

TECHNICAL NOTE NUMBER 194

FOREST PRODUCTS LABORATORY - U. S. FOREST SERVICE - MADISON, WISCONSIN

COST OF DE-INKED NEWSPAPER

Mills located near cities capable of furnishing large quantities of old newspaper can produce pulp from de-inked news cheaper than they can buy new groundwood, according to cost data collected by the U. S. Forest Products Laboratory, Madison, Wisconsin. A saving of \$15 a ton has been effected at one mill through the use of de-inked news instead of groundwood pulp. Such a saving would bring in a large return on the \$10,000 investment needed to equip an ordinary 30-ton mill with the additional washing equipment and a warehouse large enough to hold a three months' supply of old newspapers, and it would make possible the profitable operation of some mills now finding it difficult to make both ends meet.

The itemized figures given below were obtained in a mill operating at the rate of 40 tons of de-inked newspaper stock per day. The labor, repair, and maintenance figures are taken from the yearly average for that mill. The cost of power and equipment for beating the old papers is not included since it would be the same where purchased pulp was used.

Cost of Producing One Ton of De-inked Newspaper Pulp

Labor and expense

Labor	\$1.58
Labor (general and repair)49
Fuel82
Power48
Repairs51

\$3.88

Carried forward.....\$3.88

Materials

Old newspapers, 2070 pounds at 1¢.....\$20.70
Lime, 21 pounds at 3/4¢.....0.16
Soda ash, 33 pounds at 1-1/2¢......50
Bentonite, 155 pounds at 1-1/4¢.....1.94
Water, 13,000 gallons at 8¢ per M gal.1.04

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\$24.34

Miscellaneous charges

Royalty, taxes, interest on investment
in washer equipment, etc. Would not
exceed.....3.78

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Total cost \$32.00

Relative Costs of Furnish per Ton of Newsprint

Using groundwood

0.9 ton groundwood..\$40.50
0.2 ton sulphite....12.00
Labor handling
groundwood laps......50

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Total cost \$53.00

Using reclaimed old papers

1.0 ton de-inked
newspapers.....\$32.00
0.1 ton sulphite.....6.00

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Total cost \$38.00

To make the most out of the de-inking process, it is absolutely necessary that the mill be independent of the periodical manipulating of the waste-paper market. For mills situated near the larger cities such a course is very simple. In fact, a large part of a mill's supply might be collected by its own force from the neighboring territory, thereby cutting out the profits of at least three middlemen.

In stabilizing the supply of waste papers the publishers can be of enormous assistance, since the supply is directly dependent upon the amount of paper saved by the average householder. With proper newspaper campaigns, such as were carried on during the war, the supply of waste newspapers could be doubled without much effort; and if with proper warehouse facilities the demand were stabilized, the supply would continue.

With a more constant demand, the need of so many agents between the householder and the paper mill would be avoided, and the householder might receive at least 50 per cent of the price paid by the paper mill instead of only about 10 per cent, as is often the case.