

Thank you for your interest in **Little David** Case Formers by **Loveshaw**. Here is your recently requested pricing for a fully automatic case former model **CF25**, complete with bottom pressure-sensitive taper.

The top loaded powered hopper will accept up to approximately 165 single wall *RSC* or *HSC** cases. When operating continuously, the machine will need to be re-loaded every 12 to 15 minutes. It is not necessary to stop the production of cases to fill the hopper.

At the start of a cycle, the vacuum cup carriage will pneumatically rise to the pre-set position at the hopper and three (3) vacuum cups will withdraw a case. The vacuum cups grip the case on both minor and major panels, strip it from the magazine, and secure it as the carriage travels vertically downward to the forming section. Next, the box-opening arm will pivot in and apply vacuum to the other major panel. The arm then retracts to positively open the case. Immediately the flap folders will activate and fold both minor flaps. At this point, vacuum is released from all cups.

The case will then be pneumatically transferred into the chain & lug drive system via an arm traveling on a linear bearing system. The arm quickly returns to home position to await the next case. The original box gets picked up by the chain lugs and is driven through the stationary major flap folders. The combination of front pressure from the folding bars and steady power applied to the rear corners by the lugs ensures that the box is as square as possible before tape is applied. Next 2" wide (3" available) pressure sensitive tape of commercially good quality will be applied to the bottom center seam with a 2-1/4" to 2-1/2" vertical tape tab on the leading and trailing panels of the case. The sealed case is then discharged onto your exit conveyor. The returning chain lug passes over a sensor triggering the cycle to start again. The **CF25** that we propose will accept *RSC* and *HSC* containers within the following dimensions:

	<u>Length</u>	<u>Width</u>	<u>Height</u>
Min:	6"	6"	4"
Max:	16"	14"	12"

* *HSC* Containers must be a minimum of 6" in height.

This is a preliminary quotation only. **Loveshaw** Engineering will request samples for testing and evaluation of actual production cases. When **Loveshaw** Engineering is in receipt of sample cases of each size, and after testing and evaluation, a final quotation may be issued.

Loveshaw an *ITW* Company requires an ample supply of production cases for testing prior to shipment. The end-user is responsible for shipping all corrugated to the Loveshaw facility.

It is understood that the knockdown cases to be erected must contain large enough die cut slots that are equally shared between the major and minor panel to ensure proper minor flap folding. In addition, all score lines must be deep scored or double scored where possible. Your corrugated supplier should be notified that their cases would be erected on automatic erecting equipment so that they can comply with these requirements. Please pay special attention to the printing and case orientations as it applies to the footprint of the **CF25**. Different footprints require different case orientation and printing. We will require a quantity of each box size to be processed on the erector for proper set up. Please refer to the enclosed specification sheet for details.

We propose production speeds of the **CF25** case former to run up to ten (10) containers per minute, depending on the case size and corrugated quality.

Loveshaw Engineering recommends that this machine be used in a dry environment only. It is our opinion that when dampness or water vapor is present, it will weaken the corrugated. High humidity, dampness or direct water may:

- soften or dissolve the adhesive that holds the case together.
- Increase the coefficient of the board, causing the corrugated to stick in automatic equipment.
- Alter the dimensions, causing jams in automatic equipment.
- Affect such properties as printability, shrinkage, dimensional stability (warp) and physical strength.

Machine Price Includes:

- four corner post construction
- 23" conveyor height
- venturi vacuum system
- powder coat paint finish
- chain driven powered hopper
- interlocking safety gates
- right to left case flow
- no change parts required
- compact frame at 75-1/4" long
- 110 volt, single phase electric's
- Oil free pneumatic system
- chain & lug drive system
- quick, tool less case size changeover (7 adjustments)
- ALLEN BRADLEY MICROLOGIC 1000 PLC
- calibrated scales for quick, easy width & height adjustment
- removable 2" wide PST **CASELOCKER ST** tape cartridge
- opposing vacuum cups to hold and open the case in the forming section
- 48" hopper load height

Price, FOB, S. Canaan, PA Freight Collect

\$29,000.00

(plus applicable sales, use, privilege or excise taxes and Federal, State or local, if any)

Terms:

Net 30 days.

Installation:

Installation, training & service will be provided by the local distributor at prevailing rates.

Power Requirements:

110 VAC, 60 HZ, single phase, 8 amps

Air Requirements:

15 scfm per cycle @ 70 psi

Machine Dimensions:

75-1/4" L x 43-1/4" W x 75-5/8" H

Machine Weight (uncrated):

1,250 lbs.

Delivery:

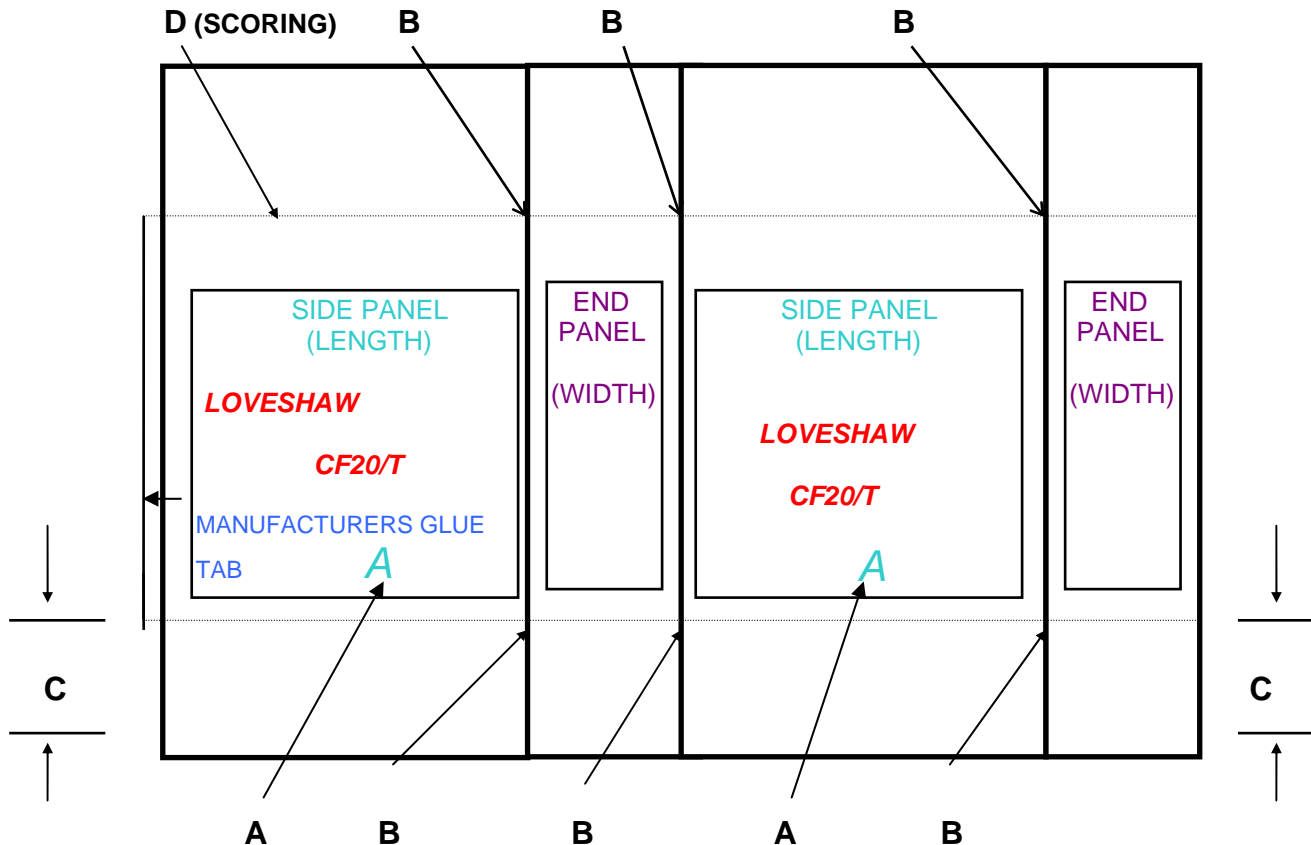
Six (6) to eight (8) weeks from the time a signed production order, actual production corrugated samples for testing and 50% down payment (if applicable) are received. Thank you for giving us the opportunity to bid for your business.

Available Options

Low Hopper Alarm		.LHPCF20	725.00
Low Tape Alarm		.LTPCF20	725.00
Box Jam Detector		.BXJMC20	725.00
Air Dryer	for pneumatic system & components	N495	450.00
Increase Conveyor Height Up To 32"		.LGXCF20/15	750.00
Spare Caselocker ST Taping Cartridge	2"	.CAC60	1,290.00
Casters		.CASC20	375.00
Custom Paint		-----	2,950.00
Spare Parts Kit (2" PST)		.REPKIT-CF25	3,600.00
Spare Parts Kit (3" PST)		.REPKIT-CF25/3	3,800.00
NEMA 12 Electrical Package		-----	695.00
NEMA 4 Electrical Package		-----	3,400.00
Cold Room Package		.CRPCF25	1,800.00
Hytrol Roller Conv. With Package Stop	5' length	----	5,665.00
3 Phase Electric's		-----	1,075.00
Leveling Pads		.LPACF20	1,010.00
UL Approval (508 listed panel)		-----	610.00
Factory installation	<i>within 100 miles of the Loveshaw facility</i>	-----	1,000.00
Factory installation	<i>outside 100 miles of the Loveshaw facility</i>	-----	2,000.00
Mirror image * (operator control station & safety gates only)		-----	995.00
3" wide PST		-----	900.00
15 CPM throughput speed		-----	800.00
Note: This Option Will Reduce The Case Size Range to 15" L x 12" W			

** The following adjustments will remain in their existing location and cannot be moved:
Hold down sled, tape head, main drives, box opening & hopper setting #1*

BLANK CONFIGURATION FOR STANDARD FOOT PRINT

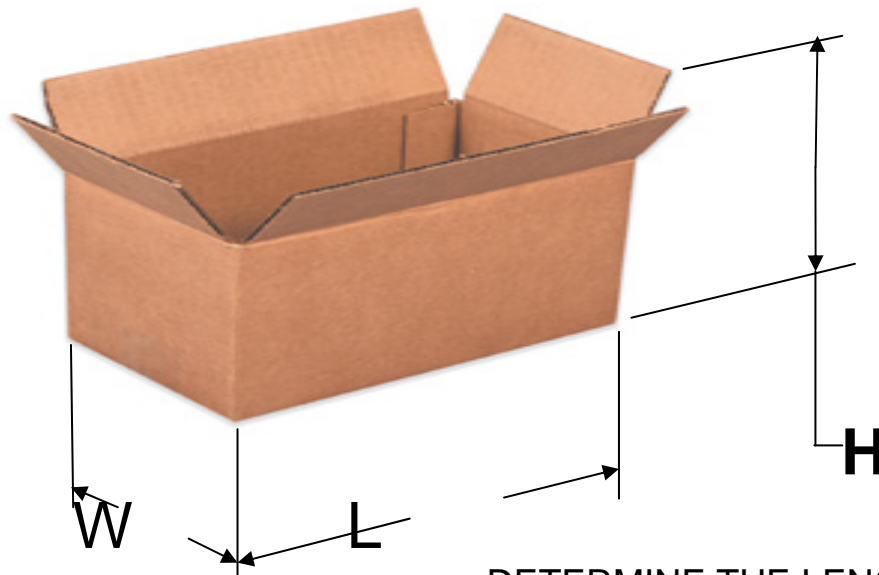


RECOMMENDED CORRUGATED SPECIFICATIONS FOR *LOVESHAW* VERTICAL CASE FORMER

MODEL CF25

- A) **THE PRINTING** SHOULD BE UPRIGHT ON THE **SIDE PANEL (LENGTH)** WITH THE **END PANEL (WIDTH)** ON THE LEFT SIDE WHEN BEING HANDLED IN A STANDARD FOOTPRINT VERTICAL CASE FORMER.
- B) SCORING AND SLOTS MUST LINE UP, ESPECIALLY AT THE MANUFACTURES JOINT 3/8" RECOMMENDED SLOT WIDTH.
- C) THIS FLAP LENGTH IS TO BE MADE SHY CUT OR SCANT CUT SO THAT WHEN FLAPS ARE FOLDED, THERE IS 1/8" SPACE BETWEEN THEM.
- D) **SCORING** SHOULD BE MALE TO FEMALE WITH FEMALE ON THE INTERIOR SURFACE. POINT TO POINT SCORING IS ACCEPTABLE FOR SINGLE WALL CORRUGATED IF MALE TO FEMALE IS NOT READILY AVAILABLE.
- E) **MANUFACTURES GLUE TAB** SHOULD NOT EXCEED THE HORIZONTAL SCORE LINES. I.E.: NOT ON THE BOTTOM FLAPS

CF25 SET- UP INSTRUCTIONS



DETERMINE THE LENGTH,
WIDTH AND HEIGHT (WITH
FLAPS UP) OF BOX IN INCHES.

IMPORTANT: USE SCALES AND YELLOW POINTERS!

- 1) HOPPER, NEAR SIDE – SET EQUAL TO WIDTH.
- 2) HOPPER, FAR SIDE – USE THE BLANK (FLAT BOX) TO SET. LEAVE 1/8” EXTRA ROOM. ADJUST 3RD VACUUM CUP TO WIDEST POSITION POSSIBLE WITHOUT CUP HITTING VERTICAL BOX GUIDE.
- 3) VERTICAL TROLLEY STOP – SET EQUAL TO WIDTH. TIGHTEN SECURELY.
- 4) BOX OPENING ARM – SET EQUAL TO WIDTH (ARM IN OPEN POSITION). ADJUST VACUUM CUP TO LAND IN CENTER OF MAJOR PANEL.
- 5) FLAP FOLDER – SET TO LENGTH.
- 6) LUG DRIVE – SET TO WIDTH.
- 7) SLED HEIGHT – SET TO ERECTED BOX WITH TOP FLAPS UP.

RUN ONE BOX IN STEP (MANUAL) MODE TO VERIFY SETTINGS



Little David® delivers high-performance packaging equipment.

Little David® CF-25



Case Former CF-25

High Performance - Case Erecting/Forming

The CF-25 is the latest in a series of industrial grade, high performance case erectors from Little David®. This case erector is designed to form and bottom-seal corrugated boxes at speeds up to 15 cases per minute.



Performance and Design Features:

- ☑ **Small Footprint-** Patented case flow technology allows the CF-25 to maintain it's versatility without compromising your floors pace.
- ☑ **Chain and Lug Drive-** Chain and Lug drive system ensures a square box is formed and eliminates box stalling and slipping seen in side-belt machines .
- ☑ **Reliable Case Transfer-**Improved case transfer system features upgraded vacuum system and (3) vacuum cups
- ☑ **Quick/Easy Changeover-** Load-on-the-fly/easy load hopper ensure box loading and changeover are simple and efficient.

LITTLE  DAVID

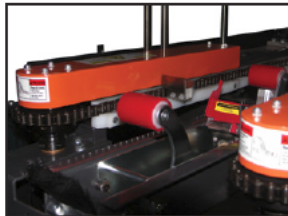
CF-25

The Little David® CF-25 is an automatic system that erects and bottom seals corrugated cases at speeds from 10 to 15 cases per minute. The CF-25 case erecting solution is ideal for applications that require more throughput than manual case erecting can provide. This versatile system creates instant labor savings and increases production for a wide range of medium-speed applications.

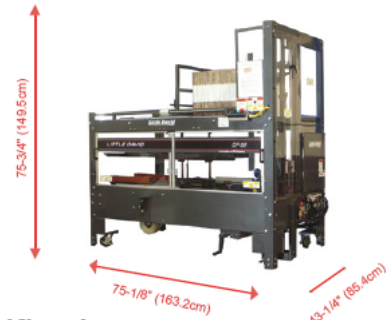
Little David® Performance and Design Features:

- Erects and bottom seals up to 10 cpm (standard) and 15 cpm (high speed)
- Patented box flow process enables small footprint
- 2 minute case size changeover; requires no tools
- Chain and lug drive system ensures case is square during sealing and eliminates slipping and stalling seen in side-belt machines
- Interlocking safety gates restrict access to moving parts
- 150 case powered hopper
- Pneumatically folds flaps

Chain and Lug Drive System:



Machine Dimensions:



Specifications:

Power Requirements: 110 volts, 60 cycle, single phase

Air Requirements: 14 SCFM @ 85 psi

Production Speed: Standard: Up to 10 cases per minute. High Speed Option: Up to 15 cases per minute, depending on case size and corrugated quality.

Closure Material: Pressure Sensitive Tape

Weight: 1100 lbs. (258 kg.), uncrated

Case Capacity:

Length: 6" - 16"

Width: 6" - 14"

Height: 4" - 12"

Options of the CF-25:

- Casters
- Box Jam Warning
- Low Tape Warning
- Leg Extensions
- Low Hopper Warning
- Tape Detection
- Special Electronics
- Spare Parts Kit
- Stainless Steel
- Avail. in CE, NEMA 4
- Leveling Pads
- Air Dryer
- Mobile Control Station
- High Speed Upgrade

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