

April 19, 2017

JUKI newly launches the "AMS-224EN4530R/AW-3", computer-controlled cycle machine with input function (full-rotary hook type, with automatic bobbin thread winding and feeding device). Its automatic bobbin thread winding and feeding devices contributes to increased productivity.



JUKI launches the "AMS-224EN4530R/AW-3", computer-controlled cycle machine with input function (full-rotary hook type, with automatic bobbin thread winding and feeding device) in overseas markets on the 21st of April. This new model is provided with automatic bobbin thread winding and feeding function. This function eliminates manual bobbin changing work, which causes interruptions of the production process, thereby increasing productivity.

Computer-controlled cycle machine automatically performs sewing exactly according to sewing patterns that are stored in the memory of operation panel. It is used for sewing car seats and air bags, and for sewing handle sections of bags.

This new model is provided with JUKI's unique "automatic bobbin thread winding and feeding device". Usually, when the bobbin thread runs out during sewing, the operator has to get under the sewing machine table in order to change the empty bobbin with another bobbin which has been wound with thread in advance. In the case of sewing car seats and bags, thick thread is used. This means that the length of thread wound on a bobbin is limited. Bobbin thread, therefore, has to be changed frequently. In addition, top stitches sewn on those products are the part of their designs and must be sewn continuously without interruption. Consequently, products being sewn will be regarded as defective ones at the moment the bobbin thread runs out during sewing, resulting in waste of materials.

This new model, however, automatically changes the bobbins while the operator is placing the next material to be sewn on the sewing machine when the thread remaining on the bobbin is smaller than the amount required for finishing one complete pattern. JUKI's unique "bobbin thread winding and feeding device" removes thread remaining on the bobbin, winding the bobbin and threading the bobbin during sewing. Once the bobbin thread runs out during sewing, the device automatically takes out the empty bobbin and loads the new bobbin that is fully wound with thread. The device automatically carries out a sequence of bobbin thread changing work, which has been carried out manually, thereby increasing productivity.

Now, JUKI adds the productivity-increasing AMS-224EN4530R/AW-3 to its product lineup. This new model can be used in connection with JUKI's automatization system. In this way, JUKI is going to offer the proposal to promote "JUKI Smart Solution" so as to help the customers to establish plants which are best suited to their products while solving problems such as increase in productivity, labor-saving, work-condition improvement and quality improvement.

◆Features

●JUKI's unique bobbin thread winding and feeding device

- This device automatically changes bobbin thread. The operator is no longer required to get under the sewing machine table for changing the bobbin thread, thereby reducing the operator's physical fatigue.
- This device allows the operator to concentrate on sewing work without worrying about shortage of bobbin thread. In addition, since the device uses only two bobbins, adjustment of bobbin thread tension will become easier.
- The time required to change bobbins is approximately four seconds. The sewing machine automatically changes bobbins while the operator is engaged in placement of the next material to be sewn on the sewing machine. This means downtime caused by thread changing will not occur.

●The constant thread amount feeding mechanism eliminates thread waste.

- The automatic bobbin thread winding and feeding device winds the optimum amount of thread on a bobbin while the constant thread amount feeding mechanism measures the length of thread remaining on the bobbin, which needs to be removed, thereby eliminating thread waste.

●Wide sewing area

- Thanks to its wide sewing area (300 mm in length and 450 mm in width), the sewing machine is applicable to various sewing processes such as attaching handles to bags, sewing multiple small parts at a time, attaching parts to shoes and sports shoes (a pair of shoes), and sewing automobile interior parts (e.g., car seats and air bags).
- Instantaneous acceleration and deceleration at the beginning and end of sewing and high-speed thread trimming contribute to improved cycle time.

●Improved seam quality

- As the sewing machine is provided with full-rotary hook, it produces soft-texture seams that are needed for bags and leather products.
Since the bobbin case opening lever can be adjusted both laterally and longitudinally, it can be accurately positioned according to the needle count.
- Since the sewing machine is provided with JUKI's unique active tension mechanism and programmable bobbin case opening lever, it flexibly responds to materials and achieves higher seam quality.

◆Expected date of launch: (Overseas markets) April 21, 2017