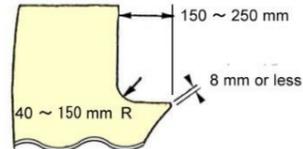


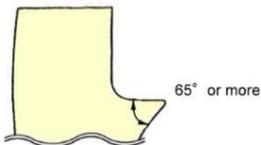
Pre-conditions to realize “Hands-Free” 4-side Fully Automatic Serging

A. U-3803 allows the “Hands-Free” full-automatic operation (for trousers: 4-side) with the materials satisfying the following conditions.

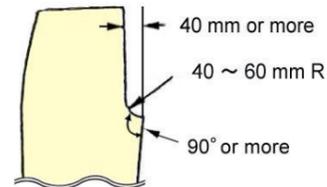
- 1) Crotch part of the back body: The size of the curve is within 40 ~ 150 mm R, and the depth is within 150 ~ 250 mm. In case the corner tip is cut, it must be 8 mm width or less.



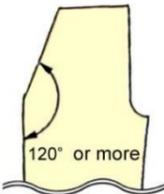
- 2) Crotch part of the back body: The angle of the corner is 65° or more.



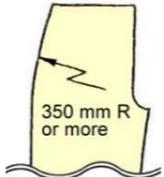
- 3) Crotch part of the front body: The size of the curve is within 40 ~ 60 mm R, and the angle of the corner is 90° or more. The depth of the crotch is 40mm or more.



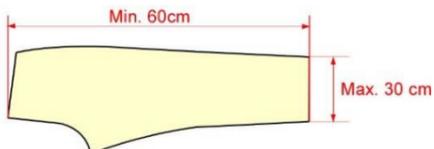
- 4) Convex curve of the front body: The angle of the corner is 120° or more.



- 5) Convex curve of the front body: the size of the corner is 350 mm R or more.



- 6) Weight of each material is 230g/ p.p. or less.
- 7) The allowance for fabrics' stretchability (length direction: width direction) Max. 1:1.2, and the stretchability ratio of length direction is 5% or less.
- 8) Too elastic fabrics which are difficult to maintain the shape or size may not be applicable.
- 9) Limitations of the material sizes for stacker: as below.



B. U-3803 “Hands-Free” full-automatic operation is not applicable with the materials mentioned below.

- 1) Cutworks with too big notches (more than 5 mm).
- 2) Very hard fabrics (e.g. jeans) which cannot be fed along the edge guide
- 3) Very sticky fabrics preventing smooth feeding on the table
- 4) Very thin fabrics (e.g. lining), coarse woven fabrics: too soft to be fed along with the edge guide
- 5) Cutworks with too much fraying

Configurations

- ★ Feeder Roller with Extendable Arm
- ★ 4 x Photo Sensors (for detecting contour of fabrics)
- ★ LCD Touch Screen
- ★ Edge Guide for drawing fabric
- ★ Fabric Turner (with retractable mechanism)
- ★ Air Blow (for assisting fabrics feeding)
- ★ Vacuum Suction (for chain-off thread or scrap of cloth)
- ★ Stacker (with Extendable Turn-Over Bar & Table Extender Bar)
- ★ Digital Control Servo Motor for Sewing Head
- ★ Pulse Control Motor for Feeder Roller
- ★ Cycle Counter
- ★ Air Duster Gun

Daily Output

★ 1,300 pcs. / 8h (Trousers, 4-side serging)

Specifications

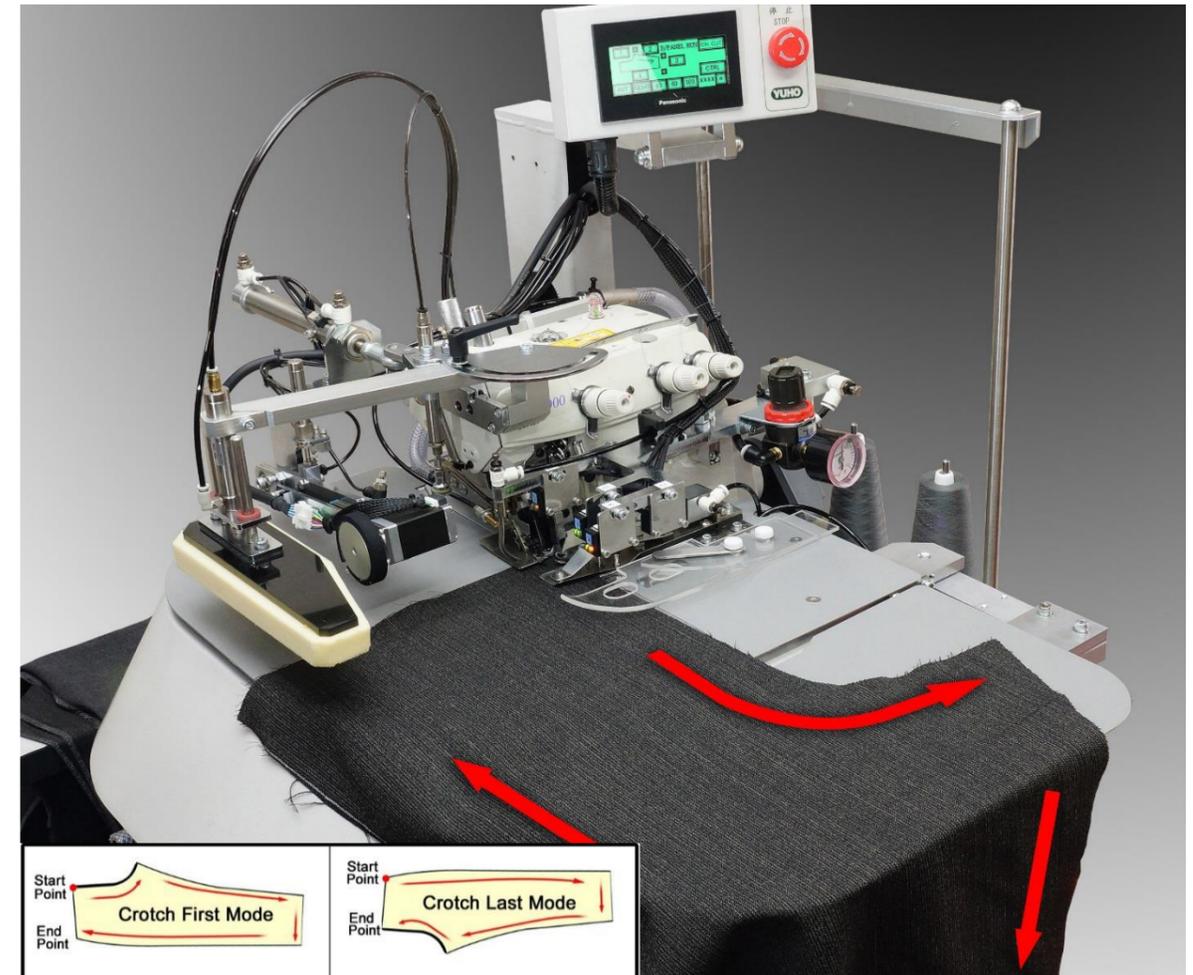
★ Sewing Head	JUKI MO-6904S (1-needle overlock type)
★ Max. Sewing Speed	6,000 rpm
★ Serging Width	4.8 mm (default)
★ Serging Pitch	3.5 mm (default)
★ Power Consumption	200 V / AC 650 VA
★ Air Consumption	0.4 MPa 30 // min
★ Dimensions (mm)	W 750 x D 900 x H 1,400 mm

In the interests of product improvement, appearance and/or specifications are subject to change without prior notice.

 **YUHO SEWING MACHINE CO., LTD**
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Pursuit of Maximum Efficiency and The Ultimate Easy-Operation

YUHO's cutting edge serging machines realize “**Hands-Free 4-sides Full-Automatic Serging**” of pants (front body or back body), allowing operators to choose either serging “**crotch first**” or serging “**crotch last.**” In the case of serging pants' back body with “**crotch first**” mode, the former serging machines required operators to keep holding a corner of crotch at the beginning to prevent misfeeding. Now the brand-new U-3803 allows operators to release the hands immediately, and this feature contributes to improving cycle time and productivity, reducing a loss (damaged items) of production, and emphasizing further **deskill** characteristics. Parallel operation with two to four units by an operator is the ideal operation method of U-3803.





New Serger

Model U-3803-E



New Generation Serging Machine

Thanks to its intelligent software design in conjunction with the intuitive touch panel operation system, U-3803 realizes Hands-Free 4-side full-automatic serging (for trousers) with stunning sewing results, without cutting the thread at each corner, saving the consumption of threads drastically. Coupled with its compact and space-saving footprint, U-3803 is ideal to use parallel operation with two to four units by a single operator.



Streamlined Operation Reducing Losses

At the "Hands-Free full-automatic serging" with "Crotch First Mode," former serging machine required operators to keep holding the corner of crotch at the beginning to support smoother feeding.

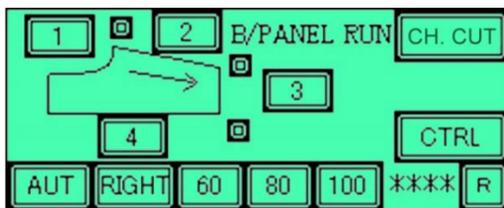
Brand-new U-3803 allows operators just to insert the starting point under the presser foot and release hands immediately while minimizing misfeeding and losses.



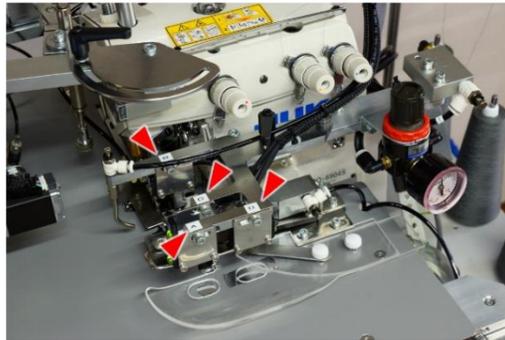
This improvement contributes shortening cycle time, reducing the mental stress of workers, especially for parallel operation with multiple (2 ~ 4) units.

Intuitive LCD Touch Screen

Configuring and switching various parameters... everything is at your fingertips. Selecting the parts: front-bodies or back-bodies, left bodies or right bodies, 4-side sewing or just 1- or 2- or 3-side sewing, the setting of Feeder Roller's extension arm (mentioned below), etc. can be switched instantly on the LCD touch panel.

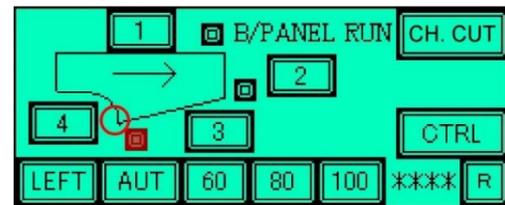


4 x Sensors Detect Contours



4 sets of photoelectric sensors accurately detect the contour of trousers' front and back body cutworks. Combined with digital servo motor (for machine head) as well as pulse-controlled motor (for Feeder Roller), U-3803 handles each cutwork on the table precisely and steadily on behalf of operators' hands. YUHO's proprietary Edge Guide mechanism ensures accurate placement of fabric edges right under the needle. Thanks to the photoelectric sensor near the needle, U-3803 detects each corner accurately, and let the needle stops while stuck on the fabric. Then the machine turns the material and restarts sewing, realizing perfect 4-side serging without cutting the thread in the middle of an operation.

Combination of Auto and Manual



U-3803 allows operators to use their hands to support turning the materials, especially in case of handling specific materials with characteristics which may cause difficulties for U-3803 such as too thick / too thin / too hard / too soft / too elastic, etc.

Operators can designate the corner(s) where he/she wants to use their hands instead of using onboard turner. This function may minimize the losses due to the troubles such as unintended folding or jamming of fabrics.

Convenience in Semi-Auto Operation

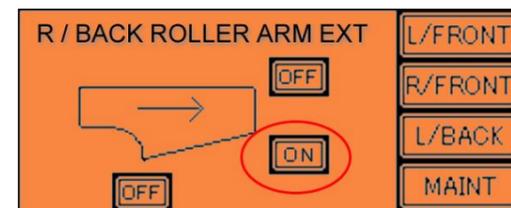
Flexibly designed U-3803 offers great convenience in case operators want to use their hands. Although the default position of onboard auto turner may be disturbing for hands, U-3803 can move it to the appropriate position, not interfering with the hand's operation.



Feeder Roller with Extension Arm

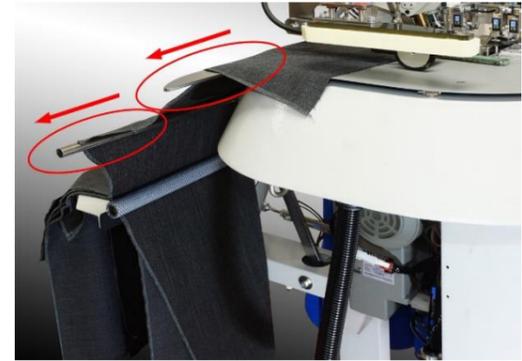


During the serging operation, depending on the shape and position of materials from time to time, the onboard Feeder Roller changes its position thanks to its extendable arm. Operators can instantly designate the timing when the arm should be extended, on the LCD Touch Screen.



Flexibly Designed Stacker

U-3803 is equipped with a unique stacker section specially designed for the serging machine which handles fabrics much larger than its working table. At the end of serging, just before a material is picked up by stacker, a Table Extender Bar jumps out in order to keep the material level. Stacker Turn-Over Bar also stretches its length in order to secure steady results of piling up larger materials.



2 x Serging Start Modes

Operators can choose either "Sensor Start Mode" or "Pedal Start Mode". It allows beginner operators to choose "Pedal Start Mode" for steadier operation until they get used to the machine, and later they can choose "Sensor Start Mode" in order to minimize cycle time. Those two modes are also available at the moments when operator stops and restarts serging at the designated corner in order to use their hands for turning materials.

Hassle-Free Maintenance

Drum-shaped table can slide to the left in order to offer easy maintenance including replacing needles, threading, cleaning, and discharging scraps of fabrics.

