

AMADA PRESS SYSTEM CO., LTD.

ORII NC Straightener-Feeders



General Catalogue for the Straightener-Feeders

LCC Series



 AMADA®



Lineup of the highly reliable **LCC Series** of NC Straightener-Feeders

Material thickness

Compact Type P 8 ▶

LCC 03KL Series

Width: 1.968" ~ 11.811"
Thickness: Max 0.126"



LCC SA Series

Width: 1.968" ~ 15.748"
Thickness: Max 0.126"



LCC KR3 Series

Width: 1.968" ~ 15.748"
Thickness: Max 0.126"



LCC HF1 Series

Width: 1.968" ~ 23.622"
Thickness: Max 0.126"

P 4 ▶



High-Performance Type



LCC HF4 R Eco **LCC HF2** Series

Width: 1.968" ~ 39.370"
Thickness: Max 0.177"

P 4 ▶

LCC HY Series

Width: 1.968" ~ 39.370"
Thickness: Max 0.177"

P 5 ▶



LCE HR3 R Eco Series

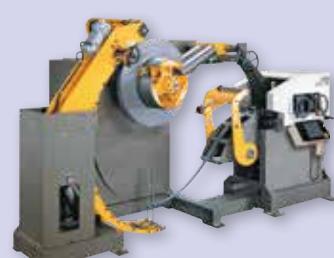
Width: 2.756" ~ 23.622"
Thickness: Max 0.236"

P 6 ▶

LCC HR3 Series

Width: 2.756" ~ 51.181"
Thickness: Max 0.236"

P 6 ▶



LCC 92HT Series

Width: 2.756" ~ 9.842"
Thickness: Max 0.236"

P 5 ▶

LCC HL Series

Width: 2.756" ~ 51.181"
Thickness: Max 0.236"

P 7 ▶



Optional



Heavy-Duty Type P 9 ▶



LCC GD Series

Width: 2.756" ~ 31.496"
Thickness: Max 0.472"



LCC PM2 Series



Optional

Width: 2.756" ~ 51.181"
Thickness: Max 0.354"

Material width

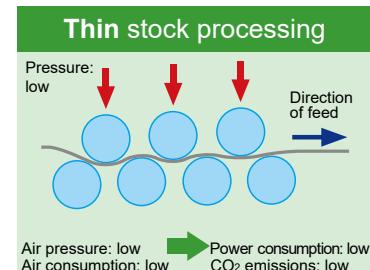
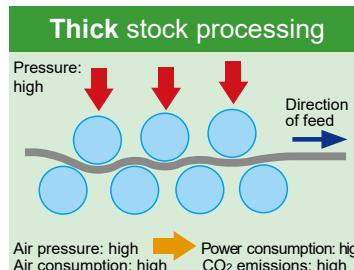
The ORII brand, which incorporates high technology and abundant experience, provides a wide variety of options for the diverse needs of our customers.



Energy saving of up to 50% by the ECO Release mechanism



The ECO Release mechanism contributes to energy savings. Since it is possible to control the optimum air cylinder pressure according to the processing material and plate thickness, power consumption can be reduced by up to about 50%.



TP-CCS control system with a user-friendly touch screen

Required information for setup, operation, maintenance, etc. is centrally managed in the four basic modes of setting, setup, operation, and maintenance. It is a total operation system equipped with various functions to support diversification and sophistication of product processing and shortened work time.

Setting



Setup



Operation



Maintenance

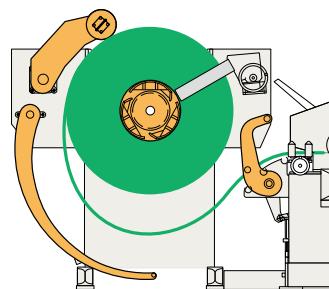


Improved product quality and simplified setup with analog loop control

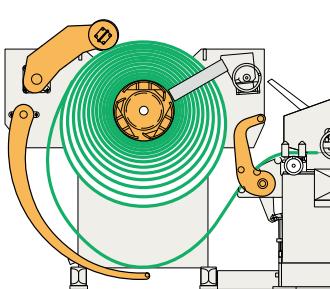
Analog loop control is a function that converts the loop control of the uncoiler into analog and synchronizes the unwinding speed of the coil with the line speed.

During automatic operation, the uncoiler keeps rotating at a constant speed without stopping, preventing the coil material from unraveling uncontrollably and promoting stable processing. This prevents scratches on the coil material, improving product quality and the life of parts, and simplifies coil material replacement.

With analog loop control



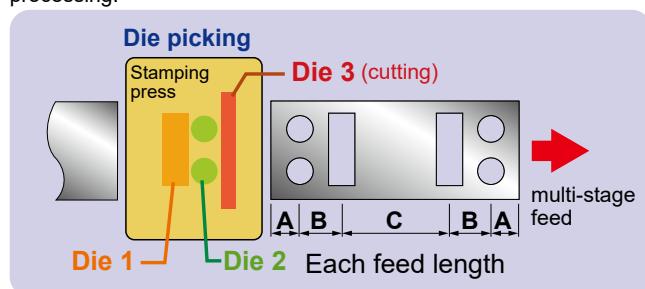
Without analog loop control



Diverse processing with multistage die picking

We have introduced our unique rationalization know-how to meet the strong needs of a multi-stage feeding system for stamping press machines.

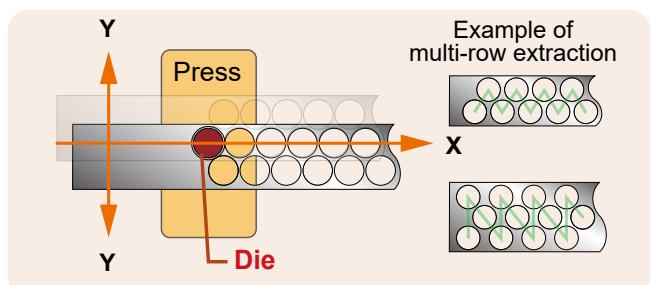
This is a function to set the feed length, die selection, etc. for each stage and operation of the machine. Up to 99 steps can be set for each product. The number of repetitions and the synchronization signal to the press can also be set, supporting a wide variety of processing.



Yield improvement with zigzag feeding system

It greatly improves the yield and reduces the material cost.

This is an optional feed system that enables zigzag feeding, which will reduce the generation of scrap material and cost, and is environmentally conscious.





A lineup of NC Straightener-Feeders, from space-saving to High-Performance Type

High-Performance Type

LCC HF1 Series

Width: 1.968" ~ 23.622"
Thickness: Max 0.126"



This is an economical model that takes advantage of on-site needs.

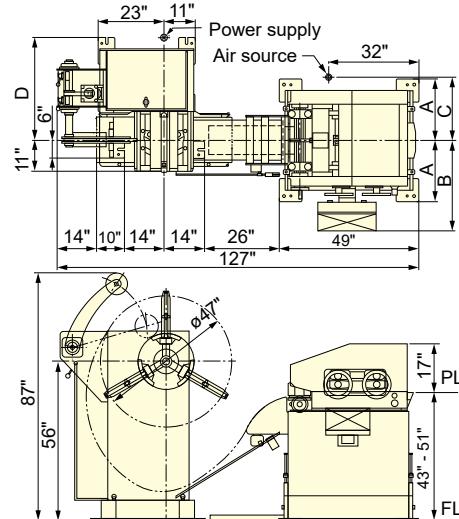


It is an intelligent high-performance type equipped with a **TP-CCS** control system that realizes total operation.



Main dimensions

LCC HF1 type



Model name	A	B	C	D
LCC04HF1	21"	31"	22"	35"
LCC05HF1	23"	33"	24"	37"
LCC06HF1	25"	35"	26"	39"

The path line can be adjusted in the range of 43" - 51".

LCC HF4/HF2 Series

Width: 1.968" ~ 39.370"
Thickness: Max 0.177"

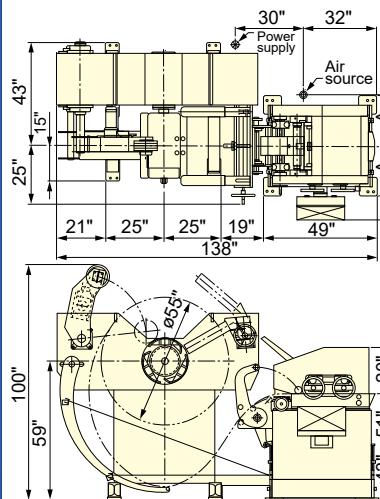


This is a highly operable and reliable model that allows material to be passed through with a simple button operation.

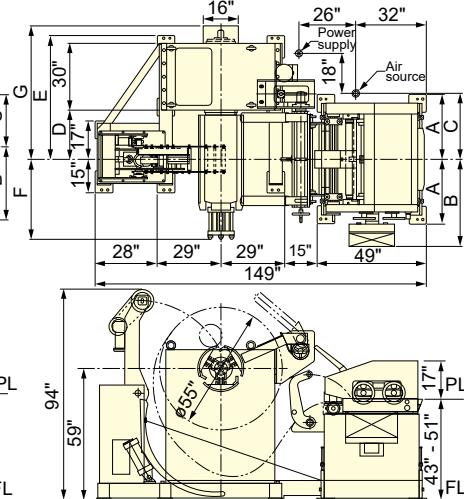


Main dimensions

LCC HF4 type



LCC HF2 type*



Model name	A	B	C
LCC04HF4	21"	31"	22"
LCC05HF4	23"	33"	24"
LCC06HF4	25"	35"	26"

Model name	Mandrel expansion	A	B	C	D	E	F	G
LCC04HF2	Pneumatic	21"	31"	22"	17"	47"	25"	-
LCC05HF2	Pneumatic	23"	33"	24"	17"	47"	25"	-
LCC06HF2	Pneumatic	25"	35"	26"	17"	47"	25"	-
LCC08HF2	Pneumatic	29"	39"	30"	22"	55"	29"	-
LCC08HF2	Hydraulic	29"	39"	30"	22"	55"	36"	59"
LCC10HF2	Hydraulic	33"	43"	33"	26"	59"	38"	63"

*The figure shows the hydraulic expansion / contraction cylinder specifications.

The air expansion / contraction cylinder specifications are different from the above figure.

High-Performance Type

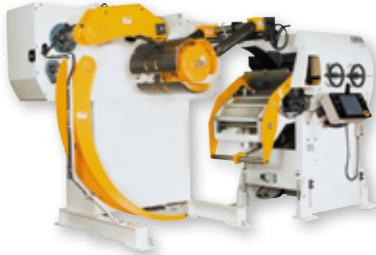
large-scale, which streamlines stamping press processing

LCC HY Series

Width: 1.968" ~ 39.370"

Thickness: Max 0.177"

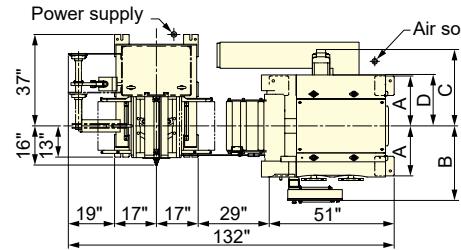
High-precision leveling is achieved by using 11 work rolls.



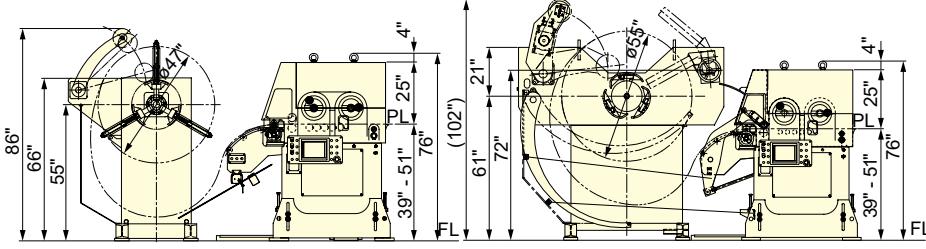
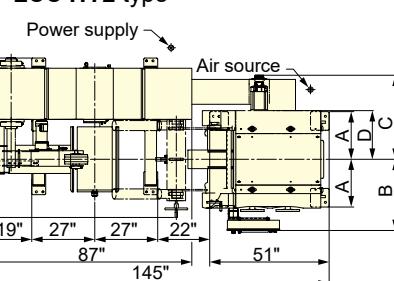
Main dimensions



LCC HY1 type



LCC HY2 type



Model name	A	B	C	D
LCC05HY1	20"	(30")	31"	23"
LCC06HY1	22"	(32")	33"	25"

Model name	A	B	C	D
LCC05HY2	20"	(30")	36"	20"
LCC06HY2	22"	(32")	38"	22"
LCC08HY2	26"	(36")	42"	26"
LCC10HY2	30"	(40")	45"	30"

LCC 92HT Series

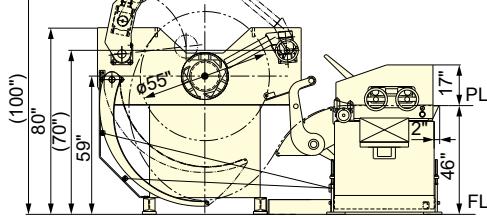
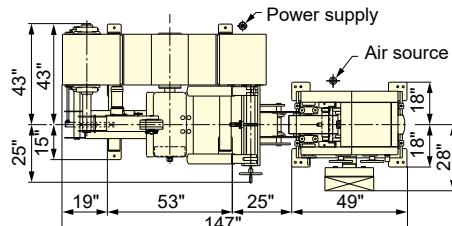
Width: 2.756" ~ 9.842"

Thickness: Max 0.236"

This is ideal for material for small parts and saving space.



Main dimensions





LCC HR3 Series

Width: 2.756" ~ 51.181"



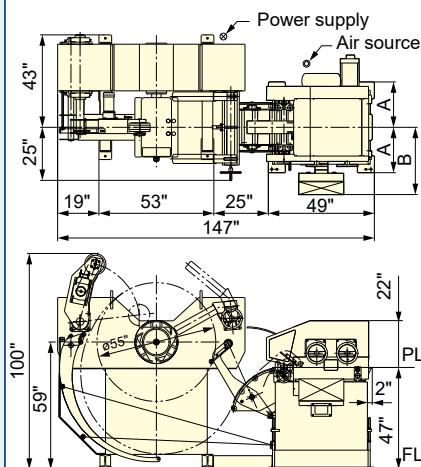
Thickness: Max 0.236"



LCC HR3 Series realizes productivity and operability by condensing high versatility in a compact size.

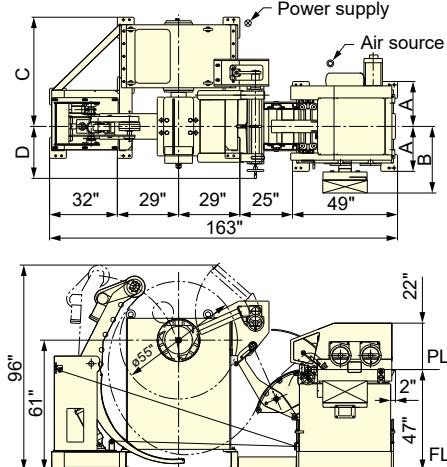
Main dimensions

EAS type (Max coil mass: 6614 lbs)



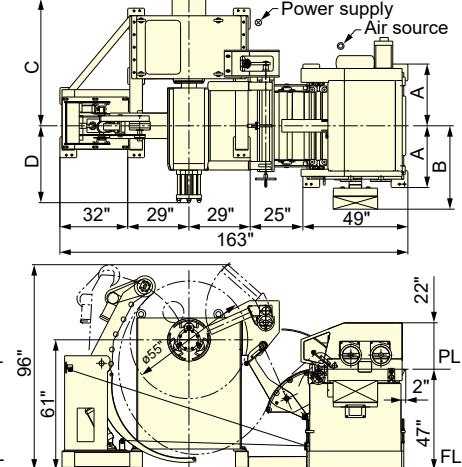
Model name	A	B
LCC04HR3/EAS	21"	31"
LCC05HR3/EAS	23"	33"
LCC06HR3/EAS	25"	35"

VAS type (Max coil mass: 11023 lbs)



Model name	A	B	C	D
LCC04HR3/VAS	21"	31"	51"	24"
LCC05HR3/VAS	23"	33"	51"	24"
LCC06HR3/VAS	25"	35"	51"	24"
LCC08HR3/VAS	29"	39"	55"	29"

MHS type (Max coil mass: 15432 lbs)



Model name	A	B	C	D
LCC08HR3/MHS	29"	39"	59"	36"
LCC10HR3/MHS	33"	43"	63"	38"
LCC13HR3/MHS	39"	49"	69"	46"

LCE HR3 Series

Main dimensions

Width: 2.756" ~ 23.622"
Thickness: Max 0.236"

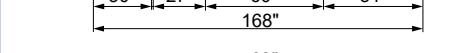


With just a one-button operation, coil material threading and loop formation have been automated. Achieves both improved work setup and high economic efficiency.

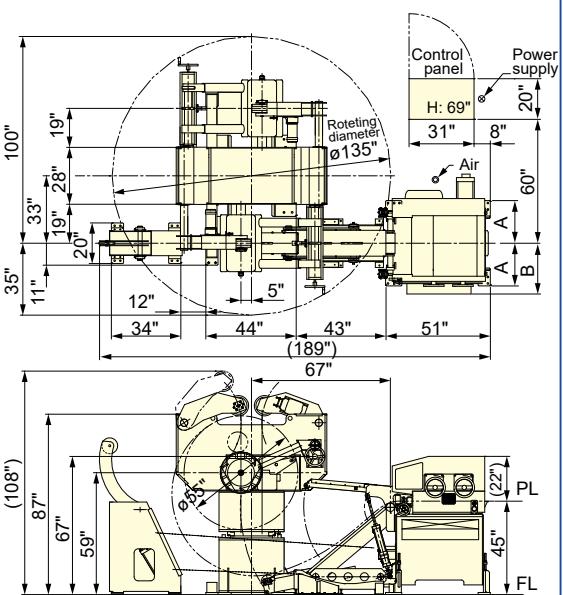


LCE 04/05/06 HR3-EAS single type

Model name	A	B
LCE04HR3-EAS/EVAS	17"	22"
LCE05HR3-EAS/EVAS	19"	24"
LCE06HR3-EAS/EVAS	21"	26"



LCE 04/05/06 HR3-EVAS double type



High-Performance Type

LCC HL Series

Width: 2.756" ~ 51.181"
Thickness: Max 0.236"



Optional

This achieves excellent flatness by utilizing 11 work rolls.

The HLU type can straighten high-tensile materials by adopting an all-roll drive system and strengthening the frame rigidity.



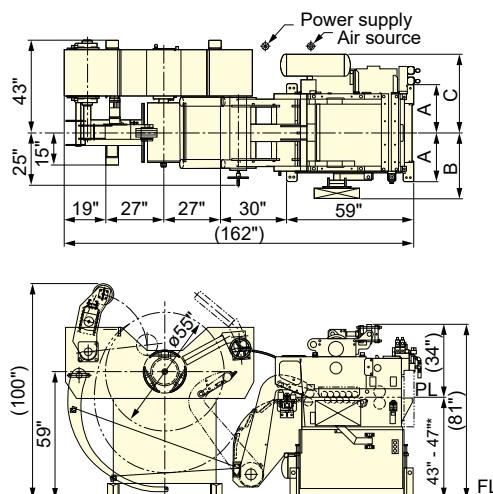
Main dimensions

Optional



LCC HLS-EAS type

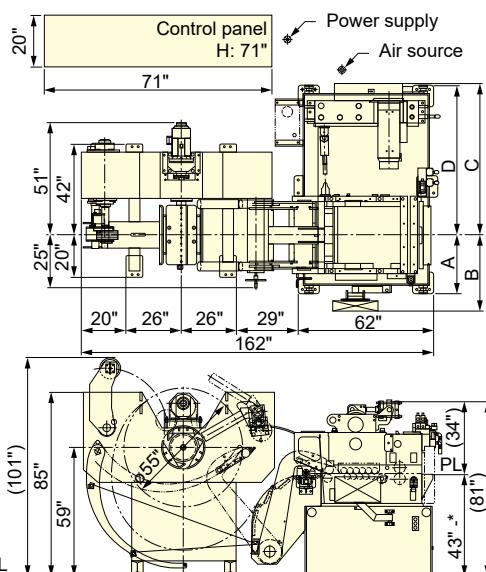
The standard LCC HLS Series has a control panel built into the uncoiler. Depending on a customer's request, the control panel can be separated from the uncoiler.



Model name	A	B	C
LCC06HLS-EAS	23"	31"	36"
LCC08HLS-VAS	27"	35"	40"
LCC10HLS-MHS	31"	38"	44"
LCC13HLS-MHS	36"	44"	50"

* It is possible to adjust the pass line height with a spanner on the jack bolt. The lowest pass line is 43".

LCC HLU-EAS type



Model name	A	B	C	D
LCC06HLU-EAS	27"	35"	70"	69"
LCC08HLU-VAS	31"	37"	74"	73"
LCC10HLU-MHS	35"	41"	78"	77"
LCC13HLU-MHS	41"	47"	83"	83"

* The pass line is fixed at a height specified by the user and cannot be adjusted afterwards. Pass line can be set at a height from 43" or higher.

LCE HR3 Series
Double uncoiler type



LCC HR3 Series



Compact Type

LCC KR3 Series

Width: 1.968" ~ 15.748"

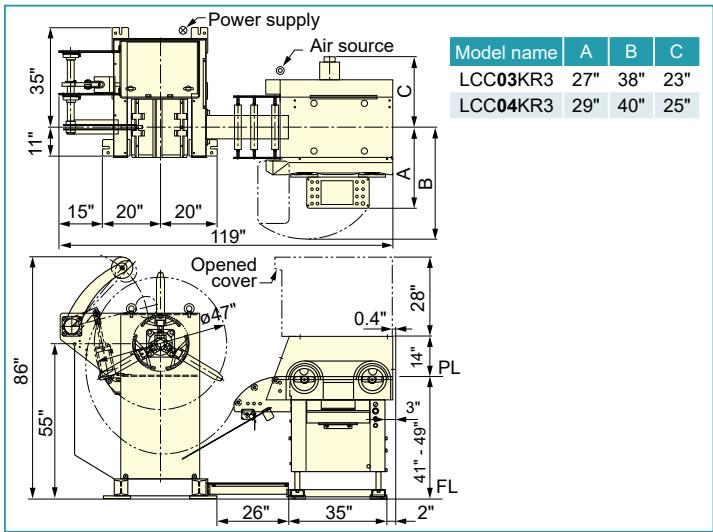
Thickness: Max 0.126"

This is a compact best-selling model, which promotes space saving and high performance. Maintenance, including roll cleaning, has been made easy by making it possible to open the cover over the straightener to access the inside.



Meets the need for high performance and saving space.

Main dimensions



LCC 03KL Series

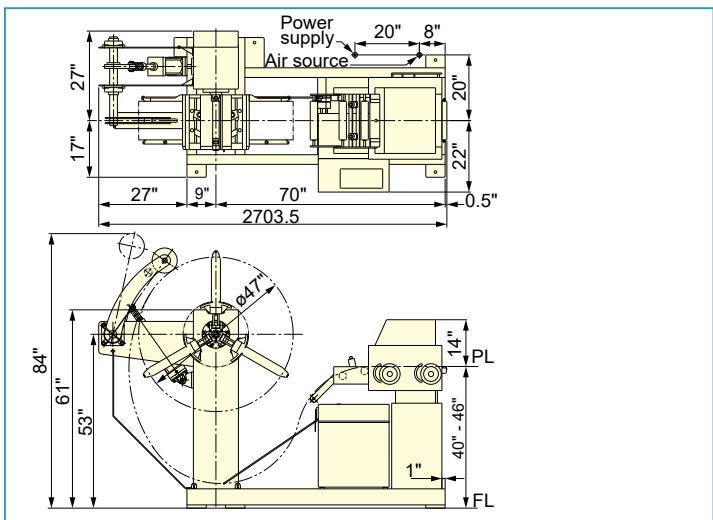
Width: 1.968" ~ 11.811"

Thickness: Max 0.126"

This is a model that pursues economic efficiency by simplifying and downsizing to the utmost limit.



Main dimensions



LCC SA Series

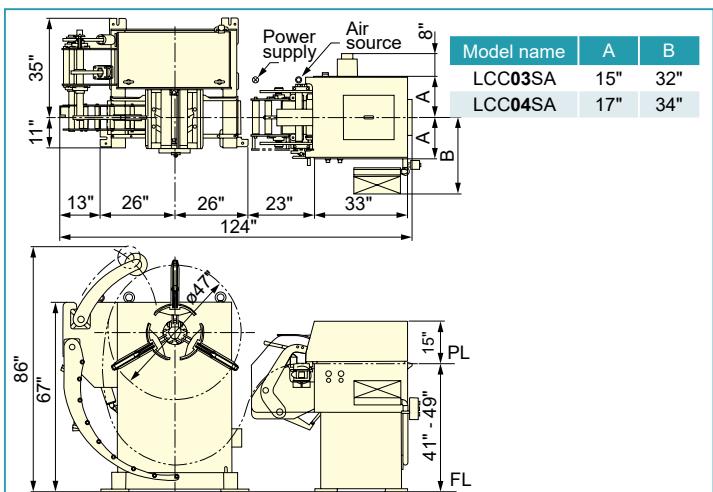
Width: 1.968" ~ 15.748"

Thickness: Max 0.126"

This is a compact model equipped with ASC control (which detects the outer diameter of the coil material and automatically changes the amount of correction), 11 work rolls to improve flatness, and a motor-controlled cover opening mechanism that makes roll cleaning easy.



Main dimensions



Heavy-Duty Type

Heavy-Duty Type A heavy-duty type that emphasizes high rigidity.

LCC PM2 Series

Width: 2.756" ~ 51.181"

Thickness: Max 0.354"



Optional

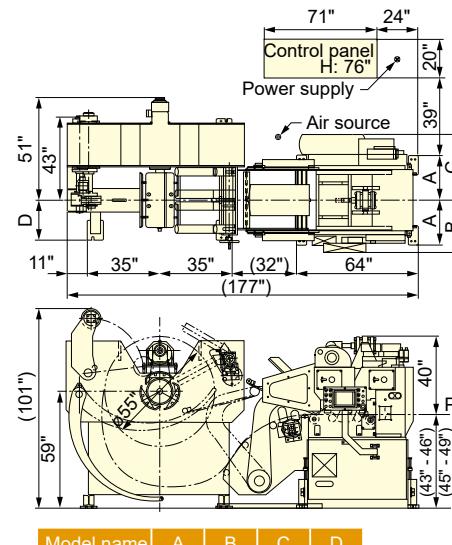
Flatness is improved with 9 work rolls. By incorporating a roll cleaning opening system, maintenance is easier and quality is improved.



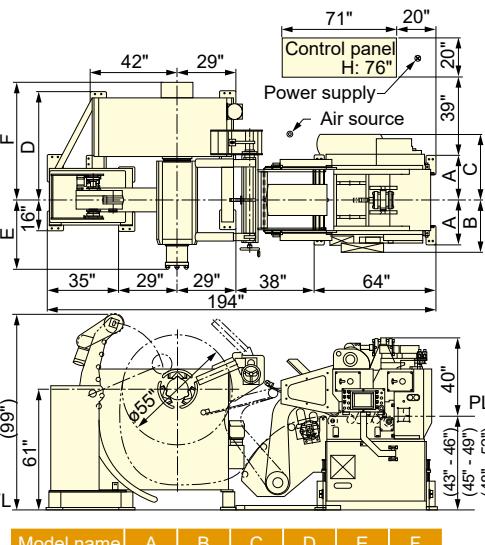
Main dimensions



LCC 03/06 PM2 type



LCC 08/10/13 PM2 type



LCC GD Series

Width: 2.756" ~ 31.496"

Thickness: Max 0.472"

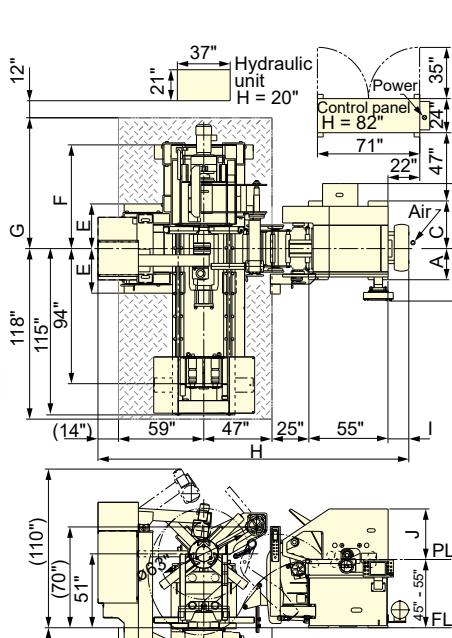
The strongest high-rigidity series that can handle material thicknesses up to 0.472".



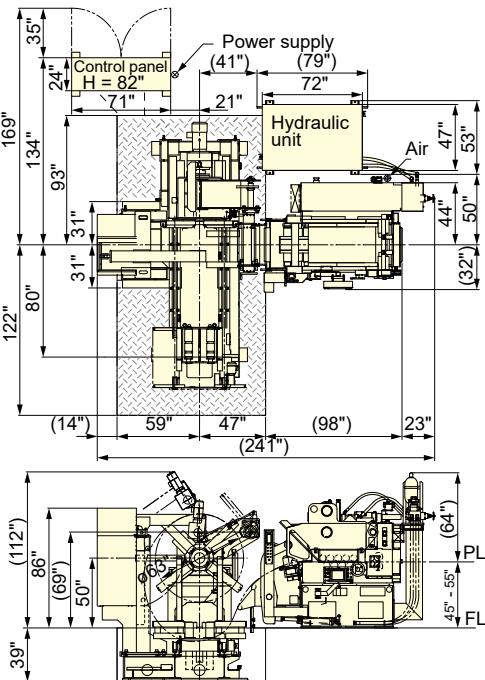
Main dimensions



LCC 05/08 GD type



LCC 06 GD2 type





Specifications

Model name	Stock Thickness	Stock width	Coil mass Max lbs	Outer coil diameter Max	Feed length	Line speed Max ft/min	Number of work roll up /down pcs	Mandrel expansion type
LCC03KR3	0.012" ~ 0.126"	1.968" ~ 11.811"	4409 / 4409	ø47"	~ 15.748"	52.5	6 / 5	Manual / Pneumatic
LCC04KR3		1.968" ~ 15.748"	5511 / 4409					
LCC03KL	0.012" ~ 0.126"	1.968" ~ 11.811"	3307 / 2645	ø47"	~ 11.811"	39.4	3 / 2	Manual / Pneumatic
LCC03SA	0.012" ~ 0.126"	1.968" ~ 11.811"	4409	ø47"	~ 11.811"	52.5	6 / 5	Manual / Pneumatic
LCC04SA		1.968" ~ 15.748"						
LCC04HF1		1.968" ~ 15.748"	5511 / 4409					
LCC05HF1	0.012" ~ 0.126"	1.968" ~ 19.685"	3307 / 4409	ø47"	~ 15.748"	52.5	4 / 3	Manual / Pneumatic
LCC06HF1		1.968" ~ 23.622"	3307 / 2204					
LCC04HF2		1.968" ~ 15.748"						
LCC05HF2		1.968" ~ 19.685"	6614 / 11023					Pneumatic
LCC06HF2		1.968" ~ 23.622"						
LCC08HF2	0.012" ~ 0.177"	1.968" ~ 31.496"	11023 / 15432	ø55"	~ 19.685"	78.7	4 / 3	Pneumatic / Hydraulic
LCC10HF2		1.968" ~ 39.370"	15432					Hydraulic
LCC04HF4		1.968" ~ 15.748"						
LCC05HF4		1.968" ~ 19.685"	6614					Pneumatic
LCC06HF4		1.968" ~ 23.622"						
LCC05HY1	0.012" ~ 0.126"	1.968" ~ 19.685"	4409 / 3307	ø47"	~ 15.748"	52.5		Manual / Pneumatic
LCC06HY1		1.968" ~ 23.622"	3307 / 2204					
LCC05HY2-E			6614					
LCC05HY2-V		1.968" ~ 19.685"	11023					
LCC06HY2-E		1.968" ~ 23.622"	6614				6 / 5	Pneumatic
LCC06HY2-V	0.012" ~ 0.177"		11023	ø55"	~ 19.685"	78.7		
LCC08HY2-V		1.968" ~ 31.496"						
LCC08HY2			15432					Hydraulic
LCC10HY2		1.968" ~ 39.370"						
LCC92HT	0.047" ~ 0.236"	2.756" ~ 9.842"	5511	ø55"	~ 19.685"	72.2	3 / 2	Pneumatic
LCE04HR3-E		2.756" (3.937") ~ 15.748"						
LCE04HR3-V			6614					
LCE05HR3-E	0.023" (0.039") ~ 0.236"	2.756" (3.937") ~ 19.685"		ø55"	~ 19.685"	72.2	4 / 3	Pneumatic
LCE05HR3-V			11023					
LCE06HR3-E		2.756" (3.937") ~ 23.622"	6614					
LCE06HR3-V			11023					
LCC04HR3-E		2.756" ~ 15.748"	6614					
LCC05HR3-E								
LCC05HR3-V		2.756" ~ 19.685"	11023					
LCC06HR3-E			6614					Pneumatic
LCC06HR3-V	0.023" ~ 0.236"	2.756" ~ 23.622"		ø55.118"	~ 19.685"	72.2	4 / 3	
LCC08HR3-V			11023					
LCC08HR3		2.756" ~ 31.496"						
LCC10HR3		2.756" ~ 39.370"	15432					Hydraulic
LCC13HR3		2.756" ~ 51.181"						
LCC06HLS-E			6614					
LCC06HLS-V		2.756" ~ 23.622"						Pneumatic
LCC08HLS-V	0.023" ~ 0.236"	2.756" ~ 31.496"	11023 / 15432	ø55"	~ 19.685"	72.2	6 / 5	Pneumatic / Hydraulic
LCC10HLS		2.756" ~ 39.370"	15432					Hydraulic
LCC13HLS		2.756" ~ 51.181"						
LCC06HLU-E			6614					
LCC06HLU-V		2.756" ~ 23.622"						Pneumatic
LCC08HLU-V	0.023" ~ 0.236"	2.756" ~ 31.496"	11023 / 15432	ø55"	~ 19.685"	72.2	4 / 3	Pneumatic / Hydraulic
LCC10HLU		2.756" ~ 39.370"						
LCC13HLU		2.756" ~ 51.181"	15432					Hydraulic
LCC03PM2-E		2.756" ~ 11.811"						
LCC06PM2-E			6614					Pneumatic
LCC06PM2-V		2.756" ~ 23.622"						
LCC08PM2-V	0.032" ~ 0.354"		11023	ø55"	~ 19.685"	72.2	5 / 4	Pneumatic / Hydraulic
LCC10PM2		2.756" ~ 31.496"	11023 / 15432					
LCC13PM2		2.756" ~ 39.370"						
LCC13PM2		2.756" ~ 51.181"	15432					
LCC05GD		2.756" ~ 19.685"					3 / 3	
LCC08GD	0.055" ~ 0.472"	2.756" ~ 31.496"	11023	ø63"	~ 19.685"	59.1		Hydraulic
LCC06GD2		2.756" ~ 23.622"					5 / 4	

Optional Feed Master function is available for feed lengths that exceed standard specifications.

The values with () are for automatic coil material threading type.

The values in the table above are for the single uncoiler type. Please contact us for the double uncoiler type.

If the mode name ends -E, it means -EAS. If it ends in -V, it means -EVAS.

Common specifications

- Inner coil diameter: ø20" - Power supply: 200/220 V

- Feed roll: 1 pair

- Air pressure: 0.5 MPa



Main equipment

Equipment	Model name													
	KL	KR3	SA	HF1	HF2 HF4	HY1	HY2	HT	HR3	LCE HR3	HLS HLU	PM2	GD	GD2
Master control for continuous operation	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Remote control switch	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Select switch for feed angle	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Loop abnormality detector		●	●	●	●	●	●	●	●	●	●	●	●	●
Loop contact sensor	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Loop photoelectric sensor		○		●	○	●	●	●	●	●	●	●	●	●
Programmable die	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Die picking	Pick	○	○	○	○	○	○	○	○	○	○	○	○	○
Digital cam switch	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Coil hold down roll drive		○		●		●	●	●	●	●	●	●	●	●
Handwheel adjustment for stock guides	○		●	●	●	●	●	●	●	○	●	●	*3	*3
Hard chrome plates roll	○	○	○	○	○	○	○	○	○	○	○	●	*3	*3
Special paint *4	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Pneumatic expansion system		○	●	○	● ¹	○	●	●	●	● ¹	● ¹	● ¹	● ¹	
Hydraulic expansion system			● ¹			●		● ¹						
Back up roll							●	●	●	●	●	●	*2	●
Unbending system		○												
Lube system	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Roll type coil side guide		○	○	○	●	○	●	●	●	●	●	●	●	●
Threading table		○	●	○	●	●	●	●	●	●	●	●	●	
End of stock detector	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Pilot roll		●	●	●	●	●	●	●	●	●	●	●	●	●
Roll cleaning opening system		●	○	○			○			●	●	●	●	●
Roll cleaning open structure		●				●	●							
Job number setting		●	●	●	●	●	●	●	●	●	●	●	●	●
ASC control			●	○	○	○	○	○	○	○	●	○	○	●
Coil car		○		○	○	○	○	○	○	○	○	○	●	●
Analog loop control *5	Loop				○		○	○	○	○	○	○	○	○
Automatic threading									○	○				
ECO release	Eco				●	●			●	●	○	○		

● Standard
○ Optional

*1 Hydraulic expansion for stock width over 39.370" or coil mass over 15432 lbs, pneumatic expansion for stock width less than 31.496".

*2 Only 08GD

*3 Hard chrome plating finished

*4 Some parts cannot be specified.

*5 Applicable only to TP-CCS controller

! Before using those products, please read the operator's manual carefully and follow all applicable instructions.

- Options are included in the photos.
- Specifications, appearance, and equipment are subject to change without notice for improvement and other purposes.

Warning: O.S.H.A. - required point of use guards for protecting the operator are not included and are the responsibility of the end user.

