

FX1200 Digital Label Finishing System

Frequently Asked Questions

Primera Technology, Inc.

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1. What is the FX1200?

FX1200 is an all-in-one, digitally-controlled label finishing system. Output from virtually any digital printing process, including Primera's CX1200 Digital Label Press, can be finished. The machine has five main functions:

- Laminating
- Digital Die Cutting
- Waste Matrix Removal
- Slitting
- Rewinding to Finished Rolls

Once a job is set-up and started, the process is automatic and "hands-free."

In addition, FX1200 can be used as a short-run digital die cutting machine for making blank labels that are later imprinted by other printers such as Primera's LX-Series Color Label Printers and most other desktop bar code label printers.

2. What are the consumables?

There are four consumables: (1) laminating films, (2) cutter blades, (3) cutter wear strip and (4) slitting blades.

Laminating films are available in an almost endless range of thicknesses, types of adhesives, amount of UV protection, etc. The most common films are made of polyester and polypropylene. Polyester is generally more expensive but has fewer tendencies to yellow over time. Regular (i.e. "loud") and quiet release films are available. If the machine is used in an office setting, only quiet films should be used.

The type of film normally used on FX1200 is called "self-wound." This means that there is no liner; instead, the film wraps around itself. Self-wound film is generally less expensive than film with a liner. Laminating film with a liner can also be used if you order the optional Laminating Film Powered Rewinder.

3. What kinds of materials can I finish with FX1200?

A wide variety of label substrates can be finished, including plain paper, polyester, vinyl and more. If Primera's CX1200 Digital Label Press can print it, FX1200 can usually finish it.

4. Can I use non pressure-sensitive adhesive (PSA) materials, such as tag or ticket stocks?

Non-PSA materials can be perforated or you can cut with “tick” marks for later punching out of the finished tag or ticket. Remember that if you use non PSA materials the cutter wear bar will need to be replaced more often than if you primarily use PSA stocks with a liner.

5. How fast is it?

It depends upon the complexity of the shape. A long, rectangular label will be the fastest. A pattern such as a starburst or an intricate contour cut will take the longest. At its fastest, linear throughput speed is about 4” (102mm) per second.

6. Why are there two finished label rewind mandrels?

There are a number of different situations where the second rewinder is needed:

- If you want the ability to do inside winds. The standard single rewind only does outside winds.
- If you want to rewind edge trim. This material is thinner, so it needs to rewind at a different speed than the finished label mandrel.
- If you want to alternate every other finished label roll during rewinding on separate mandrels to avoid interleaving edges on adjacent rolls.

7. What kind of operator training is suggested?

Primera holds free training classes before or after your purchase of an FX1200. Classes are generally held once a month at the company’s headquarters in Plymouth (Minneapolis), Minnesota, USA. Classes are also held at Primera Europe in Wiesbaden (Frankfurt) Germany and at Primera Asia Pacific in Melbourne, Australia. It is strongly suggested that all operators attend training.

8. What happens if it needs repairs?

The machine has been carefully designed so that every major component (except the cabinet stand) can easily be shipped via UPS/FedEx. Components are field-replaceable with just a few screws and electrical connectors.

9. How heavy is the unit?

Roughly 500 lbs. (227 kg) un-crated and about 600 lbs. (272 kg) crated.

10. How do I get my cut files into the machine?

USB thumb drives are an inexpensive, fast and easy way to import common HPGL cut files. FX1200 can also be connected to your office network via built-in wired or wireless Ethernet connections to retrieve files from another computer.

11. Is the monitor connected to a PC?

Actually, the monitor is a PC. It’s an all-in-one touch screen computer running Windows 7®. It self-boots into the operating screen for FX1200.

12. How thick of a substrate can be cut?

Generally speaking, anything that can be run through Primera's CX1200 can also be finished on the FX1200. The maximum paper density printable on CX1200 is 330 g/m². Subtracting the liner, that comes to roughly 8 to 10 mils.

13. What maintenance is required?

Other than consumables, only an occasional vacuuming of paper dust and cleaning adhesive and paper residue from the rollers is necessary.

14. Where can I see a working machine "in action?"

FX1200 units are always set-up and available for viewing at Primera USA in Plymouth, Minnesota, USA, Primera Europe in Wiesbaden, Germany and Primera AP in Melbourne, Australia. Machines are also installed in many end-user locations. Some of those may be available for visits. Contact the factory at **1-800-797-2772** (USA and Canada) or +1-763-475-6676 to schedule a visit to any of these facilities.

15. What is the warranty?

The hardware is warranted for one year parts and labor. Consumables (cutting and slitting knives and cutter wear bar) are warranted for 90 days. Extended and "hot-swap" warranties for the hardware and PC are also available.

16. Is the machine dangerous in any way?

FX1200 has been tested and listed by Underwriter's Laboratory for the USA and Canada. It also has been tested and approved for FCC Class A office use. For Europe, FX1200 is RoHS compliant and carries the CE mark for safety and emissions.

As of this date, we believe that FX1200 is the only digital label finishing system in the world that has met or exceeded the requirements for all of these approvals.

However, as with any piece of industrial equipment, caution must be exercised when using FX1200. Stay clear of cutting and slitting knives and all moving parts. Safety guards must be left in place and not altered in any way.

18. How loud is it during operation?

Normal operating sound level is around 72 dB with "quiet" lamination film. With less expensive (and more aggressive) regular self-wound film, sound levels can be more than 100 dB. Hearing protection is strongly advised.

19. Does FX1200 connect in any way to the CX1200?

No; it is a completely stand-alone system. In-line operation with a digital press was purposely not considered. Reliability and flexibility is generally greater with separate printing and finishing systems.

20. Can it be used with output from other digital printers?

Yes, as long as proper registration marks have been printed on the web and a standard HPGL file is provided.

21. Is there room in the cabinet for storage?

Since the web travels through the cabinet around tensioning arms, storage in the cabinet is specifically not recommended. No safety guards are incorporated inside the cabinet. Rather, the cabinet itself is the safety guard for the tensioning arms.

22. What are the electrical requirements?

100-240 VAC. No special wiring is needed.

23. How does it cut different sizes and shapes without dies?

The X/Y cutting assembly in the FX1200 allows it to automatically cut the shapes specified by the HPGL file from the label software. To produce labels the fastest, a multiple cutting knife feature is available. FX takes up to four knives.

When utilizing all four knives, all labels across the web must be the same shape. The actual data and graphics can of course be different but the label size and shape must be identical. If different size or shape labels are desired across the web, FX1200 then uses just one cutting knife. This reduces the throughput speed of the system.

24. How do you adjust the cutting knife pressure?

Through the touch screen control panel. The FX1200 software has default settings for different material types which will set initial pressures. The system is also capable of adjusting the force up or down from these initial settings via touch screen controls, and it can also save these settings as a custom material type. This adjustment will change the force on all of the knives.

25. How is this controlled over the whole width when using multiple knives?

Each individual knife carrier has a mechanical force adjustment which will be factory adjusted to balance the force of the knives across the web. These individual settings can be adjusted by the end-user, but we do not recommend changing these factory settings.

It is recommended to use and replace knives in sets so they will wear evenly. A very dull knife will require more force than a brand new one.

26. What is the life of the cutting knives?

The plotter knives should last around 40,000 linear feet of cutting with our standard matte label paper. This number will vary quite a bit depending upon materials used, cutting force, etc., so it shouldn't be considered a "hard" spec.

As an example, the 3.75" x 5.00" sample labels we have been running on the prototype require about 4,000 linear feet of cutting per plotter knife per full roll of media, so the knives should last about 10 rolls with that label. As the knives wear over time, the cutting force may need to be increased (the blade will not wear enough within one roll to require a change in force).

27. How are the knives controlled? Software?

FX1200 requires a HPGL file which can be generated directly from the CX1200 software or other compatible label creation software. The printed media web has registration marks which were printed by CX1200. The HPGL file tells the FX1200 where to cut relative to those registration marks.

If multiple cutting knives are being used, the user will be required to move the cutting knives to the correct label-to-label spacing with assistance from the FX1200 through the touch screen control panel. The cutting knife carriers each have a thumb screw to lock their position.

28. How are the blades replaced?

The blades are held in removable housings. The housings are captured in the cutting knife carriers with another thumbscrew. Once the housing is removed, the blade tip can be inspected for wear/damage. To replace the blade, unscrew the housing cap and slide out the blade; then insert a new blade and reattach the cap.

29. What is the configuration on the web to get different shapes and sizes?

When the labels are printed on the CX1200, the HPGL file generated with the software will automatically cut the label to the appropriate size and shape of the label. The user just needs to verify that the HPGL file for label run "X" is transferred to the FX1200 (via USB thumb drive, network connection, etc.) and loaded into the software via the integrated touch screen control panel.

30. What are the minimum and maximum size labels that can be finished?

If slitting is required, 1" (25.4mm) minimum width. Maximum cutting length is 24" (610mm).

31. How many slitting blades can be used at a time?

Zero to seven.

32. Is "some assembly required?"

The entire FX1200, less the touch screen PC, is shipped completely assembled. Just four bolts are used to attach the PC to the frame of the unit.

33. How long does it take to thread and how much material is used?

For ease of start-up, the unit is shipped with a 8.5" wide web already threaded. You can splice your first job to this web. If you have to re-thread the unit, it takes about 5-10 minutes. Additional set-up for a new job can add another 8 to 10 minutes.

34. Can I finish label web widths of less than 8.5" (216mm)?

Yes, you can use any web width from 6" to 8.5" (152mm to 216mm).

35. How much does it cost?

FX1200 sells for US\$29,995. The optional powered rewind for liner-type lamination films is US\$2500. When a CX1200 Digital Color Label Press and a FX1200 Digital

label Finishing System are purchased together, a special discounted price is available. Contact the factory or your distributor for details.