

When Your Local Bindery Becomes a Thing of the Past

By David Spiel

There used to be 200 binderies in New York City. "When it rained, a salesman could make a full week of sales calls at 200 Hudson Street," recalls my father, Norton Spiel. "One of my salesman's territories was Manhattan below 14th Street, another was above 14th Street."

Well those days are long gone. There are only a couple of binderies left in New York City.

Rather than lament the halcyon days of a bygone era, let us ask the question: What are all of your printers doing about this?

The answer, of course, is that you are buying bindery equipment. Lots of it. If you can't count on a local bindery, what else can you do? You may not be buying every last piece of equipment that you need, or large machines that output large runs, but you are buying something.

Let's look at what many printers are doing.

Options To Consider

Binding basically breaks down into four categories: Stitching, perfect binding, mechanical binding, and case binding. Stitching is, of course, the easiest, fastest, and cheapest way to bind a book. Almost all printers own stitchers, whether they be bench mounted or floor models. Many have in-line booklet makers, mistakenly referred to as saddle stitchers.

These machines fold, stitch, and face trim, and can cost between \$50,000 and \$150,000. The upside of these machines is that they are in-line.

The downside is that they cannot be reloaded while running. This often requires the printer to buy multiple sets of towers (vertical bins) so empty towers can be loaded while the others are running. Towers are usually sold in 10-bin configurations.

The only way to avoid this is to buy a top load/bottom feed collator, which can be fed continuously while running.

The downside of these machines are that they take up a lot of space. The upside is that they last and last, often for decades. It would not be uncommon to replace a tower collator between five and 10 years.

Small to medium size commercial printers usually opt for tower collators, even though they require more labor.

Perfect binding is becoming more and more popular with digital printers. The advent of "easy-to-use" machines has also made photo, or memory, books a very popular item.

Perfect binders can be huge in-line machines hooked up with collators. These are generally very expensive, and completely unnecessary in the digital market. In-line perfect binders can collate and trim signatures, something no longer necessary for most shops.

Small- to medium-size commercial printers are usually binding pre-collated sets of single sheets, hence, do not need to trim the signatures.



Prepping for Finishing

Before the spine of the unbound book passes over the glue rollers, the book must be prepared for gluing. There are three ways to prepare a book prior to perfect binding: notching, roughing, and milling.

With notching, a wheel containing two upright pins rotates. This creates a spiral pattern on the spine of the book, and scrapes up the finished edge to expose paper fibers. This is where the glue will seep in and cause it to adhere to the cover.

Roughing uses a serrated blade that looks almost like a king's crown. This scrapes up the entire surface area of the spine. Naturally, the more paper fiber is exposed, the more glue seeps in, and gives a stronger bind to the cover.

Milling actually saws off up to an 0.13-inch of the spine. This is ideal, but unnecessary

when binding single sheets. Milling is only necessary when binding signatures.

The entry-level Bourg, Duplo, and Standard machines merely notch. To safely bind coated stock, digitally printed, you must have full roughing or your books will fall apart.

So be careful—if the machine merely notches, it will be next to impossible to perfect bind books with coated stock. Tabletop machines are also becoming popular because manufacturers are starting to put floor model features into tabletop units. For instance, the Sterling Digbinder both roughs and notches.

This allows you to bind floor model quality books on a tabletop unit that costs less than floor models.

Growing by Leaps and Bounds

Mechanical binding is the most difficult and expensive to produce, yet it is by far, the fastest growing segment of the bindery business. Mechanical binding refers to any book that uses a mechanical element to bind the book: posts, a loose-leaf binder, etc.

However it usually refers to spiral binding. Spiral binding is another term that people throw around loosely. There is ordinary wire spiral binding.

You probably had a schoolbook that had wire snaking through the holes in your book in a spiral fashion. Plastic coil is merely the plastic version.

Double loop wire is completely different. A cut length of wire clasps the book closed. Make a "C" with your hand and close it into an "O." Twin tongs of wire go through each hole of the book.

Spiral wire equipment is no longer being manufactured in this country, and demand for it is being replaced by plastic. Cerlox or comb binding is on the wane because of its inability to be bound automatically.

Double loop wire can be bound manually on tabletop machines, whether they are pressed by a hand lever or closed electrically. The other option is to purchase a semi-automatic machine. All manufacturers have an entry-level, semi-automatic machine that can bind up to 1,000 books per hour.

Some manufacturers have fully automatic wire binding equipment.

To Automate or Not To Automate...

While there aren't many automatic machines in this country, they are very popular in Europe, where printers are loathe to pay for labor.

Bielomatic and Womako build fully automatic, in-line punches and wire binders.

Most American printers opt for a semi-automatic machine. Sterling and James Burn sell both semi-automatic and automatic wire binders. Semi-Automatic wire binders top out at 1,000 books an hour primarily because operators cannot feed them that fast.

The Sterling Wiremaster Compact and Wiremaster Pro bind books automatically at speeds up to 2,000 and 3,000 books per hour respectively.

Most on-demand printers opt for tabletops. The Sterling Looper is a table top wire binder that can bind at speeds up to 600 books per hour.

Plastic coil binding has become ever more popular in the past decade, since the introduction of semi-automatic machinery to do both the forming and the binding.

Plastic coil can be formed from a spool that looks like a large fishing reel. Printers who are binding 100,000 books per year will save more than 60 percent on their material costs, and that can add up to more than \$10,000 per 100,000 books.

Since these in-line machines cost upward of \$60,000, most large printers opt for a semi automatic binder such as the GBC Digicoil or The Gateway Koilmatic inserter.

Both insert the coil from the first hole onward. The Gateway's maximum diameter thickness is 20mm. These machines can bind between 200 and 400 books per hour, depending on the model and the thickness of the book. This is a far cry from the 100 books per hour an individual can bind manually.

The only hybrid is the semi-automatic tabletop unit, The Sterling Coilmaster Jr. Plus.

This machine is a table top that can bind up to 600 books per hour, up to 30mm in diameter with round or oval holes at any pitch. It can also run in-line with a coil forming machine.

Other plastic coil binders require you to use a special pitch or an oversized oval hole to work. You must make sure that your punching dies match the hole pattern of the coil binder.

My experience is that most printers choose manual tabletop equipment, even for large runs. Labor concerns here are not as paramount as they are elsewhere in the western world— But they should be.

Getting Punchy

The hitch with plastic coil or double loop wire is that you need a punch.

Punching machines vary in cost between a few thousand and \$70,000. Models include, the Kugler and Lhermite Punches, and the Sterling DigiPunchmaster.

These are heavy duty high speed punches that can punch 100,000 sheets per hour.

Choosing a good punching machine is no easy matter, and would require a full ar-

ticle all by itself. The best rule of thumb is that you should buy a punching machine that you can grow into rather than one that just meets your present needs. This will forestall the need for a second machine, and the need to double up on punching dies, which can end up costing almost as much as the machine itself.

That said, two good entry level are The Docupunch and Sterling Digipunch. Both can punch up to 70,000 sheets per hour. The latter sets up and changes over automatically via a touch screen.

The days of your local bindery holding your hand to the finish are becoming more and more numbered.

It may be prudent to become more self-reliant before the building where your local bindery is situated goes condo. Printers ought to take a more active interest in what has always been considered the "stepchild of the printing industry."

David Spiel is a co-owner of Spiel Associates, America's leading source for bindery equipment, specializing in mechanical and perfect binding equipment.

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