



DETERMINATION OF CONCENTRATION WITH A REFRACTOMETER

This procedure is designed to provide a quick method to determine the concentration of working baths of soluble oil metal protection fluid.

This method is not as accurate as an acid split method, however the results obtained by the use of a refractometer are normally reliable enough to keep the washer within acceptable ranges.

PROCEDURE:

1. Using an Atago model #N-10E refractometer, or equivalent, calibrate the instrument so that distilled water reads zero.
2. Obtain a well-mixed sample of the used emulsion to be tested. It is important that the sample be as uniform as possible. Free oil in the sample can lead to erratic results.
3. Place a few drops of the emulsion on the prism, and lower the cover.
4. Hold up to a light source, and look through the view piece to obtain a reading. The reading is the dividing line between the light and dark areas. In some cases the line is not sharp, when this occurs the dividing line should be taken as the middle of the transition area.
5. To determine the concentration of the bath multiply the reading by product factor.

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