

Operation/Task:	Folding Operations			Equipment:	Folders
Owner:	Finishing Manager	Date Created:	4/9/2015	Department:	Finishing
		Revision History:	See last page		

ALERTS (see below): Critical Step ◆ Quality Check ☑ Tip 😊 Team Safety +

**Purpose:** This SOP/work instruction documents procedures for folding operations.

Step #	Alerts	Step Description - "What to Do"	"How to Do it"	"Why to Do it"
1		See SOP FINISHING000 for all general finishing procedures	<ul style="list-style-type: none"> <li>Keep product segregated. Purge after completed.</li> </ul>	Keep from co-mingling.
2	<span style="color: red;">◆</span>	Set the machine for the operations required on the Job Ticket.	<ul style="list-style-type: none"> <li>Use the marked up folding proof or sample to verify the fold requirements.</li> <li>Check ticket for next process to accommodate for any special trim allowances or folding requirements which may be needed (ie: stitching/binding). See notes below for standard guidelines for Smyth sewn books</li> <li>Verify the pieces using the guide and gripper registration marks on signatures to be collated and/or stitched. Typical number of pages in a form are 4, 6, 8, 12, 16 or 32 pages</li> <li>Adjust the machine for number of pages and fold sequence by tearing off a small portion of the product and placing in to clamps at the various stages of folding.</li> <li>Set tension</li> </ul>	<p>The proof gives a visual representation of the finished product. Each job is different, and adjustments are almost always needed</p> <p>If tension is too tight, it may cause rubbing, if it is too loose, the fold could be crooked or jam up the machine</p>
3		Determine the need and practicality for wet scoring	<ul style="list-style-type: none"> <li>If the fold does not lay as flat/crisp as it should, a wet score may be applied to provide a higher quality fold. <b>This should not be done if Aqueous coating was applied.</b></li> </ul> <p><span style="color: red;">◆</span> <b>IMPORTANT NOTE:</b> Aqueous coating will typically react negatively with the moisture and cause damage to the piece after it dries.</p>	The moisture will work with the paper and provide a cleaner crease.
4		Load product into machine	<ul style="list-style-type: none"> <li>Each lift should be placed on belt in the same orientation</li> <li>Each lift should be fanned and tapped solidly on the side of the stack.</li> <li>For variable data jobs, special care is to be taken to ensure the address panel is on the outside of the folded piece.</li> </ul>	<p>This allows the machine to easily take one piece at a time in a consistent position so that the fold is made at precisely the same location each time.</p> <p>If the product is being sent via USPS, the mailing panel needs to be on the outside so it can be read.</p>

5	<input checked="" type="checkbox"/>	Quality check the set-up and throughout the run	<ul style="list-style-type: none"> <li>• Run several pieces through the equipment and verify accuracy</li> <li>• Check the alignment of the folds using the registration marks, and/or sample and/or proof.</li> <li>• Check for wrinkles, dog ears or tears in product</li> <li>• Check for offsetting in rollers and marking on stackers or tables</li> </ul> <p>Note: Alignment must be within 1/32" (visually, approximate)</p>	To meet client expectations
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**Notes:**

The folding machine to be used for the job is selected by the Finishing Lead or Manager based on availability and size.

**Smyth sewn book guidelines:**

¼" high-folio lip

- No perforations on backbone/no grind-off allowance
- Grain of signatures is parallel to the spine
- All forms uniform in size, trims, and lip orientation
- No inks or coatings for 1/8" along the spine of the first and last text pages where side-glue adheres to

**Definitions:**

Lift – convenient handful of material ranging from 1" – 5" tall.

Revision History	Description of Changes	Requested by	Date
Rev 1	Revised SOP to new format.	Troy Bauer	4/9/15
Rev 2	Added Revision History table	Troy Bauer	8/1/16
Rev 3	Removed general SOPs tasks as they are now all defined in SOP FINISHING000. Added steps for additional clarification.	Kathy Osterberg	6/2018
Rev 4	Added standard folding guidelines for Smyth sewn books in notes and added reference to it in task 2	Dan Nelson/ Kathy Osterberg	12/2018
Rev 5	Revised verbiage in Step 2 How to Do it. Revised gray headers.	Liz Nourse	8/5/2020
Rev 6	Updated to current SOP format; branding updates: font, company name; grammar updates; Added new step 3 about wet score; Manager review – No changes	Kevin Washington Tom Wall	5/21
Rev 7	Added verbiage to Step 1 How to Do it and Why to Do it.	Jeff Storeby	6/16/25