

JUKI®

AMS-210E series

1306 / 1510 / 2206 / 2210

130mm(x) X 60mm(y) 150mm(x) X 100mm(y) 220mm(x) X 60mm(y) 220mm(x) X 100mm(y)

AMS-210E-1306
130mm(x) X 60mm(y)

AMS-210E-1510
150mm(x) X 100mm(y)

AMS-210E-2210
220mm(x) X 100mm(y)

AMS-210E-2206
220mm(x) X 60mm(y)



Computer-controlled Cycle Machine with Input Function

AMS-210E series

Computer-controlled cycle machine with greater improvement of basic functions compared with the conventional machine.

Preparing 4 different sewing areas corresponding to application.

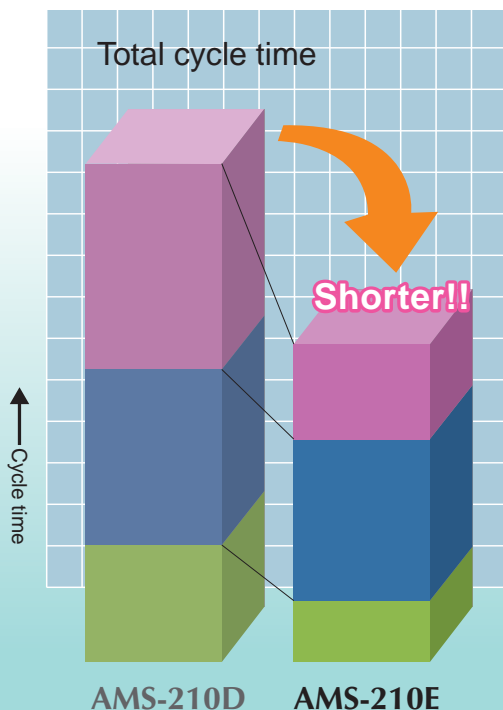


AMS-210EHS-1306



Intelligent panel IP-400

Productivity



The cycle time is dramatically reduced by **35%** as compared with that of the conventional models.

Not only the instantaneous acceleration at the beginning and instantaneous deceleration at the end of sewing, but also the increased speed of thread trimming action and work clamp lifting action have contributed to substantially reduced total cycle time.

- Beginning of sewing (the presser foot comes down ~ 8 stitches)
- During sewing (44 stitches)
- End of sewing (4 stitches ~ the thread trimmer cuts thread and the work clamp foot goes up)

*Sewing pattern used for comparison: Semi-circular shape pattern, 2.1 mm-pitch, and 56 stitches Application: Shoes

AMS-210E-1306/IP-400
 AMS-210E-1510/IP-400
 AMS-210E-2206/IP-400
 AMS-210E-2210/IP-400

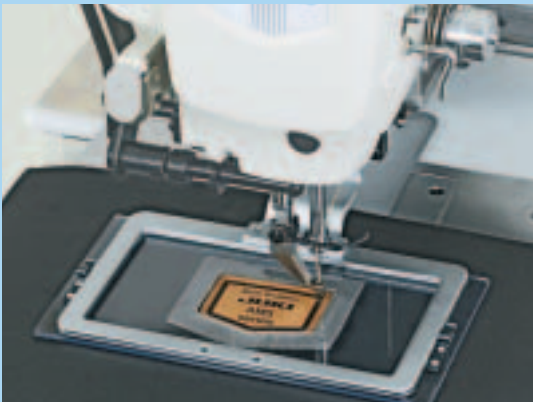
<130mm(X)× 60mm(Y)>
 <150mm(X)×100mm(Y)>
 <220mm(X)× 60mm(Y)>
 <220mm(X)×100mm(Y)>

Application

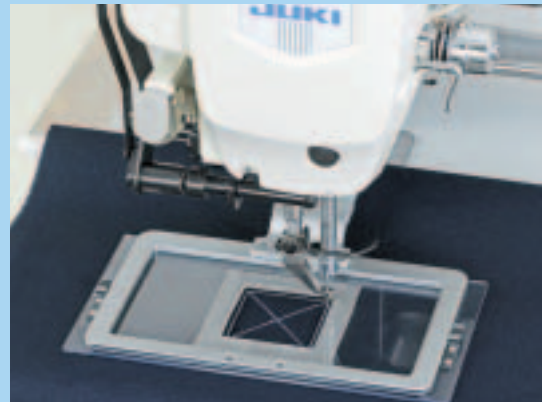
The machine can be used for free pattern stitching, parts sewing, reinforcement stitching, etc.

Practical applications include attaching labels, emblems or name labels, attaching Velcro, shape-tacking pockets and special bartacking.

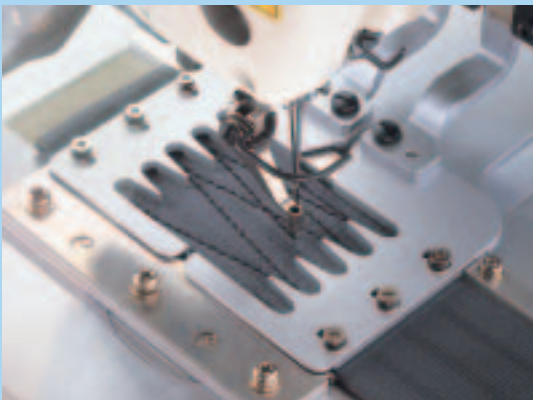
The machine supports a broader range of materials and various sewing specifications.



Sewing emblems



Reinforcement stitching



Reinforcement stitching on seat belts



Sewing labels (FU05 type inverting clamp device)



Maximum sewing speed:

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



Work clamp lifter:

Thanks to the stepping motor drive, the work clamp lifter's operating time has been reduced to one-fourth that of the conventional device.



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:

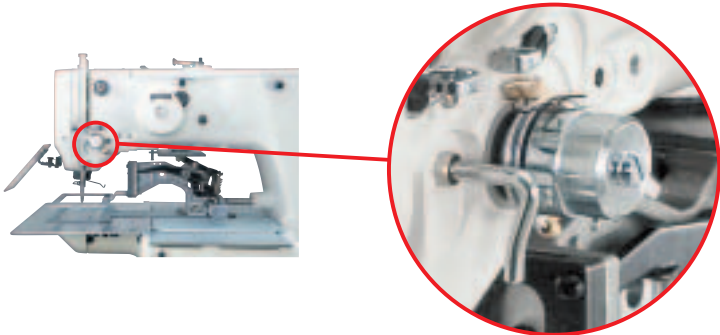
A stepping-motor controlled thread trimming mechanism is employed to perform high-speed thread trimming without fail.

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.

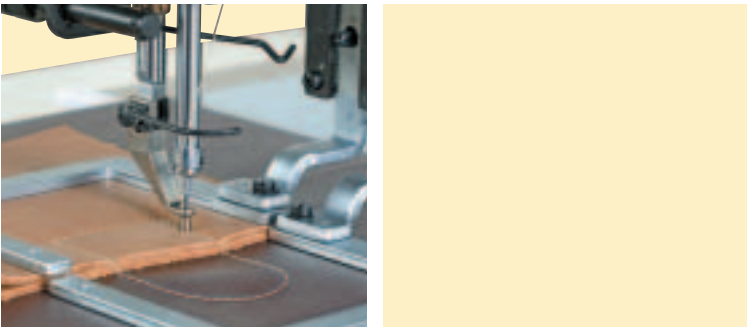
Market-proven active tension has been introduced to the needle thread tension controller. With the active tension, pinpoint changes in the needle thread tension during sewing are enabled. The needle thread tension, therefore, can be set in conjunction with the material thickness and can be corrected 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.



Close-up picture of active tension

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: 0~3.5mm; maximum: 0~7.0mm). 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.)




Operability

The work clamp lifting method can be selected according to the application of your machine.


Stepping motor work clamp (monolithic feeding frame)

A stepping motor is used for driving the feeding frame. The intermediate height setting of the feeding frame, which has not been possible with the conventional magnet drive, is now possible. This facilitates positioning of the sewing product and operation of the machine, resulting in increased operation efficiency.




Pneumatic work clamp (separately-driven feeding frame)

Pneumatic pressure is used for driving the feeding frame. The right and left pieces of the feeding frame are independent from each other and can be separately lifted or lowered. This type of feeding frame is effective for separately clamping the body and part or to sew sewing products that has differences in thickness.



Pneumatic work clamp (monolithic feeding frame type)

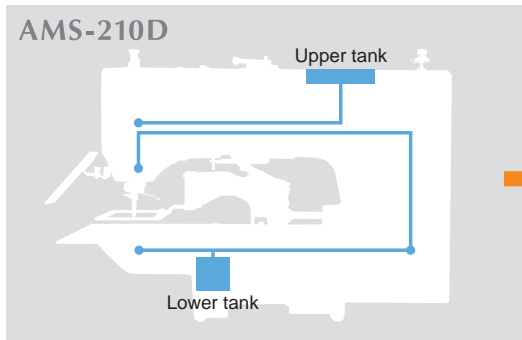
Pneumatic pressure is used for driving the feeding frame. Both the feeding frame (right and left parts) are monolithically structured. This type helps reduce the time required to set the material on the machine. It effectively works in the reinforcing stitching or shape-tacking process.



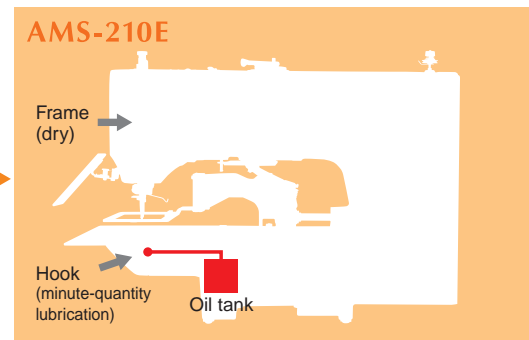
Semi-dry

The advanced dry technology prevents oil stains.

The frame (needle bar unit and thread take-up unit) is lubricated with grease, and the hook is fed with a minute quantity of oil from the oil tank. JUKI's advanced dry technology, which is utilized in a number of our sewing machine models, protects your products from being stained with oil.



Lubrication / circulation diagram



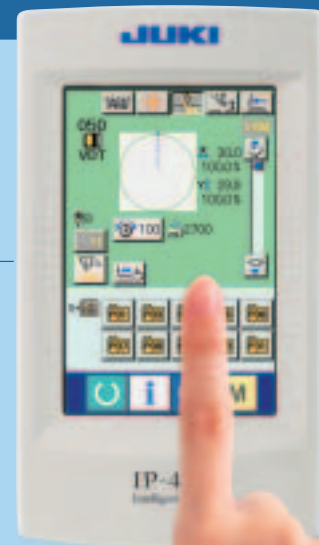
Lubrication diagram

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

IP-400

Operation panel IP-400 provided with programmable functions

The IP-400 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.



Information capability

Information capability: As our proposal to customers, the following three pieces of function information have been prepared.

Information on operation-related measurements

Information on the actual operating rate of the machine, pitch time, machine time and machine's running speed can be displayed on the screen.

Information on maintenance and inspection

Information such as the time for oil changing (grease-up), time for needle changing and time for cleaning is conveyed through alarm messages.

Information on production management

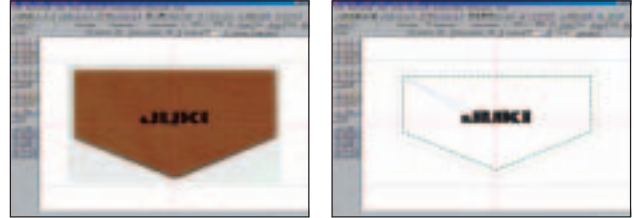
Target output and actual output can be displayed to verify the state of progress of production lines or groups.

*Function information may be updated from time to time.

Options

Programming software for computer-controlled sewing machine PM-1

In the actual editing work, a larger and more-detailed shape of the sewing data is displayed for reviewing than that on the IP-400. 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. Input image data (BMP file) copied by a scanner.

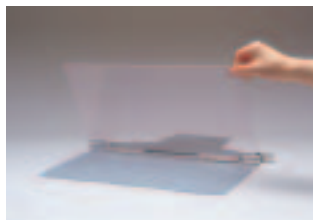


Options

Model	Part No.	Description	Feature
FU-05	40036596	Pneumatic inverted clamp device	The model is best-suited to circular sewing, for attaching small patches such as labels and emblems. *For the S type (motor-driven work clamp), the AMS-210E pneumatic set is required.
MU12	—	Milling unit	The unit can be mounted on the main body of the sewing machine to carry out the milling operations of work clamps or feed plates.
—	40036526	Parts set for AMS-210E (MU12)	It is a replacement parts set to be used with the MU12 (milling unit).
—	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. *For the S type (motor-driven work clamp), the AMS-210E pneumatic set is required.
—	40035696	Air unit	The unit is required when the S type (motor-driven work clamp) uses FU-05 (pneumatic inverted clamp device) and needle cooler.
—	B2594210DA0	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.
—	B2593210DA0	Cassette holder fixing base (asm.)	
—	B2585210DB0	One-touch utility clamp *Exclusive to the S type (motor-driven work clamp)	The feeding frame and the feed plate can be quickly changed without any tools.
—	B2586210DB0	One-touch utility clamp *Exclusive to the L type (pneumatic type work clamp)	
—	40040138	Pedal SW cable set	Possible to add SW to the 2-row pedal (PK78) (possible to make 3 consecutive motions)
—	40042352	Mechanical bulb unit	Possible to make up and down movements same as manual pedal. *Not available to S-type machine head.



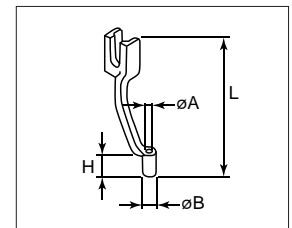
Pneumatic inverted clamp device



Cassette holder



One-touch utility clamp



Needle / Needle hole guide

Needle / Needle hole guide / Intermediate presser corresponding table

Needle	Needle hole guide			Intermediate presser	
Number	Part No.	Needle hole diameter	Application	Part No.	Dimension (øAxøBxHxL)
#09~#11	B242621000C	ø1.6	Knit and knitting fabric (option)	B1601210D0E (option)	ø1.6xø2.6x7.5x37.0
#11~#14	B242621000A	ø1.6	Light- to medium-weight (S type)	40023632 (standard)	ø2.2xø3.6x7.5x38.5
#14~#18	B242621000B	ø2.0	Medium- to heavy-weight (H type)	B1601210D0FA (option)	ø2.2xø3.6x10.5x41.5
#18~#21	B242621000D	ø2.4	Heavy-weight (option)	B1601210D0BA (option)	ø2.7xø4.1x7.5x38.5
	B242621000F	ø3.0			
#22~#25	B242621000G	ø3.0 (with counterbore)	Extra heavy-weight (option)	B1601210D0CA (option)	ø3.5xø5.5x7.5x38.5
#18~#25	B242621000H	ø3.0 (with eccentric)	For the prevention of stitch skipping on heavy-weight materials (option)		

When you place orders

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

[Machine head]

Application	Code	Feeding frame type	Code	Applicable model	Sewing area	Code
Light- to medium-weight	S	Motor-driven work clamp	S	AMS-210E1306	X:130mm - Y:60mm	1306
Heavy-weight	H	Pneumatic work clamp	L	AMS-210E1306, 1510, 2206, 2210	X:150mm - Y:100mm	1510
					X:220mm - Y:60mm	2206
					X:220mm - Y:100mm	2210

AMS210E **S** **Z**

Stitch type	Code	Option	Code	Subclass	Code	Pedal switch	Code	Applicable model
Standard	S	Not provided	Z	Standard	5000	PK 2-pedal unit (PK78)	C	AMS-210E*S1306, *L2206
				Subclass	5000~	PK 3-pedal unit (PK47)	D	AMS-210E*L1306, *L1510
						PK 2-pedal unit*	F	AMS-210E*L2210

*With a mechanical valve pedal

[Control box]

MC583

Power supply			Code	Operation panel		Code
3-phase	200~240V		E	IP panel for AMS-210E		IP400F
Shingle-phase	200~240V		K			
	CE 200~240V (not provided with power switch)		N			

●To order, please contact your nearest JUKI distributor.

Blank materials to be machined

Part No.	Description		
40035606	Feeding frame blank (with knurl)		$A \times B \times t$ 97 × 164 × 4 (mm)
40035607	Feeding frame blank (without knurl)		
40035608	Feeding frame blank (without knurl)		97 × 81.5 × 4 (mm)
40035609	Feeding frame blank, right (with knurl)		
40035610	Feeding frame blank, left (with knurl)		
B2556210D0A	Lower plate blank (with knurl)		168 × 131 × 1.2 (mm)
B2556210D0B	Lower plate blank (without knurl)		

Specifications

Model name	AMS-210ESS1306	AMS-210EHS1306	AMS-210ESL1306	AMS-210EHL1306
Sewing area	130mm(X)X60mm(Y)			
Feeding frame type	Motor-driven feeding frame (lifting amount: 25mm)		Pneumatic feeding frame (lifting amount: 30mm)	
Application	Light- to medium-weight DPX5(#14)	Heavy-weight DPX17(#18)	Light- to medium-weight DPX5(#14)	Heavy-weight DPX17(#18)
Compressed air / Air consumption	—		0.35~0.4(max. 0.55)MPa / 1.8dm ³ /min(ANR)	
Dimensions / Weight	1,200mmX710mmX1,200mm / Machine head: 69kg, Control box: 16.5kg			

Model name	AMS-210ESL1510	AMS-210EHL1510
Sewing area	150mm(X)X100mm(Y)	
Feeding frame type	Pneumatic feeding frame (lifting amount: 30mm)	
Application	Light- to medium-weight DPX5(#14)	Heavy-weight DPX17(#18)
Compressed air / Air consumption	0.35~0.4(max. 0.55)MPa / 1.8dm ³ /min(ANR)	
Dimensions / Weight	1,200mmX770mmX1,200mm / Machine head: 73kg, Control box: 16.5kg	

Model name	AMS-210ESL2206	AMS-210EHL2206
Sewing area	220mm(X)X60mm(Y)	
Feeding frame type	Pneumatic feeding frame (lifting amount: 30mm)	
Application	Light- to medium-weight DPX5(#14)	Heavy-weight DPX17(#18)
Compressed air / Air consumption	0.35~0.4(max. 0.55)MPa / 1.8dm ³ /min(ANR)	
Dimensions / Weight	1,200mmX710mmX1,200mm / Machine head: 75kg, Control box: 16.5kg	

Model name	AMS-210ESL2210	AMS-210EHL2210
Sewing area	220mm(X)X100mm(Y)	
Feeding frame type	Pneumatic feeding frame (lifting amount: 30mm)	
Application	Light- to medium-weight DPX5(#14)	Heavy-weight DPX17(#18)
Compressed air / Air consumption	0.35~0.4(max. 0.55)MPa / 1.8dm ³ /min(ANR)	
Dimensions / Weight	1,200mmX770mmX1,200mm / Machine head: 77kg, Control box: 16.5kg	

Specification common to all models

Max. sewing speed	2,700rpm
Stitch length	0.1~12.7mm (0.05mm step)
Needle bar stroke	41.2mm
Lift / Stroke of the intermediate presser	Lifting amount: 20mm / Stroke: Standard 4mm (0~10mm)
Variable lower position of the intermediate presser	Standard 0~3.5mm (max. 0~7mm)
Needle thread tension	Active tension (electronic thread tension control mechanism)
Hook	Double-capacity shuttle hook
Storage of pattern data in the memory	EEP-ROM: Max. 200 patterns (max. 20,000 stitches / pattern)
	SmartMedia: 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
Bobbin thread / Product counter	Up / Down system (0~9,999)
Lubrication / Lubricating oil	Only the hook section needs a minute-quantity lubrication (tank system), 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 / 500VA



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.

JUKI®
JUKI CORPORATION
MARKETING & SALES H.Q.

8-2-1, KOKURYO-CHO, CHOFU-SHI,
 TOKYO 182-8655, JAPAN
 PHONE : (81) 3-3480-2357, 2358
 FAX : (81) 3-3430-4909, 4914
<http://www.juki.com>

* 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.