Shape 2, 4 hole sew-through button stitching

Shank & 3 hole sew-through button

J -	, , , , , , , , , , , , , , , , , , ,
Button Style	(§) (®) (®) (©)
Sewing Style	
Button Diameter	22" - 40" ligne (14 - 26mm)
Button Parameters	3 - 5 mm max 3 mm max 2,5 mm max 2,5 mm max 2,5 mm
Neck Height	0 - 8 mm
Number of Stitches	1 - 14
Number of Wraps	0 - 30
Number of Locking Stitches	0 - 3
Stitch Depth	0 - 3 mm
Stitching Option	overlaping, alternating
Memory	99 button patterns
Standard Cycle Mode	20, 1 cycle mode = 20 button patterns
Prompt Cycle Mode	20, 1 cycle mode = 2 button patterns
Thread Trimming	pneumatic
Threading	pneumatic
Thread Tension	electronically adjustable 1 - 20 by step motor
Main Drive	servo motor
X-Y Movements	2 step motors
Stitch Depth	step motor
Button Feeding	step motor
Neck Height	step motor
Recommended Thread	polyester size 30, 40, 50, 70; waxed Rice size 3, 4, 5
Recommended Needle	AMF Reece 2000A size 38
Marking Light	LED
Sewing Light	LED
Button Holder (standard accessories)	2-hole sew-through button holder 3-hole sew-through button holder 4-hole sew-through button holder (hole spacing 3 - 4,5 mm) 4-hole sew-through button holder (hole spacing 4,5 - 6 mm) shank button holder
Electrical Supply	230V, 50/60 Hz, 1 Ph
Air requirements	0,55 MPa (80 psi)
Dimensions Head and Table (mm) Weight (kg) Dimensions Packed (mm)	850 (W) x 850 (D) x adjustable 800-1050 (H) 184 1014 (W) x 1016 (D) x 1482 (H)
Weight (kg)	252 Quinment shown herein apply to products as manufactured at time of publication

hand stitching with floating needle technology

100 - 200 spm; adjustable in increments of 5 spm

Technical Specifications EBS Mark II

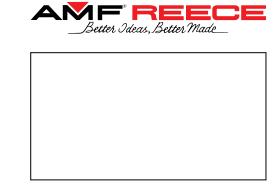
Stitch Type

Sewing Speed

Accuracy of illustration and description of equipment shown herein apply to products as manufactured at time of publication.







EBS Mark II



Button Sewing and Neck Wrapping in One Operation with Hand Sewn Quality

The AMF Reece EBS Mark II, electronic button sewing machine, duplicates the quality of hand sewn buttons with our unique floating needle technology. It performs a neatly sewn button that stands away from the jacket front with a tightly wrapped shank and no unsightly thread showing on the underside of the garment.







Productivity 500 jackets with 3 buttons

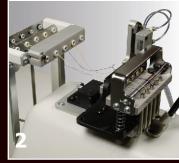
per 8-hour shift.

(4-hole sew-through buttons)















Features

Unique floating needle technology (1)

Unique technology patented by AMF Reece. Double pointed needle with an eye in the middle is passed through the fabric between two needle bars to perform "true" hand stitching. In replication to a seamstress a length of thread is passed through the material duplicating the hand stitch with flawless consistency and incomparable speed.

Independent Motors

The combination of 7 independent motors enable the machine to sew a wide range of buttons and styles, along with an incomparable sewing quality. The main drive is controlled by the servo motor while the X-Y movements for the button stitching and wrapping are driven by step motors. The step motors are also used for button feeding, thread tension, neck height and stitch depth adjustments.

Electronically Controlled Thread Tension

The step motor controlling the thread tension ensures smooth distribution of pre-set tensions. The thread tension can be separately programmed for four different sewing phases such as stitching the button, show stitch, neck wrapping and the final "locking" stitch. This plays an important role especially when sewing on difficult and thin materials to eliminate puckering and other sewing issues.

Sewing Speed

The sewing speed can be adjusted from 100 to 200 spm from the touch screen display. To achieve top sewing quality, different speeds can be separately programmed for button stitching, button wrapping and final "locking" stitch. A lower speed of a final stitch can be required for example when sewing with thinner threads.

Easy Threading System (2)

Especially small scale companies, that are frequently changing production range, would appreciate our new multi-threading system fixed on the top of the sewing head. This flexible system allows the operator easy and quick change between sewing threads. Operator can thread the multi-threading system with up to 5 different threads (size, type, color) that are always ready to be used for sewing.

A pneumatic system guarantees easy threading by bringing the thread from the multi-threading device to the needle eye. The needle threading itself is ensured by a threading hook.

Our new threading solution provides the operator with maximum comfort, reduces threading time and eliminates complicated and time consuming manual handling.

LED Sewing and Marking Lights (3)

Machine is standardly equipped with sewing and marking lights. The sewing light is embedded in the sewing head and illuminates the sewing area much better than commonly used work lights. The red LED marking light ensures easy placement of the garment and marks the exact button position.

Threads

Compared to the former model which only sewed with special waxed threads, the new machine can handle standard polyester cone thread which helps to eliminate color matching issues and reduces thread costs. Thanks to a newly developed trimming mechanism, the cone thread is trimmed automatically

Maximum Sewing Comfort

The EBS Mark II machine has a specially designed ergonomic table equipped with an additional lower-level desk for easy placement of the sewn garment. The lower-level desk and the sewing table itself can be adjusted for operator comfort.

Safety First

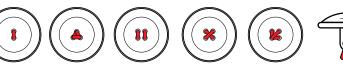
The machine is designed to meet the highest safety requirements from the European Union. The standard fitted automatic sliding eye guard protects the operator during sewing. The emergency stop button, placed on the operator's right hand, is ready to be used if needed (for example in case of thread or needle breakage). Hand start control is used to activate the machine to minimize the risk of the accident at start of the machine.

Machine can be activated only when all sewing mechanisms are in their correct position. In case of any machine error the operator is provided with basic instructions that appear on the machine display to eliminate the problem.

Sewing Range and Style

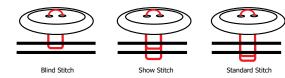
Button Style

Button type range from 2, 3, 4-hole sew-through buttons to shank buttons in different sizes are easily programmable from the touch screen. At the time of button specification, the operator selects all the sewing style with one simple touch. Up to 99 different button style combinations can be stored in the machine memory.



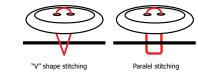
Show & Blind Stitch

The EBS Mark II machine has an option called "blind" or "show" stitch in adittion to standard. If the show stitch option is selected, one single stitch is passed through the garment for high-quality appearance. Alternatively, the blind stitch does not show on the inside of the garment and the thread only penetrates to the middle of the material.



Stitching Option

Optional "V" shape stitching method is available for 4-hole sewn-through buttons. When attaching the button, all stitches are sewn into one preset location. Furthermore, combining the "V" shape sewing with the blind stitching would enhance the stitching quality, which will give the hallmark of quality to the sewn garment.



Button Wrapping

Buttons are proportionally and automatically wrapped to form a firm button neck. Operator can specify number of wraps, neck height, start and end of wrapping position. Depending on the designer's requirements the neck height can be programmed from 0-8 mm.

Button Feeding

The EBS Mark II machine is supplied with 5 exchangeable button holders that cover all button applications. Thanks to fexible pins that adjust automatically, one holder can accommodate different button sizes. Unlike other machines on the market, the holder does not need to be changed for different button sizes. The feeding speed of a button loader can be adjusted directly from the touch screen display for different button types.

Material Feeding

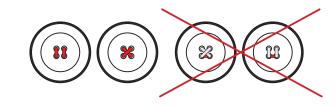
Special new design of a tongue ensures perfect feeding and fixing of the fabric. The tongue automatically adjusts to a different material thickness and holds tight the sewn garment while stitching the button. The new design also simplifies the tongue change for 2, 4-hole sewn through and shank button.

"Locking" Stitches

Preventing the button from unraveling or falling off, the machine has an option to secure the first and last stitches. If required the button can be locked on with up to 3 stitches before attaching the button and also after wrapping it by passing the thread through the middle of the neck.

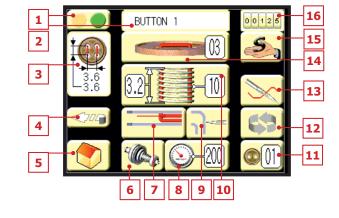
No Cross-over Thread

Machine duplicates the continuous thread of a tailor's hand stitching therefore when sewing 4-hole buttons cross-over thread is not needed. Other machines on the market either require the cross-over stitch or perform the button sewing in more sequences. Thanks to the foating needle technology the EBS Mark II machine attaches the button in one continuous operation.



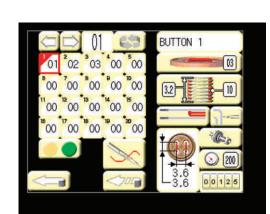
High Resolution Full-Color Touch Screen Display

5,7" LCD high resolution full-color touch screen display incorporates new sewing functions. The use of easily understood symbols makes the machine very easy to operate with minimum requirements for training time. User friendly icons are used for setting parameters such as button type, sewing style, number of stitches and wraps, neck height, stitch depth. Currently sewn button parameters are displayed on the main screen while sewing.

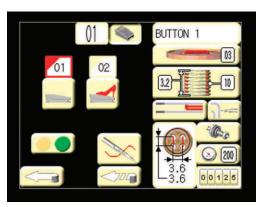


Cycle Sewing

The machine offers two different cycle modes – standard and prompt. The standard cycle mode can accommodate up to 20 different button styles within one program. The prompt cycle mode is designed only for two different button styles, for example when sewing one button with blind stitch and two with show stitch on jacket. In the prompt cycle mode the required button style is activated by the pedal. The operator can pre-set 20 standard and 20 prompt cycle mode programs.



Standard Cycle Mode Home Screen



Prompt Cycle Mode Home Screen

- 4. Step Back to Previous Machine
- Operation
- 5. Home Position
- 6. Thread Tension Adjustments7. Show & Blind Stitch Adjustments
- 8. Sewing Speed Adjustments
- 9. "Locking" Stitch Adjustments 10. Button Neck Adjustments
- 10. Button Neck A
- 12. Cycle Modes
- 13. Threading14. Button Type and Sewing Style
- Adjustments
 15. Service Mode
- 15. Service Mode

Customized Program N.
 Currently Sewn Button