



JUKI

JUKI CORPORATION

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"Guide for the JUKI exhibits at CISMA 2011"



Conceptual drawing of the JUKI booth

JUKI is happy to announce that we will be running a booth at CISMA 2011 to be held in ShangHai New Int'l EXPO Center, ShangHai in China for four days from the 27 to 30 of September 2011.

Under the exhibition concept "Be the best in CS - New Edge Solution for Your Success" (JUKI's proposal of novel ideas for success), we will be showing a total of 78 models; 65 will be state-of-the-art industrial sewing machines and 13 will be household sewing machines. Among the 78 models, More than half of them are new.

The JUKI booth will occupy 871 m² in Hall W3-D02 of the venue. The booth will consist of eleven different zones.

Outline and major models to be shown in the respective zones are as follows:

A. New basic models zone

This zone introduces new models of our lockstitch machines and lockstitch machines with an automatic thread trimmer. In this zone, visitors are able to get hands-on experience of the most-advanced sewing machines.

B. Intelligent sewing system zone (ISS zone)

This zone introduces JUKI's system products comprised of the data analysis software (IA-1) and the data measuring terminals (IT series), which contribute to the realization of an actual sewing shop floor, enabling a visual check of the production status.

C. Knits/sportswear sewing machines zone

This zone introduces the range of products which contribute to the further increased quality and productivity of knitwear. In this zone, the MF-7500/-7900 flat seamer, top and bottom coverstitch machine will also be introduced for reference.

D. Sports-shoes/bags sewing machines zone

This zone introduces sewing machines for heavy-weight materials which are best-suited for sewing sports shoes and sports bags, such as the unison-feed sewing machines, which achieve outstanding reliability and sewing capabilities, and the newly-developed "AMS-224EN" computer-controlled cycle machine with an input function and a large sewing area.

E. Men's-wear sewing machines zone

This zone introduces various kinds of the most-advanced models of sewing machines with outstanding responsiveness to materials and increased flexibility, which are essential for sewing outer wear, and includes the 1-needle automatic belt-loop sewing machine "AB-1351", which enables the sewing of seven different belt-loops by itself for the first time in the world.

F. Shirt sewing machines zone

This zone introduces a group of products contributing to improved quality of finished products and increased productivity, and includes the newly-developed computer-controlled lockstitch buttonholing machine "LBH-1795S", which enables the operator to attend to two buttonholing machine units at one time.

G. Ladies' wear sewing machines zone

This zone introduces a group of products to enhance laborsaving and efficiency by utilizing the automatic sewing machines, such as the edge-control seamer "AE-200A", automatic serging machine and automatic welting machine.

H. Jeans/casual-pants sewing machines zone

This zone introduces the latest models of specialized sewing machines and automatic sewing machines which have been developed through a careful and thorough analysis of each sewing process involved in jeans and casual pants.

I. Household sewing machines zone

This zone introduces 13 models of household sewing machines, including the latest four computer-controlled machines under two different series. JUKI's household machines incorporating well-established technology help broaden the sphere of household needlework.

J. Parts zone

This exhibit runs an explanatory video to demonstrate how to tell genuine parts apart from counterfeit parts, and why genuine parts are recommended for manufacturers.

K. JUKI Sewing Research Institute zone

This section introduces JUKI's broad-range of software support activities, including attachment development techniques and production management techniques to increase productivity. One of the installations here demonstrates a process to add an attachment and sew with it.

Industrial sewing machines

◆ **ISS** <Intelligent Sewing System>

● **Product overview**

With the motto, total achievement of "CS" (Customer Satisfaction), JUKI proposes its IT-based production management tool called "ISS" (Intelligent Sewing System). This system enables the real-time review of production data through network-connected sewing machines in the sewing production line, thereby facilitating daily progress management and achieving early detection of bottlenecks which may hinder production.

● **Features**

IA-1 (Intelligent Application)

- ① With this software, the actual quantity of products is continuously monitored to enable a visual check of the progress/delay status of the production line by means of visual signal lights (red, blue and yellow)
- ② With this software, measurement of the operating ratio and sewing speed of each sewing machine is enabled.
- ③ With this software, processing time of each sewing process can be measured to facilitate checking of the production line balance.
- ④ This software offers assistance in finding solutions to various problems/challenges faced by garment manufacturing companies, such as the achievement of a quick response to small-lot production and quick delivery, thereby backing up the apparel industry to build a bright and valuable future.
- ⑤ Production data from the sewing machines in a production line can be visually checked in real time by network-connecting a personal computer (IA-1) and the sewing machines (IT Series) to contribute to improved daily progress management and earlier detection of bottlenecks, which cause a delay in production.

IT Series (Intelligent Terminal)

- ① By connecting the terminal to the sewing machine, direct measurement of the sewing workshop production data is enabled. Data measurement can be done automatically or manually simply by pressing a button.
- ② With the IT Series, the target and actual numbers of pieces of products can be displayed on the terminal. This helps improve the operators' sense of purpose.

◆ **DDL-8700A-7**

<Direct-drive lockstitch machine with an automatic thread trimmer>

● **Product overview**

This machine is a new model lockstitch machine with an automatic thread trimmer. It adopts a direct-drive

system which directly drives the main shaft by means of a compact servomotor. With this system, the sewing machine quickly increases sewing speed at the beginning of sewing and demonstrates outstanding responsiveness.

●Features

- ① The motor is installed in the direct-drive system. As a result, power is transmitted directly to the main shaft with no loss, thus contributing to a quicker increase in speed at the beginning of sewing and improved responsiveness. Furthermore, this system enhances the energy-saving ability of the sewing machine.
- ② The control box and the operation panel are built into the machine head cover to achieve compactness and an all-in-one style. This compact-in-size machine is easy to set up through a simplified installing procedure.

◆ **AB-1351** <1-needle, automatic belt-loop attaching machine>

●Product overview

The AB-1351 is best suited to the sewing of belt loops on slacks and casual pants. This automatic sewing machine sews various kinds of belt loops with flexibility by utilizing the seven different sewing patterns it incorporates.

●Features

- ① Since the AB-1351 uses the highly operable new operation panel (IP-420), it is possible for the operator to change the sewing shape and sewing size of belt loops, change the sewing pattern, and change detailed settings of the sewing position, etc. through the operation panel with ease. In addition, cycle sewing can also be set.
- ② Access to data previously stored in the memory of the operation panel is possible, thus shortening the setup time when re-using the same data as that stored in the memory. The operator needs only to place a garment body on the sewing machine. He/she therefore has idle time while the sewing machine is sewing belt loops on the garment body. This means that the operator is then able to attend to two units of the AB-1351 at one time by placing another garment body on one machine while the other machine is engaged in sewing, thereby contributing to further increased productivity.
- ③ In the case of standard sewing machines (general-purpose sewing machines), operator skill is required to sew belt loops exactly according to specified sewing dimensions and seam allowances (the allowance to be determined taking the belt thickness or other influencing factors into account) with consistency. On the other hand, the AB-1351 has adopted JUKI's unique twin-drive type belt-loop feeder mechanism. The belt-loop pulling clamp and the belt-loop draw-out roller operate in sync with each other, thereby ensuring accurate belt loop lengths even when using soft and elastic materials. With this mechanism, even an inexperienced operator is allowed to carry out belt-loop attaching with consistency while maintaining adequate seam allowances as in the case of skilled operators, thereby producing beautifully-attached belt-loops with no variation in quality.

◆ AMS—224EN4530／6030

<Computer-controlled cycle machine with an input function>

(Sewing size of 4530: 450 mm (width) x 300 mm (length))

(Sewing size of 6030: 600 mm (width) x 300 mm (length))

●Product overview

This is a computer-controlled cycle machine with an input function and a large sewing area which is provided with dramatically-increased memory capacity for storing data on sewing patterns in the main body. The machine achieves a maximum sewing speed which is the highest sewing speed among competitive machines of the equivalent class, thereby promising increased productivity.

●Features

- ① The machine has adopted the direct-drive system, which provides excellent responsiveness. In addition, the sewing machine is able to run at a maximum sewing speed of 2,500 sti/min (stitch length: 3 mm or less), which is the highest sewing speed among competitive machines with the equivalent sewing area. With this sewing speed, the machine promises increased productivity and enhanced energy saving.
- ② The machine is provided with the color LCD touch-sensitive operation panel "IP-420", which supports 14 different languages. Sewing data such as the sewing shape, needle thread tension, enlargement/reduction, sewing speed and the number of stitches can be entered/edited through the operation panel screen, thereby increasing work efficiency.
- ③ As compared with the predecessor model, the number of pieces of sewing data (the number of stitches) to be stored in the main body of this machine has been significantly increased from 20,000 stitches to 500,000 stitches, and the number of sewing patterns has been increased from 200 patterns to 999 patterns. This promises easy storage and recall of data, thereby improving operability. In addition, not only CompactFlash cards, but also the USB thumb drives and USB card readers are applicable as the sewing pattern storage media.

◆AMS-210ENSS1306SA/7450

<Computer-controlled cycle machine with an input function (for embroidery)>

●Product overview

The AMS-210EN1306 has been developed for embroidering names (alphabetic/Japanese characters) with single color thread.

The sewing machine is a computer-controlled cycle machine provided with an input function. Once the operator places a piece of material on the sewing machine, the sewing machine carries out the entire sequence of embroidering according to the preliminarily input name data from start to the thread trimming under finish in a fully-automatic manner. With this function, the machine enables even an inexperienced operator to beautifully and speedily embroider names with accuracy.

●Features

- ① The AMS-210EN1306 is the first embroidery machine in the sewing machine industry which achieves the highest sewing speed of 2,000 sti/min to promise higher productivity.
- ② The thread tension controller with its rotary tension mechanism is adopted for the machine to promise beautifully finished name (alphabetic/Japanese characters) embroideries with a lower thread tension
- ③ The USB-supporting operation panel IP-420 with input functions has been adopted for the machine. (Various kinds of storage media can be used for reading/writing data by means of a card reader.) Since the name embroidery shape is displayed on the color LCD screen, the operator can carry out sewing while visually confirming the finished shape.
- ④ It is possible to input data on two or more name embroideries at a time. Since the sewing machine stops every time it finishes the embroidering of one name, it can sew different name embroideries continuously.

◆ **PM-3** <Embroidery data creation software>

● **Product overview**

This software is developed exclusively for creating embroidery data. With the software, the operator is able to enter/edit new/existing data as if he/she were operating word processor software. The font data can be converted to the embroidery data.

◆ **MF-7500 Series** <High-speed flat-bed, top and bottom coverstitch machine>

● **Product overview**

The well-reputed high-speed, flat-bed, top and bottom coverstitch machine MF-7700 Series has been remodeled to the MF-7500 Series. This sewing machine with a thread trimmer is provided with a direct-drive motor and, in addition, with many different functions including the improved looper-thread entanglement prevention mechanism and oscillating thread tension controller unit.

The MF-7500 Series is a high-grade model with excellent functions and performance suited not only to the hemming of sleeves and bottoms of knit shirts and T shirts, as well as the covering process of knitwear, but also to the attaching of tape on underwear, briefs and knitwear.

● **Features**

- ① As compared with the conventional model, the changed model has a bed shape which allows the operator to handle the material on the machine while placing his/her hands closer to the needle entry.
- ② The machine is provided with enhanced cloth guides. One unit of the machine can therefore be used for many different hemming and covering processes utilizing those cloth guides.
- ③ The machine with a thread trimmer has adopted the direct-drive motor to increase ease of setup, thereby helping save energy.
- ④ The type of seam can be selected according to the application and material simply by changing the thread path and adjusting the thread tension, i.e., soft-to-touch seams for innerwear and high-grade well-tensed seams for outerwear.
- ⑤ The machine has adopted the bobbin-thread tangling preventing device with a new mechanism. This

device prevents the bobbin thread from twining around the cam shaft, thereby increasing the operator's work efficiency.

- ⑥ The machine is provided as standard with the feed dog inclination adjusting mechanism, needle-entry longitudinal position adjusting mechanism and micro-lifter mechanism. With these mechanisms, the machine is able to handle difficult-to-sew materials more easily.

◆ **MF-7900 Series** <High-speed, cylinder-bed, top and bottom coverstitch machine>

● **Product overview**

The well-reputed high-speed, flat-bed, top and bottom coverstitch machine MF-7800 Series has been remodeled to the MF-7900 Series. This sewing machine with a thread trimmer is provided with a direct-drive motor and, in addition, with many different functions including the improved looper-thread entanglement prevention mechanism and oscillating thread tension controller unit.

The MF-7900 Series is a high-grade model with excellent functions and performance suited to the hemming and covering processes of T-shirts and polo shirts, and the covering processes of fleece wear, polo shirts, training wear, sportswear and knit outerwear

● **Features**

- ① The machine has adopted a new model bobbin thread cam mechanism which can be threaded through a simplified procedure.
- ② The machine is provided with enhanced cloth guides to allow a single unit of the machine to support many different hemming and covering processes utilizing those cloth guides.
- ③ The machine with a thread trimmer has adopted a direct-drive motor to increase ease of setup, thereby helping save energy.
- ④ The type of seam can be selected according to the application and material simply by changing the thread path and adjusting the thread tension, i.e., soft-to-touch seams for innerwear and high-grade well-tensed seams for outerwear.
- ⑤ The bobbin-thread tangling prevention mechanism has been improved to prevent the bobbin thread from twining around the cam shaft. With this mechanism, the operator is able to increase his/her work efficiency.
- ⑥ Optimization of the thread take-up mechanism and thread path route enables sewing with a lower tension, thereby broadening the range of thread types applicable to the machine.

Household sewing machines

◆ **Exceed Series (HXL-F300, -F400, -F600)**

<Computer-controlled household sewing machines>

● **Product overview**

The "Exceed" series household sewing machine is an upgraded full-sized computer-controlled machine

using the technologies and functions of industrial sewing machines. The name "Exceed" represents the machine's performance level exceeding the conventional performance level of household sewing machines.

The machine is provided with a "longer distance from machine arm to needle entry as compared with the conventional model", as well as having lots of new features including "box feed", "controller with an automatic thread trimmer", "sensor-type buttonholing" and "quilting" to achieve improved seam quality and added comfort of use. JUKI is proudly introducing the "Exceed" series as the best machine for household needle work.

●Features

- ① The "box feed" has a rectangular (box-like) motion locus, while the feed dog of the conventional household sewing machine performs an elliptic motion. The feed dog which performs the rectangular motion comes in contact with the material for a longer time and over a larger area. As a result, the feed dog can feed light- to heavy-weight materials without material-clogging/stitch gathering.
- ② The "controller with an automatic thread trimmer" has the capability of activating the thread trimmer when the operator depresses the controller pedal with his/her heel, which is widely adopted among industrial sewing machines. This thread trimming system allows the operator to carry out sewing rhythmically and comfortably without removing hands from the material being sewn.
- ③ The "sensor type buttonholing" is able to sew buttonholes while preventing material-clogging / stitch-gathering due to the type of material and multi-layered parts of the material, thereby substantially improving seam quality.
- ④ The HZL-F300 is the basic model in the Exceed series and is best suited to household needlework, which includes sewing dresses, and interior ornaments according to the customers' interests.
- ⑤ The HZL-F400 is provided with an increased number of quilt patterns. It is also equipped with many kinds of presser feet. In addition, it is provided as standard with a knee lifter lever. All of these features allow the machine to be used for sewing quilts.
- ⑤ The HZL-600F is the highest model of the Exceed series for sewing quilts. It is provided with a random stitch function and a stitch dial for changing the stitch length and width during sewing, as well as being provided as standard with various quilting presser feet. All of these features and specifications of the machine are best suited to the sewing of quilts. This is the sewing machine for quilt lovers who want to sew higher quality quilts.

◆HZL-G Series (HZL-G110, -G210)

<Computer-controlled household sewing machine>

●Product overview

The HZL-G series is the best full-sized computer-controlled sewing machine for customers who intend to change their current sewing machine to an upgraded one.

●Features

- ① Thanks to the adoption of the "box feed", the machine is able to feed light- to heavy-weight materials without material-clogging/stitch-gathering.

- ② The machines have adopted simple-to-use operating parts and operating buttons to allow inexperienced users to use the machine with ease.
- ③ The HZL-G110 is provided with as many as 180 different sewing patterns in total, including utility patterns, buttonholing patterns, decorative sewing patterns and alphabetic character patterns.
- ④ The HZL-G210 is provided with an automatic thread trimmer. The other features are the same as with those of the HZL-G110.

◆HZL-K Series (HZL-K65, -K85)

<Computer-controlled household sewing machine>

●Product overview

The HZL-K series is a compact-in-size computer-controlled household sewing machine which allows even inexperienced users to use with ease.

●Features

- ① The space between the machine arm and the needle entry is widened to achieve increased usability and operability as compared with the conventional model.
- ② The HZL-K65 is provided with 20 different sewing patterns, including in principle utility patterns and decorative sewing patterns which are frequently used.
- ③ The HZL-K85 is able to sew alphabetic/Japanese characters in addition to the sewing patterns provided by the HZL-K65. Since the machine is provided with memory, it is able to temporarily save a combination of alphabetic characters or decorative patterns in its memory for later sewing.

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