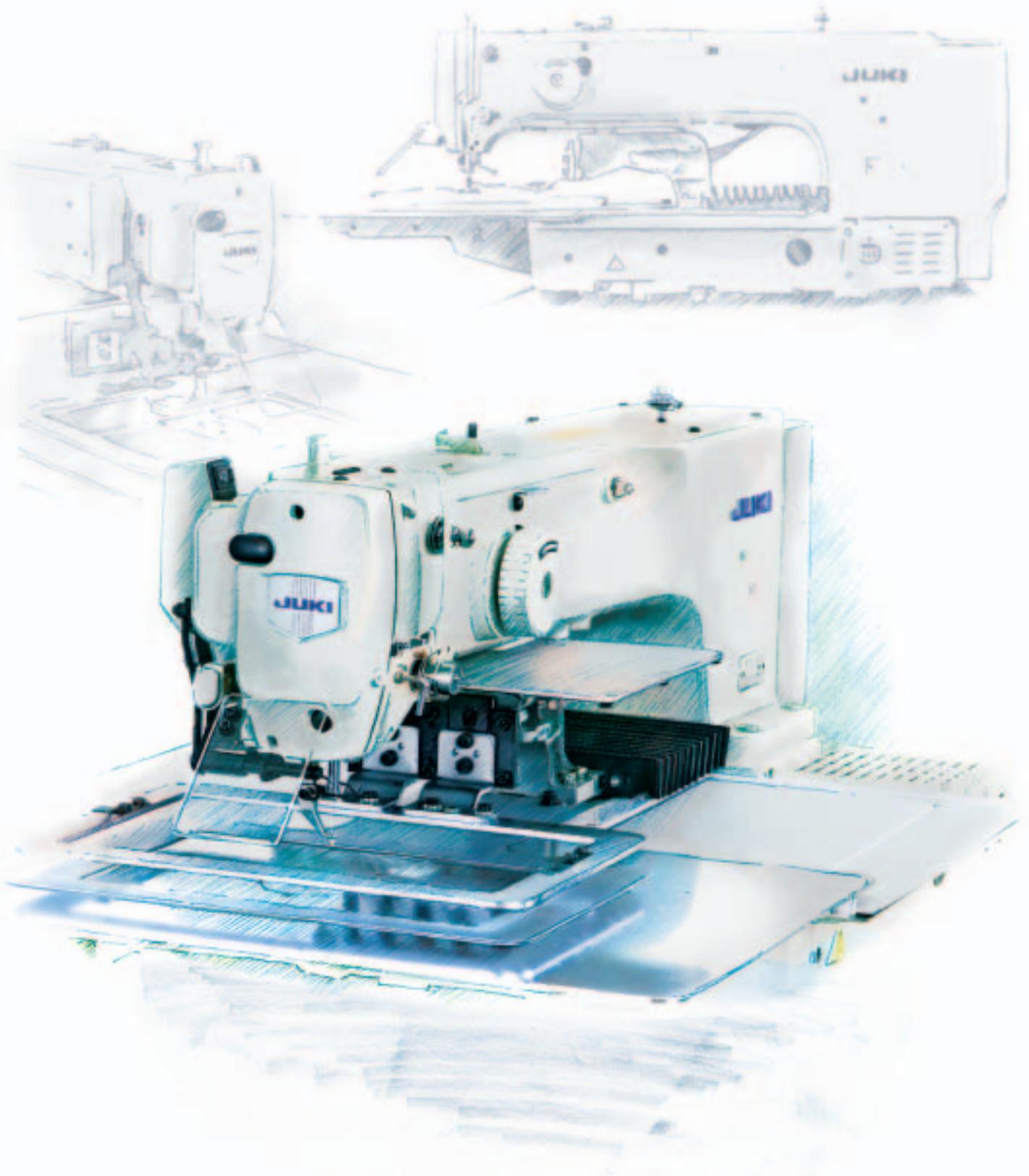


JUKI®



Computer-controlled Cycle Machine with Input Function

AMS-221E series

AMS-221E-2516/IP410 [250mm(X) × 160mm(Y)]

AMS-221E-3020/IP410 [300mm(X) × 200mm(Y)]

Productivity

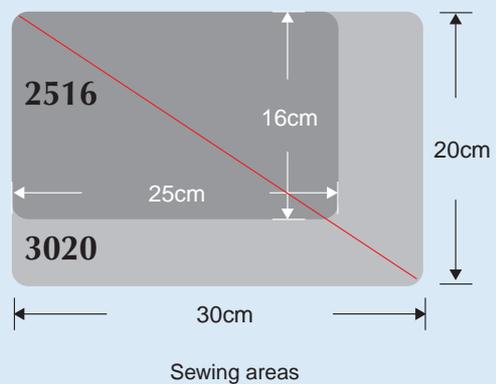
As compared with the conventional models, basic performance has been dramatically improved. The machine is middle area computer-controlled cycle machine which offers excellent operability. Instantaneous acceleration (deceleration) at the beginning (end) of sewing, and high-speed thread trimming have contributed to **24%** shorter total cycle time as compared with that of JUKI's conventional machines.

2516/3020 sewing areas

The machine has two different sewing areas which differ in size.



*AMS-221E-2516



The machine has a wider sewing area and ensures the smooth placement of material. It supports improved seam quality with its highly-accurate sewing capabilities.

Application

The machine can be used for free pattern stitching, parts sewing, reinforcement stitching, etc. Practical applications include shape-tacking sports shoes or leather shoes, attaching large-sized labels, emblems or name labels and attaching belts on bags.

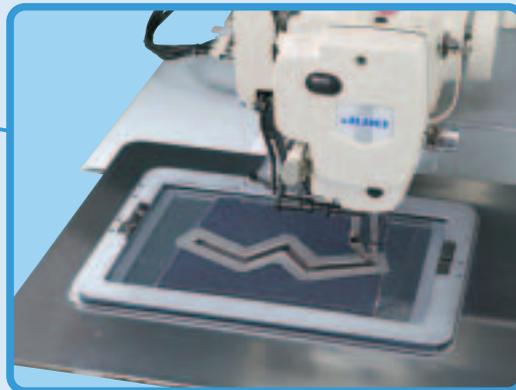
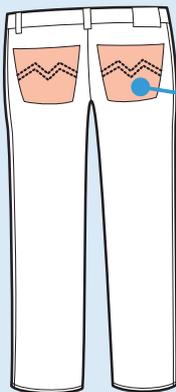


Shape-tacking shoe toe leather pieces



Shape-tacking quarters

The machine supports a broader range of materials and various sewing specifications.



Shape-tacking hip pockets of jeans



Maximum sewing speed

The machine achieves the highest sewing speed of 2,700rpm for a computer-controlled cycle machine.



Instantaneous acceleration

The maximum sewing speed is reached by the 2nd stitch from the beginning of sewing.



Instantaneous deceleration

The machine remains at the maximum sewing speed until just before the end of sewing and decelerates instantaneously.



Thread trimming

A stepping-motor controlled thread trimming mechanism is employed to perform high-speed thread trimming without fail.

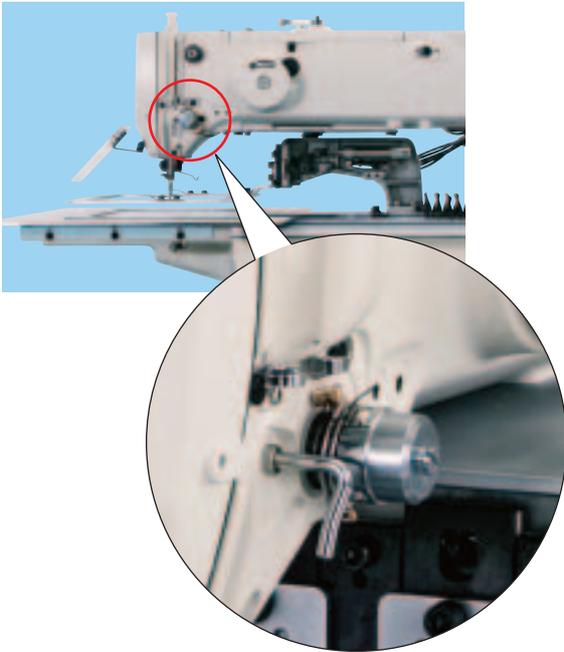
In addition to the substantial improvement of seam quality and operability, the machine demonstrates flexible responsiveness to diverse kinds of materials.

Sewing quality

Active tension

The machine achieves uniformly tensed seams with increased accuracy.

Market-proven active tension has been introduced to the needle thread tension controller. With the active tension, pinpoint changes in the needle thread tension during sewing are enabled. The needle thread tension, therefore, can be set in conjunction with the material thickness and can be corrected according to the direction of sewing on a stitch-by-stitch basis through the operation panel. Since the needle thread tension is reproducible, supporting a broader range of sewing conditions, the time required for setup changing upon process changeover can be reduced.



Programmable intermediate presser

Height of the intermediate presser can be adjusted during sewing.

To support the sewing of multi-layered parts of materials, the lower dead point height of the intermediate presser can be changed steplessly during sewing (standard: 3.5mm; maximum: 7.0mm). The intermediate presser will now be able to clamp the material without fail, thereby preventing troubles in sewing, such as stitch skipping and thread breakage. Furthermore, flaws on the sewing product are prevented by maintaining the intermediate height as desired according to the material thickness. (The intermediate presser stroke is adjustable between 0 and 10mm.)



*A photograph is the separately-driven feeding frame type for AMS-210E.

Operability

Pedal for the feeding frame which are best-suited to applications are available.

A Pedal for the monolithic feeding frame

Since the pedal is provided with a mechanical valve, it is capable of moving the feeding frame up and down as in the case with the manual pedal.

B Pedal for the separately-driven feeding frame

The right and left pedals are interlocked with the right and left parts of the feeding frame.



A Pedal for the monolithic feeding frame



B Pedal for the separately-driven feeding frame

The large-sized liquid crystal touch panel, which has been developed to ensure ease of operation, dramatically increases efficiency in edit work.

IP-410

Operation panel provided with programmable functions

The IP-410 touch panel offers market-proven ease of operation. It is provided with a wide screen and programmable functions. The color LCD unit displays sewing data such as stitch shape, needle thread tension, enlargement/reduction ratio, maximum sewing speed and the number of stitches at a glance. For data edit operations, detailed data is shown on the screen simply by lightly pressing the display icon, thus contributing to dramatically enhanced efficiency.

The language display function supports three different languages, Japanese, Chinese and English.

Programmable functions and error messages can be displayed in one of the three languages (Japanese, Chinese and English) by changing over the language display.



The data storing capacity of the main body of the sewing machine has been substantially enhanced.

Sewing data created with the IP-410 can be stored in the memory of the main body of the sewing machine. The memory capacity is a maximum of 200 different patterns (max. 20,000 stitches). When external media (CF card) is used, as many as 999 different patterns (max. 50,000 stitches/pattern and the max. number of stitches that can be stored in the memory is 24,000,000) can be stored.

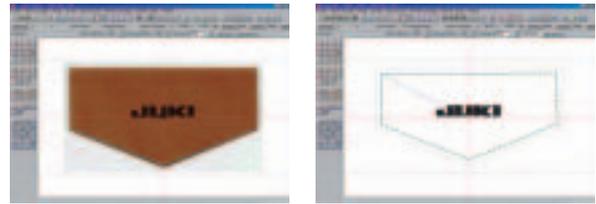
The machine can be connected to a personal computer by using a commercially-available communication cable (RS-232C: Reverse type). Further variable data entry and edit work is enabled by the use of software (PM-1) which is able to create/edit data on the personal computer together with your machine.



Options

Programming software for computer-controlled sewing machine <PM-1> Ver 2.01

● In the actual editing work, a larger and more-detailed shape of the sewing data is displayed for reviewing than that on the IP-410. For complicated and fine data editing, frequent trial stitching can be directly performed in repetition. This helps the operator eliminate stress in editing work and allows him / her to sew a pattern for a desired design.



Options

Model	Part No.	Description	Feature
FU-06	—	Pneumatic inverted clamp device	The model is best-suited to circular sewing process, for attaching small patches such as labels and emblems.
—	40035867	Side wiper (asm.)	A side wiping type is also available depending on the sewing products or sewing conditions.
—	40036668	Relay cable asm. for the side wiper	
—	40035692	Needle cooler (asm.)	It blows air on the needle to prevent thread breakage due to heat.
—	B25822210A0	Cassette holder (asm.)	The next material to be sewn can be placed between the top and bottom plates of the cassette holder while the machine is still engaged in the sewing of the currently set material.
	40052328	Cassette holder fixing base (asm.)	
—	40052330	One-touch clamp	The feeding frame and the feed plate can be quickly changed without any tools.



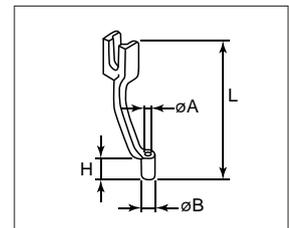
Pneumatic inverted clamp device



Cassette holder



One-touch clamp



Needle / Needle hole guide

Needle / Needle hole guide / Intermediate presser corresponding table

Needle Number	Needle hole guide			Intermediate presser	
	Part No.	Needle hole diameter	Application	Part No.	Dimension (øAXøBXHXL)
#09~#11	B242621000C	ø1.6	Knit and knitting fabric (option)	B1601210D0E (option)	ø1.6 X ø2.6 X 5.7 X 37.0
#11~#14	B242621000A	ø1.6	Light- to medium-weight (S type)	40023632 (standard)	ø2.2 X ø3.6 X 5.7 X 38.5
#14~#18	B242621000B	ø2.0	Medium- to heavy-weight (H type)	B1601210D0FA (option)	ø2.2 X ø3.6 X 8.7 X 41.5
#18~#21	B242621000D	ø2.4	Heavy-weight (option)	B1601210D0BA (option)	ø2.7 X ø4.1 X 5.7 X 38.5
	B242621000F	ø3.0			
#22~#25	B242621000G	ø3.0(with counterbore)	Extra heavy-weight (option)	B1601210D0CA (option)	ø3.5 X ø5.5 X 5.7 X 38.5
#18~#25	B242621000H	ø3.0(with eccentric)	For the prevention of stitch skipping on heavy-weight materials (option)		

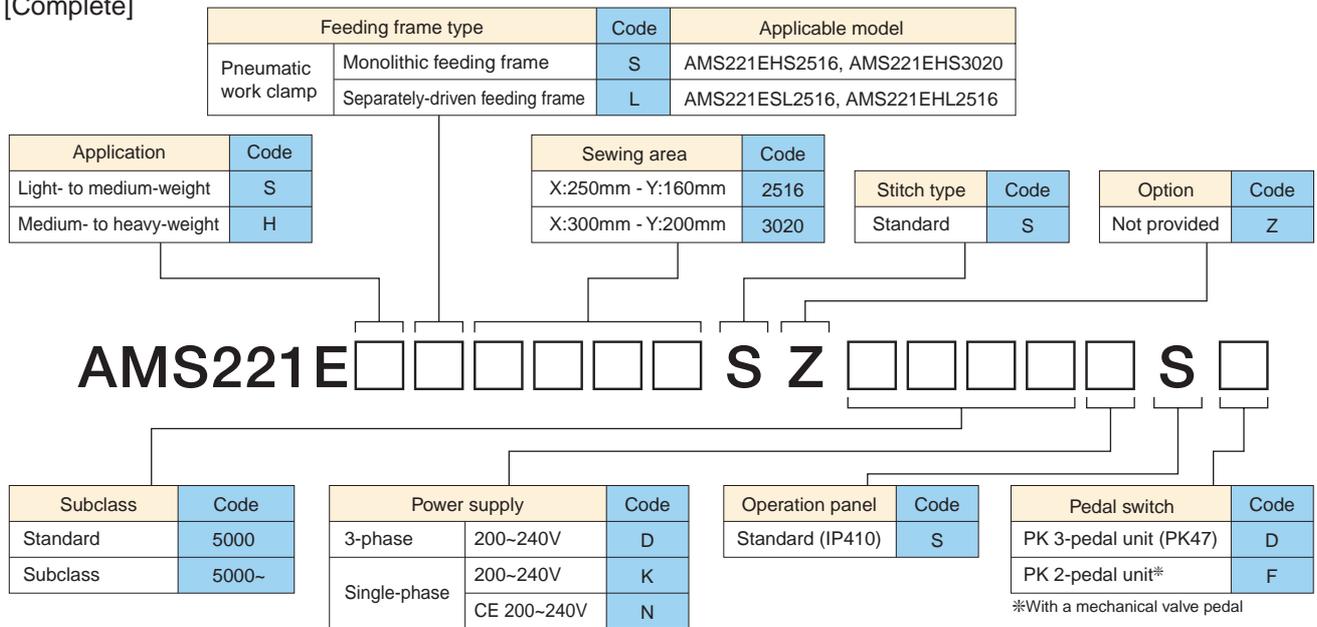
Blank materials to be machined

Part No.	Description		
40052336	Feeding frame blank (with knurl)		A X B X t 229 X 347 X 4 (mm)
40052337	Feeding frame blank (without knurl)		
40052338	Feeding frame blank (without knurl / right and left combined use)		229 X 169 X 4 (mm)
40052339	Feeding frame blank, right (with knurl)		
40052340	Feeding frame blank, left (with knurl)		239 X 353 X 1.2 (mm)
40052341	Lower plate blank (with knurl)		
40052342	Lower plate blank (without knurl)		
40052343	Lower plate blank (without knurl)		239 X 353 X 0.5 (mm)

When you place orders

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

[Complete]



●To order, please contact your nearest JUKI distributor.

Specifications

Model name	AMS-221E**-2516, AMS-221E**-3020*		
Application	Medium- to heavy-weight: H	Light- to medium-weight: S	Medium- to heavy-weight: H
Feeding frame type	Monolithic feeding frame: S	Separately-driven feeding frame: L	
	Pneumatic work clamp		
Max. sewing speed	2,700rpm (when stitch length is 3mm or less)		
Sewing area	2516: 250mm (X) X 160mm (Y), 3020: 300mm (X) X 200mm (Y)		
Stitch length	0.1~12.7mm (0.05mm step)		
Needle bar stroke	41.2mm		
Lift of the feeding frame	30mm		
Stroke of intermediate presser	Standard 4mm (0~10mm)		
Lift of the intermediate presser	20mm		
Variable lower position of the intermediate presser	Standard 0~3.5mm (max. 0~7.0mm)		
Needle thread tension	Active tension (electronic thread tension control mechanism)		
Needle (at the time of delivery)	DP X 17 (#18)	DP X 5 (#14)	DP X 17 (#18)
Hook	Double-capacity shuttle hook		
Storage of pattern data in the memory	EEP-ROM: Max. 200 patterns (max. 20,000 stitches / pattern)		
	External media (CF card): Max. 999 patterns (max. 50,000 stitches / pattern)		
Enlarging / Reducing facility	1~400% (0.1% step), Pattern enlargement / reduction can be done by increasing / decreasing either stitch length or the number of stitches		
Pattern selecting function	Pattern number selection		
	EEP-ROM: 1~200, External media (CF card): 1~999		
Bobbin thread counter	Up / Down system (0~9,999)		
Product counter	Up / Down system (0~9,999)		
Lubrication	Only the hook section needs a minute-quantity lubrication (tank system)		
Lubricating oil	Hook: JUKI New Defrix Oil No.2 (equivalent to ISO VG32)		
Sewing machine motor	Compact AC servomotor (direct-drive system)		
Power requirement / Power consumption	Single-phase, 3-phase 200~240V / 700VA		
Compressed air	0.5~0.55MPa (2516), 0.35~0.4MPa (3020)		
Air consumption	1.8dm ³ / min(ANR)		
Total weight	197kg (2516), 207kg (3020)		
Dimensions	1,200mm X 1,000mm X 1,200mm		

*For the AMS-221E**-3020, the classification of specifications which is available is only S (monolithic feeding frame type).

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.



JUKI CORPORATION HEAD OFFICE

The environmental management system to promote and conduct
① the technological and technical research, the development and design of the products in which the environmental impact is considered,
② the conservation of the energy and resources, and the recycling, in the research, development, design, distribution, sale and maintenance service of the industrial sewing machines, household sewing machines and industrial-use robots, etc., and in the sale and maintenance service of the data entry system and in the purchase, distribution and sale of the household commodities including the healthcare products.