

AMS-221F3020R

Computer-controlled Cycle Machine with Input Function
(Rotary hook type)

AMS-221F3020R/AW-3

Computer-controlled Cycle Machine with Input Function
(Rotary hook type / With Automatic bobbin-thread winding and feeding device)

JUKI

DIGITALLY
Smart Solution

Inspire the Knowledge in Sewing Adjustment
Epoch-making Sewing Systems in history



AMS-221FHS3020RSW (with AW-3)

OPTIONS

	No.	without AW-3	with AW-3
Bobbin Thread Remaining Detector	40235894	×	○
Material ply detector device	40225111	○	○



Material ply detector device

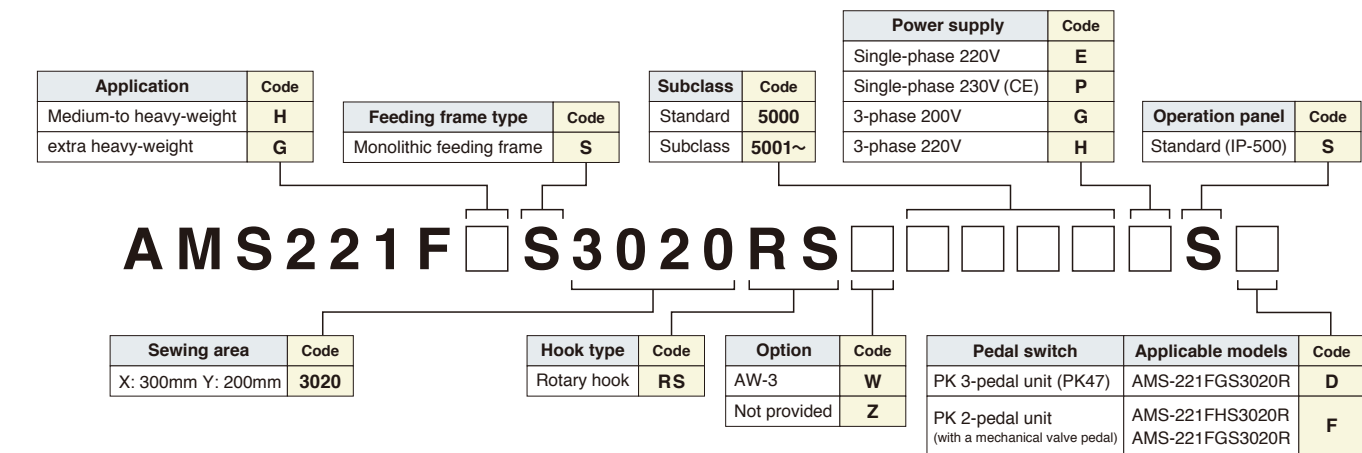
SPECIFICATIONS

Model name	AMS-221FH3020R AMS-221FH3020R/AW-3	AMS-221FG3020R AMS-221FG3020R/AW-3
Application	Medium- to heavy-weight	Extra heavy-weight
Feeding frame type	Monolithic feeding frame	
Max. sewing speed	2,800sti/min*	
Sewing area	300mm (X) × 200mm (Y)	
Settable stitch length	0.1~12.7mm (0.05mm step)	
Needle bar stroke	45.7mm	
Lift of the feeding frame	Max. 30mm	
Lift / Stroke of intermediate presser	Lifting amount: 25mm / Stroke: Standard 4mm (0~10mm)	
Variable lower position of the intermediate presser	Standard 0~3.5mm (max. 0~7.0mm)	
Change in height of the intermediate presser	Stepless control by programming (controlled by a stepping motor)	
Needle thread tension	Active tension (electronic thread tension control mechanism)	
Needle thread breakage detecting device	Provided as standard	
Prevention of the slip-off of thread at the beginning of sewing	Prevented by active tension	
Needle (at the time of delivery)	DP×17 (#18)	DP×17 (#23)
Thread	#30~#8	#20~#5
Hook	Double-capacity rotary hook	
Sewing machine motor	Compact AC servomotor (direct-drive system)	
Power requirement / Power consumption	3-phase 200V / 400VA	
Compressed air / Air consumption	0.35~0.55MPa (Max. 0.55MPa) / 156dm ³ /min (with AW-3), 1.8dm ³ /min (without AW-3)	

* sti/min is the abbreviation for "stitches per minute"

WHEN YOU PLACE ORDERS

Please note when placing orders, that the model name should be written as follows:



JUKI ECO PRODUCTS

The AMS-221F3020R and AMS-221F3020R/AW-3 are eco-friendly products which complies with JUKI ECO PRODUCTS standards for protecting the environment.



● The sewing machine complies with the "Juki Group Green Procurement Guidelines" on the use of hazardous substances, which is stricter than other restrictions, such as those of the RoHS Directive.

For details of JUKI ECO PRODUCTS, refer to: <https://www.juki.co.jp/en/company/eco>

*The RoHS Directive is an EU Directive limiting the use of 6 hazardous substances (lead, hexavalent chromium, mercury, cadmium, PBB and PBDE) in electrical and electronic equipment. The Juki Green Procurement Guideline is the voluntarily established criteria to eliminate not only the aforementioned six substances, but also other ones which also adversely affect the environment.



Registered Organization: JUKI CORPORATION Head Office
The Scope of the Registration: The activities of research, development, design, sales, distribution, and maintenance services of industrial sewing machines, household sewing machines and industrial robots, etc., including sales and maintenance services of data entry systems.

Computer-controlled Cycle Machine with Input Function (Rotary hook type)

AMS-221F3020R series

JUKI

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* Specifications and appearance are subject to change without prior notice for improvement.
* Read the instruction manual before putting the machine into service to ensure safety.
* This catalogue prints with environment-friendly soyink on recycle paper.
* Paper from responsible sources FSC™ C001712

Digital sewing system proposes the production process added with a computerized new value to all the people who engage in production.

Computer-controlled Cycle Machine with Input Function (Rotary hook type)

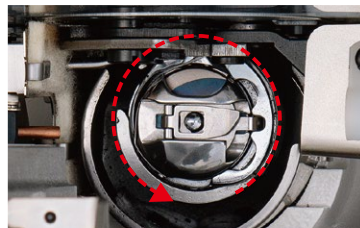
AMS-221F 3020R Series



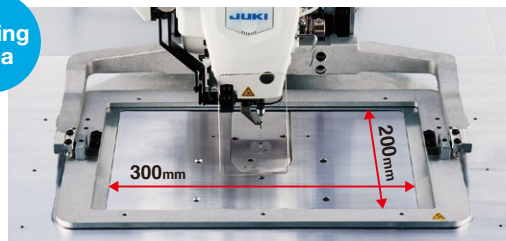
AMS-221F3020R/AW-3 eliminates the need for the operator to change the bobbin thread.

Rotary hook

In addition to the shuttle hook type model which is favorably accepted by users, the rotary hook type model is newly developed. The rotary hook contributes to the achievement of beautifully-finished seams which are required for bags and leather products. In addition, inner hook stopper is adjustable not only laterally but also longitudinally, thereby enabling accurate positioning of the bobbin case according to the needle count.



Sewing area

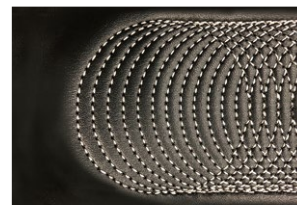


The cycle machine achieves an improved seam quality, increased productivity and easier operation.

The machine not only achieves higher productivity due to instantaneous increases/decreases in sewing speed at the beginning/end of sewing and increased speed of thread trimming, but also achieves a flexible responsiveness to materials to promise enhanced seam quality due to JUKI's unique active tension and programmable intermediate presser.

Industry's most accurate needle entry point is ensured

Increased rigidity and JUKI's unique high-performance feed control system contribute to increased feed accuracy, thereby reducing uneven material feed during outward/inward sewing. Uneven material feed during outward/inward sewing is reduced. In addition, for the feed system of the feeding frame, either the intermittent feed or the continuous feed can be selected.

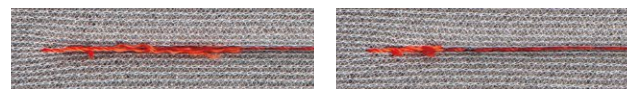


High-quality seams that respond to heavy-weight materials and extra heavy-weight materials

The thread nipper mechanism and the feed mechanism that succeeded JUKI's unique technologies have been reviewed for improvement. As a result, more beautifully-finished seams are now produced. In addition, the main-shaft retry function can be selected with the memory switch. This improves the penetration force of the needle when sewing extra heavy-weight materials.

Beautifully-finished seams without bird's nests (bird's nest reducing function) are produced

Since thread trimming is performed at the beginning of sewing, so-called bird's nest (thread tangling in at the beginning of sewing) is reduced, thereby producing more beautiful seams.



AMS-221EN (When the bobbin thread clamp is performed) AMS-221F (Bird's nest reduction function)

Shorter thread remaining function*

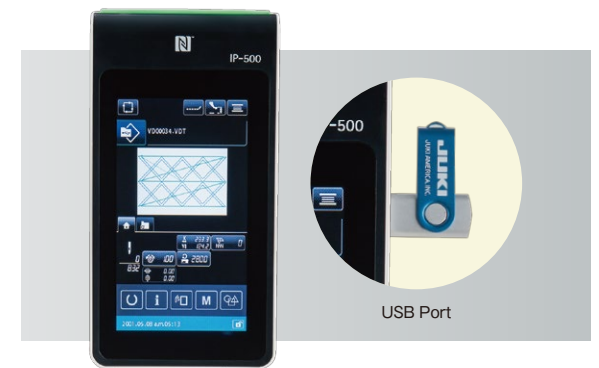
Since the counter knife position has been changed, length of needle thread and bobbin thread remaining on the material after thread trimming is reduced to 5 mm or less. As a result, securing of thread at the end of sewing is no longer required.

* The bird's nest reduction function and shorter-thread remaining function cannot be used simultaneously.

Operation panel provided with programmable functions IP-500 (provided as standard)

The IP-500 is the newly-developed operation panel that comes with a high-resolution touch-panel screen. The speed of response to the operation is increased. The operator is able to input/edit data while visually observing the needle entry points. A file name consisting of 12 alphanumeric characters can be set to a piece of pattern data. As a result, it is possible to manage the sewing pattern using the file name.

In addition, since the corrective measure is additionally displayed to the error message, easy resetting of the error is enabled.

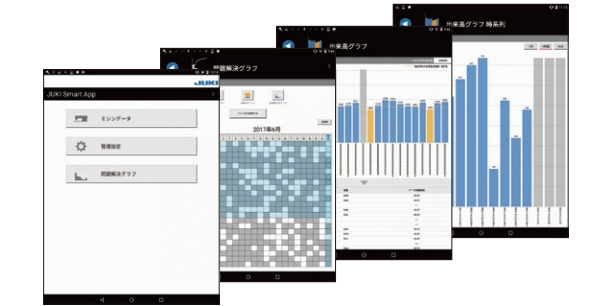


JUKI Smart APP allows you to send and confirm various data.

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.

*Android OS Version 6.0 is recommended to use JUKI Smart APP. (Operation is confirmed with respect to Versions 5.0 and later.) Contact JUKI distributor in your area for how to use the application software.

The sewing machine can be paired with equipment which supports NFC (Near Field Communication) only by holding the equipment over the sewing machine.



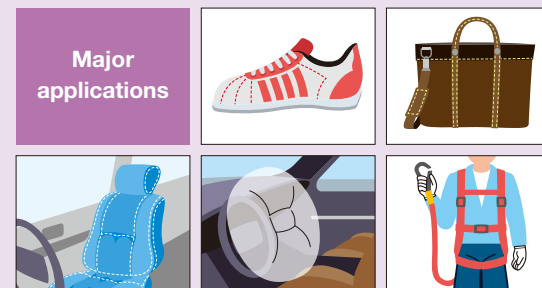
AW-3 Automatic bobbin-thread winding and feeding device

OPTION

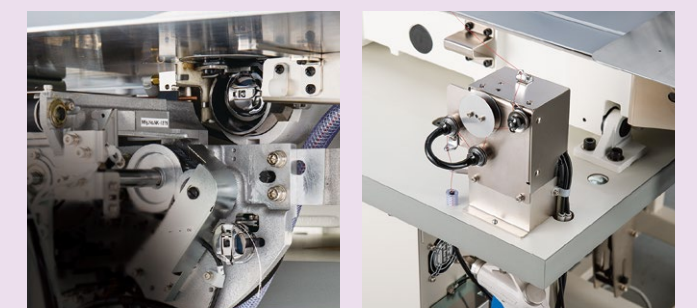
This sewing machine responds to diversified materials and stitches, and there is no time loss for bobbin thread replacement.

AMS-221F has high sewing machine operation rate and bobbin thread occurs frequently replacement. Since the AW-3 changes the bobbin automatically before the bobbin-thread runs out and bobbin-thread is wound during sewing, the operator is able to concentrate on sewing without worrying about shortage of bobbin thread.

In addition, only two bobbin cases are required for sewing. As a result, burdensome control of bobbin thread tension and bobbin-changing work are no longer required, thereby contributing to increased productivity.



This sewing machine provides for attaching parts to shoes and sports shoes (in pairs), sewing automotive interior parts (such as car seats and air bags), attaching handles and belts to bags, sewing two or more small parts at the same time, and sewing full-harness-type safety belts, thereby supporting a broader range of applications.



Automatic bobbin-thread winding and feeding unit

Constant-quantity bobbin thread feeding mechanism