



JUKI

JUKI CORPORATION

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JUKI launches its high-speed, 3-needle, feed-off-the-arm, double chainstitch sewing system (digital workstation) "MS-1261A/DWS" for controlling the production of heavy-weight trousers by combining the sewing machine and the application software, aiming at the achievement of improved seam quality



JUKI is going to launch its "High-speed, 3-needle, feed-off-the-arm, double chainstitch sewing system (digital workstation)", MS-1261A/DWS for sewing heavy-weight trousers, from the 11th of September for the domestic market and from September for the overseas markets. This sewing system ensures improved seam quality in a hard-to-sew heavy-weight trousers sewing process through not only the digitalization of setting of presser foot pressure and feed length but also the realization of production control by operating the JUKI exclusive application software and the sewing machine in combination.

This sewing system is intended for in seaming and hip seaming, as well as for lapping seam for attaching hip-yokes for jeans, chinos and work pants. Sewing these parts is a very hard-to-sew process and is likely to cause sewing troubles at multi-layered sections such as stitch gathering, stitch skipping, irregular stitches, etc.

The sewing machine digitalizes setting of the presser foot pressure and the feed length of cloth puller, and is added with a sensor that detects multi-layered sections of material. The sewing machine controls the presser foot pressure and the feed length to the set values that are best-suited to the flat sections and to the multi-layered sections of material respectively. This function helps prevent stitch skipping and enables production of consistent stitch pitches. Furthermore, the cloth puller adopts the belt system, thereby achieving stable feed of multi-layered sections (such as 16-layer sections) of material while preventing stitch gathering and stitch skipping.

In addition, the shape of sewing machine head has been substantially changed to broaden the sewing space, thereby improving workability.

This sewing system allows bidirectional communication of sewing-machine adjustment data for sewing products between the sewing machine and a tablet (Android). It is easy to transfer sewing data loaded to the tablet to two or more sewing machines. This function facilitates setup changes, contributing to a substantially reduced preparation time in the entire factory. The information on the operation of sewing machines is displayed in real time on the tablet by the use of the JUKI exclusive application software, thereby not only realizing easy management of progress in production but also aggregating data and displaying it in a chart. These capabilities will ensure facilitation of the production improvement activities.

JUKI is going to expand the sales of the "MS-1261A / DWS" that improves seam quality in the sewing of heavy-weight trousers and controls the production by using the sewing machine and the application software in combination, and to pursue possibility of our IoT-based solutions so as to assist our customers in the smartification of their factories.

◆ Features

1. Management of sewing performance and sewing machine by the utilization of IoT (Internet of Things)

(1) Management, browsing and editing of data can be carried out on the application software

Data on sewing machine adjustments made according to the product to be sewn can be transferred to a commercially-available Android tablet in contactless mode. This enables quick check for uniform settings as well as confirmation of conditions of sewing machines in a sewing line, thereby facilitating setup changes. The operation panel is also provided as standard with a USB port.

Data management and software update can be carried out with ease using a USB thumb drive.

※Android OS Version 6.0 is recommended to use JUKI Smart APP.

(2) JUKI Smart APP allows you to send and confirm various data.

In the application, there are items of management setting (terminal registration), sewing machine data (sewing data), problem-solution chart.

In the problem-solution chart, we can generate production graphs, the availability chart, etc. for each acquired sewing machine data so it can be used for checking the current situation and analyzing it.

2. The multi-layered part detection sensor helps feed the material smoothly allowing the sewing machine to produce beautiful seams.

The MS-1261A is provided with digital functions for preventing stitch skipping and stitch gathering as well as for supporting smooth feed of multi-layered parts of materials that are considerably heavier in weight than the other parts of materials. These capabilities are highly required in sewing jeans. The newly-developed machine head is provided as standard with the presser foot pressure control function that has the multi-layered part detection sensor. In combination with the belt-type digital cloth puller which enables digital setting of the belt presser foot pressure and feed length, the sewing machine achieves "more beautifully-finished seams".

Support to the digital control facilitates the adjustment of sewing for various kinds of materials. Even when sewing heavy-weight materials, the sewing system produces soft and beautiful seams (balloon stitches).

3.Prevention of stitch skipping

Through the improvement to the feed locus, needle bending is prevented by decreasing the feed amount when the needle penetrates the material. As a result, the bobbin thread is securely retained to ensure stable loop formation, thereby allowing the looper to catch the needle thread appropriately to produce seams without fail. In addition, the backward-moving type needle guard helps feed heavy-weight materials smoothly, thereby preventing the occurrence of stitch skipping.

4.The sewing system offers improved operability for the operator and promotes energy savings

The conventional feed-off-the-arm chainstitch machines have specially-shaped machine head due to its stitch type. In pursuit of ease of sewing and ease of handling of materials, the MS-1261A/DWS has adopted newly-developed machine head the shape of which is like of the general-purpose sewing machines.

The MS-1261A/DWS is the first sewing system that comes with an energy-saving high-powered direct-drive motor. As a result, workability and maintainability are improved.