

December 10, 2012

**World's First Mechanism For Improving Seam Quality
Launching New Top and Bottom Coverstitch Machine
“MF7500(D) series and MF7900(D) series”**



JUKI will release two models including eight series of newly developed “Top and Bottom Coverstitch Machine” equipped with the world’s first mechanisms for creating beautiful seams with good strength and elasticity as well as good responsiveness against sewing failures from December in overseas markets and from January next year in Japan.

Coverstitch Machines are used for sewing hemming (*1) and covering processes (*2) of knitwear made by elastic fabrics such as T-shirts, Cutsews, Sportswear and Underwear. The machines are also used for making “decorative stitches” for improving the designs of sportswear, etc.

*1 Hemming: Sew hemmed edges to prevent them from being frayed

*2 Covering: Sew the edges by coverstitches like covering on top of the overedging previously performed to prevent the cut boards from being frayed.

The machines are fully upgraded models of the Top and Bottom Coverstitch Models “MF7700(D) and MF7800(D) series”. There are eight series such as semi-dry head series and the machines with thread trimming function of two models, Flat-bed and Cylinder-bed, prepared for responding to the requirements of users.

Knit fabric sewing requires the feed adjustment according to the types of materials and its elasticity, the machines are equipped with the world’s first “New Feed Mechanism” to be capable of adjusting both horizontal and vertical directions of the feeding, thereby eliminating the chances

of sewing failures when performing three-dimensional sewing as well as creating beautiful seams responding to various kinds of knit fabrics.

Thanks to the new feed mechanism, the feed longitudinal position adjustment from the exterior and the looper thread twining prevention mechanism (JUKI Original and the world's first), the maintainability is substantially improved. The semi-dry head series have succeeded the dry technology around the face plate area where the oil used there causes oil splashes, changed the material quality used for the needle bar, thereby achieving the sewing speed increased by 25%, i.e. from 4,000 sti/min to 5,000 sti/min. The machines contribute to the improvement of productivity.

The machines provided with thread trimming equipment have the direct-drive motor, thereby well responding to the sewing and decreasing the power consumption for MF7500(D) by 29% and for MF7900(D) by 27% compared with the conventional machines with servo motor.

JUKI will expand the sales with these cutting edge, knitwear sewing machines having many unique mechanisms only JUKI can provide with.

◆ Features

● Improvement of sewing

- The machines are equipped with the world's first "New Feed Mechanism" to be capable of adjusting both horizontal and vertical directions of the feeding, thereby eliminating the chances of sewing failures when performing three-dimensional sewing as well as creating beautiful seams responding to various kinds of knit fabrics.
- Due to the capability of the longitudinal feed adjustment from the exterior, it increases the responsiveness to uneven material feed and decreases the puckering occurrence when sewing elastic materials such as foundations.
- Thanks to the micro-lifter mechanism provided as standard, the machines can sew with the presser a little floated. This can help reduce the unevenness, twist as well as damages on the elastic fabrics and sensitive fabrics.
- Thanks to the differential-feed micro-adjustment mechanism, the most appropriate amount of differential feed can be created according to the fabrics. The differential ratio can stay constant after changing the seam length.

● Advanced Dry Technology

- The face plate area where it causes oil leakage problems is dried. By eliminating the oil stains on the sewing products, it will substantially decrease the stain removal and fix of sewing processes and improves the finished quality.
- The machines improve the maximum sewing speed by 25%, achieving 5,000 sti/min, thereby improving the productivity. (The maximum sewing speed of conventional model is 4,000 sti/min) *sti/min = Stitch per minute.

● Improvement of energy-saving and operability by Direct-Drive Mechanism

- All the machines with the thread trimming function have the newly developed compact servo motor installed by Direct-Drive mechanism. The power can be directly transmitted, thereby decreasing the power consumption (Power Consumption: Reduction by 29%

compared with MF7500(D) and by 27% with MF7900(D))

- The great responsiveness at the time of power-on and the accuracy of stoppage helps reduce the fatigue of operators.
- V-belt is not used, therefore no cutting scraps from the belt, no distortion adjustment of the belt.

● **Improvement of Maintainability**

- Thanks to the new feed mechanism, the feed longitudinal position adjustment from the exterior, the maintainability is substantially improved.
- The looper thread twining prevention mechanism (JUKI Original and the world's first) is improved. At the time when the thread is unexpectedly cut, the prevention works before the looper thread twines on the looper thread cam and cuts the looper thread, thereby it can prevent the looper thread from twining on the looper thread cam.
- Commercially available gauge components can be applied as they are. As a result of the commonality with commercially available components (presser foot, throat plate, feed dog, needle clamp), the components are easily obtainable.