

Stages of Papermaking

Before:

Fiber Selection : Bast, leaf, grass, recycled materials

Fiber Preparation:

Prior to cooking (harvesting raw fibers, cutting fiber to length, fermentation, sunbleaching steaming and stripping bast fiber, presoaking)

Cooking (lime, soda ash, lye)

Rinsing

Beating (wooden mallets, blender, stamper, hollander beater)

During:

Fiber/water ratio in vat

Mould & Deckle type used for sheetforming(wove, laid, deckle box)

Sheetforming

Couching (surface texture of material couched on, double couching)

Pressing (hand pressure, vacuum, hydraulic press)

After:

Drying (air dried, dried singly, dried in groups, restraint dried)

Sizing

Dyeing

Burnishing

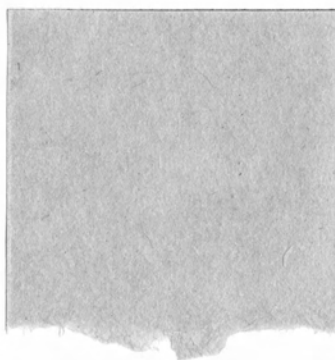
Other Surface Coatings

Flax, Flax and More Flax

#1



#2



#3



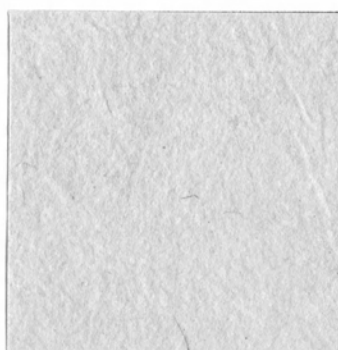
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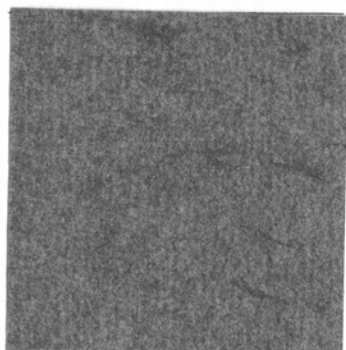
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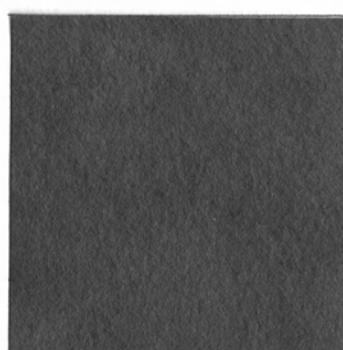
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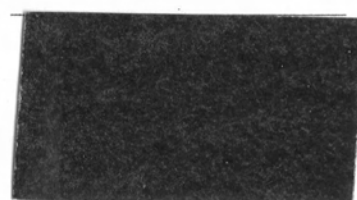
#7



#8



#9



#1: Belgian Flax, cooked in 3% solution of calcium hydroxide, rinsed during beating, unsized, restraint dried.

#2: Belgian Flax, uncooked, unrinsed, unsized, restraint dried.

#3: Egyptian flax, 4" long fibers with 25% shive, cooked in 3% calcium hydroxide, rinsed during beating, unsized, restraint dried.

#4: Same as #1 but with the additional step of burnishing.

#5: Belgian Flax, cooked in 3% calcium hydroxide, rinsed during beating, air dried, gelatin sized.

#6: Belgian Flax, cooked in 3% calcium hydroxide, rinsed during beating, air dried, gelatin sized, hand burnished.

#7: Belgian Flax, cooked in 3% calcium hydroxide, rinsed during beating, aqueous dispersed pigments and retention aid added to wet fiber, unsized, air dried.

#8: Belgian Flax, cooked in 3% calcium hydroxide, rinsed during beating, air dried, walnut dyed, gelatin sized.

#9: Same as #1, surface coated with wood varnish.

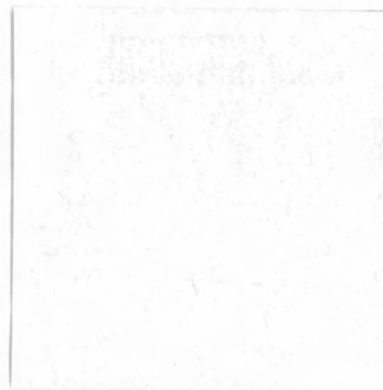
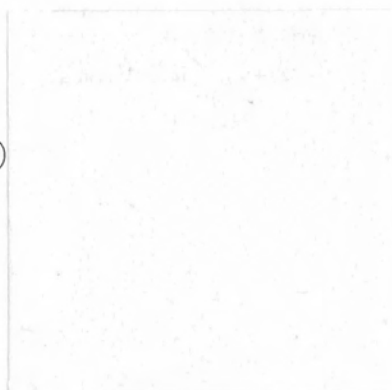
The effects of beating time and fiber choice on the resulting handmade paper

20 minutes

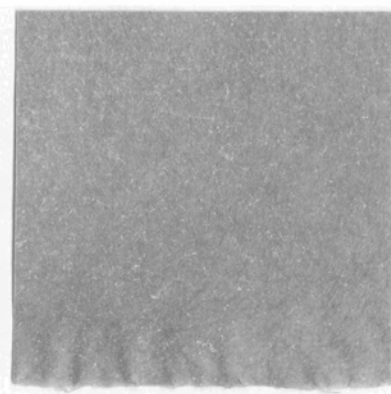
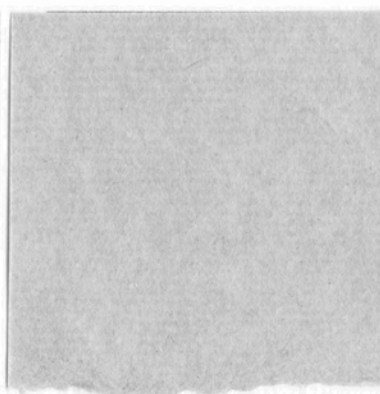
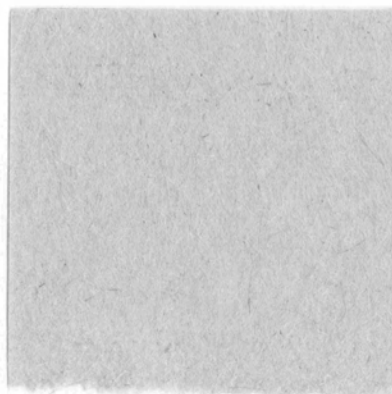
60 minutes

180 minutes

Cotton (half stuff)



Raw Flax
(cleaned and cut to
1/4" lengths)



Abaca(sheet
pulp)

