



COMPARATIVE CHARACTERISTICS OF THE PROCEDURES IN BOOKBINDING FINISHING PROCESS

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ABSTRACT:

The most common binding types used in bookbinding finishing process are: brochure binding which is realized by sewing through the fold with a string, stitchless (paperback) binding and hardback binding. This paper contains the description of the technological procedures and normative provisions regarding the materials and time necessary for these three types of binding.

Hardback binding is the toughest and esthetically superior to other types. At the same time, it is the most expensive method of bookbinding finishing process. Long-lasting books submitted to a quality finishing process have hardback cover.

KEYWORDS:

Bookbinding finishing process, brochure binding, paperback and hardback binding

1. INTRODUCTION

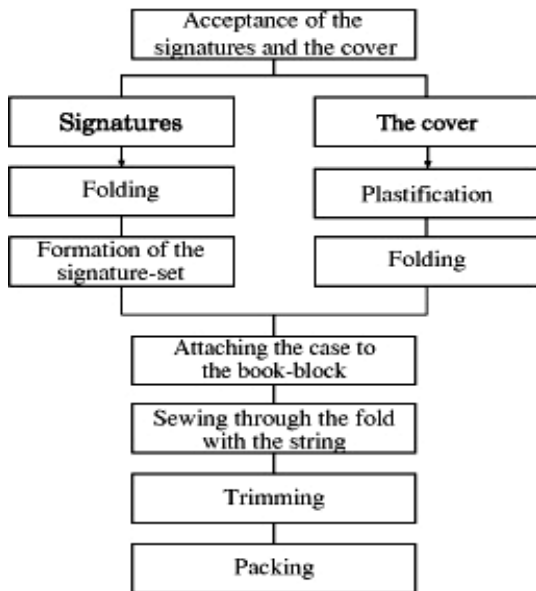
Graphical finishing process represents the final stage in graphical production during which graphical products are given their final shape. It primarily implies bookbinding and then production of packaging and cardboard, paper procession and many other additional working operations (trimming, perforating, numbering, gluing of the mull).

Books and brochures are the most characteristic products of bookbinding finishing process. The most common types of binding used in making books and brochures are:

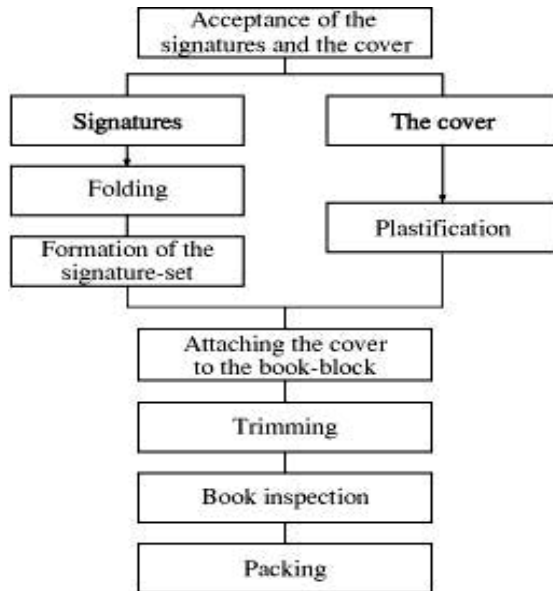
- ✚ brochure binding-sewn through the fold with a string,
- ✚ stitchless (paperback) binding,
- ✚ hardback binding.

2. TECHNOLOGICAL PROCEDURES IN BOOKBINDING FINISHING PROCESS

In our country, books and brochures are most often half - industrially made i.e. some operations are performed by hand and some by suitable machines. They represent complex products and their realization demands the most complicated technological procedures of bookbinding finishing process. The following schemes contain the technological procedures in bookbinding finishing process of these products made under the same working conditions, with the same format, number of pages and circulation:

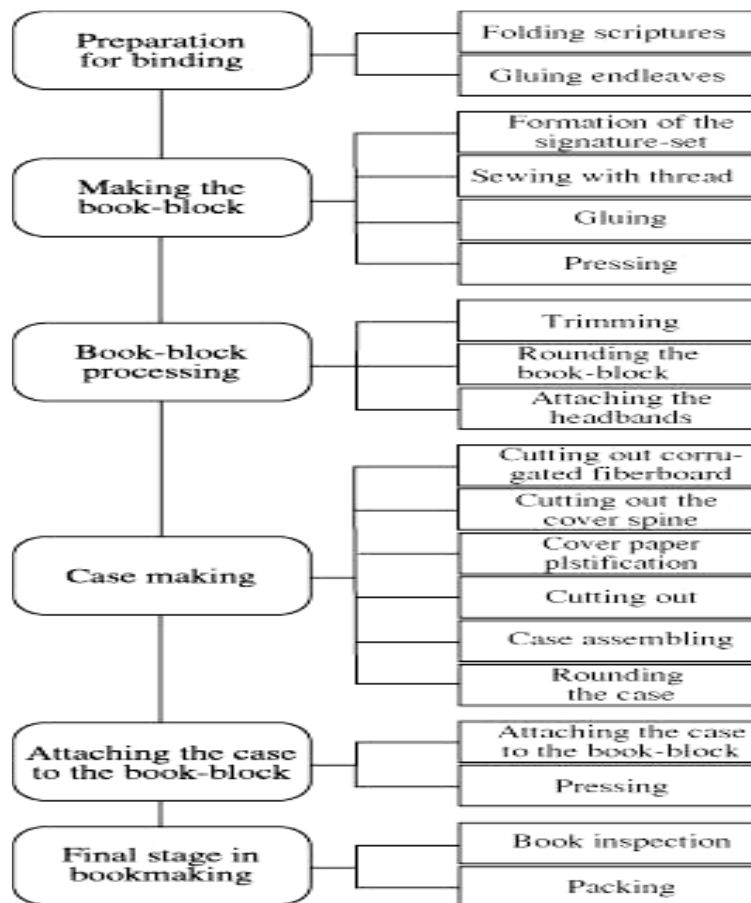


Picture 1. The procedure of making a book by sewing through the fold with a string



Picture 2. The procedure of making a paperback book

Suitable calculations result in the amount of material and time necessary for bookbinding finishing process. Table 1 contains specification of material and time.



Picture 3. The procedure of making a hardback binding

Table 1. Normative provisions regarding material and time

Format: B5 (16.5x23.5 cm)		Sewing through the fold with a string	Paper-back binding	Hard-back binding
Size: 100 pages				
Circulation: 500 copies				
Necessary material				
1.	Offset paper B2 - 70 g/m ²	80.5 kg	80.5 kg	80.5 kg
2.	Offset paper B1 - 120 g/m ²	/	/	11 kg
3.	Coated paper B2 - 135 g/m ²	/	/	12.4 kg
4.	Coated paperboard B2 - 250 g/m ²	11.5 kg	/	0.2 kg
5.	Coated paperboard A1 - 250 g/m ²	/	15 kg	/
6.	9 µm foil 50 cm wide	91 m	105 m	182 m
7.	Corrugated fiberboard 20 in a bundle	/	/	2.6 bundles
8.	String 24	5200 m	/	/
9.	Sewing thread	/	/	130 m
10.	Cover fabric	/	/	2.5 m
11.	Headband	/	/	0.6 m
12.	Glue PACOL 300	0.5 kg	0.6 kg	1 kg
13.	Glue PACOL 301	/	2.6 kg	2.5 kg
The amount of time necessary for bookmaking		4 hours	5 hours	15 hours

When compared, technological procedures and the necessary amount of material and time used for making the above mentioned products are similar in some respects and different in other. Similarities refer to the methods of cutting paper and cardboard, folding signatures, formation of the signature-sets with paperback and hardback binding, trimming numbering, packing. At the same time, these similarities allow using the same machines for certain operations in production of different products. The basic difference lies in the manner of binding which demands both individual techniques and the use of specialized machines.

3. CONCLUSION

Sewing through the fold with a string is the simplest, cheapest and fastest procedure but technologically unsuitable for production of the books of greater size and it doesn't provide enough quality for products which are intended to last longer. With the increase in the number of signatures, the quality and the outward appearance are made worse, because after the trimming the front whites are not the same in the whole book-block.

Paperback binding has considerable economical and technical advantages. Paperback binding is fast, rational and relatively cheap procedure. In practice, books are usually made in paperback binding which, besides being considerably cheaper than the hardback binding, is tough enough and esthetically appealing. Paperback books are produced without a delay which makes them cheaper and shortens the delivery period.

Hardback binding is the toughest and esthetically superior. It is meant for much used books which are intended to last longer. When compared to other types of binding, the procedure of making a hardback book is the most complicated. At the same, it is the most expensive method of bookbinding finishing process. Making the hardback books implies the greatest number of working operations and therefore expensive products. In other words, it demands the greatest expenditure of time and bookbinding material. High price is determined by material and time needed for bookbinding finishing process.

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