Filter Paper in the Vegetable Oil Industry

Proper Selection of Filter Medium Promotes Quality and Profits

BY THOMAS L. HARROCKS

HE use of filter paper as a filtering medium for vegetable oils is regular practice in many refineries.

The type of paper used varies with the conditions under which it is used and the purpose which prompts its use.

Purposes of Use of Filter Paper

In general, filter paper is used for two widely varying purposes:

- 1—To protect filter cloths from the film of oxidized oil principally in the filtration of linseed and other drying oils.
- 2—To obtain an oil of crystal clarity and sparkle for the highest class of trade.

Filter Paper has been used by Linseed Oil Refiners for years in the usual type of plate and frame press. The sheets are usually something over twice the length of the plates so that they can be thrown over the frame and cover each side. For example, a 24-inch press will require sheets 26 x 52 inches.

The type of paper used for this work for years was a heavy wool felt paper similar to roofing or floor covering base but made more carefully and with a much more comprehensive grading of rags. Recently, however, a white paper of similar character has become more popular probably because the white paper does not impart color to oil even when the oil is left standing in contact with it for a long period.

Various Types Papers Used Some refiners prefer a different paper for raw and boiled oils, others use the one grade for both types.

For clarifying oils where protection of the filter cloths is not the first consideration, other types of filter paper are demanded.

The type of paper in such cases is a pure white paper made of linen and cotton rags and with a creped surface such as is seen on paper napkins.

The weight usually used varies between seventy and one hundred forty grams per square meter, equivalent to a weight per thousand sheets nineteen by twenty-four inches of from 50 to 90 pounds.

Occasionally heavier papers are used and sometimes papers with a small percentage of woodpulp are preferred, but these are exceptions.

The Olive Oil Industry abroad has for years employed a special type of filter press requiring a special French filter paper. At the present time there are three installations of this type in the United States, all, apparently, giving excellent results.

One of the drawbacks to the use of Filter Paper has been the difficulty in obtaining reasonably small quantities from the average paper mill. Most mills will not make less than a ton at one time and the average refiner requires possibly one fourth of that quantity at a time. The use of filter paper has broadened during the past few years, however, and it is not necessary to purchase several years' requirements at once in order to obtain the type of paper desired.