



Application Engineering Data

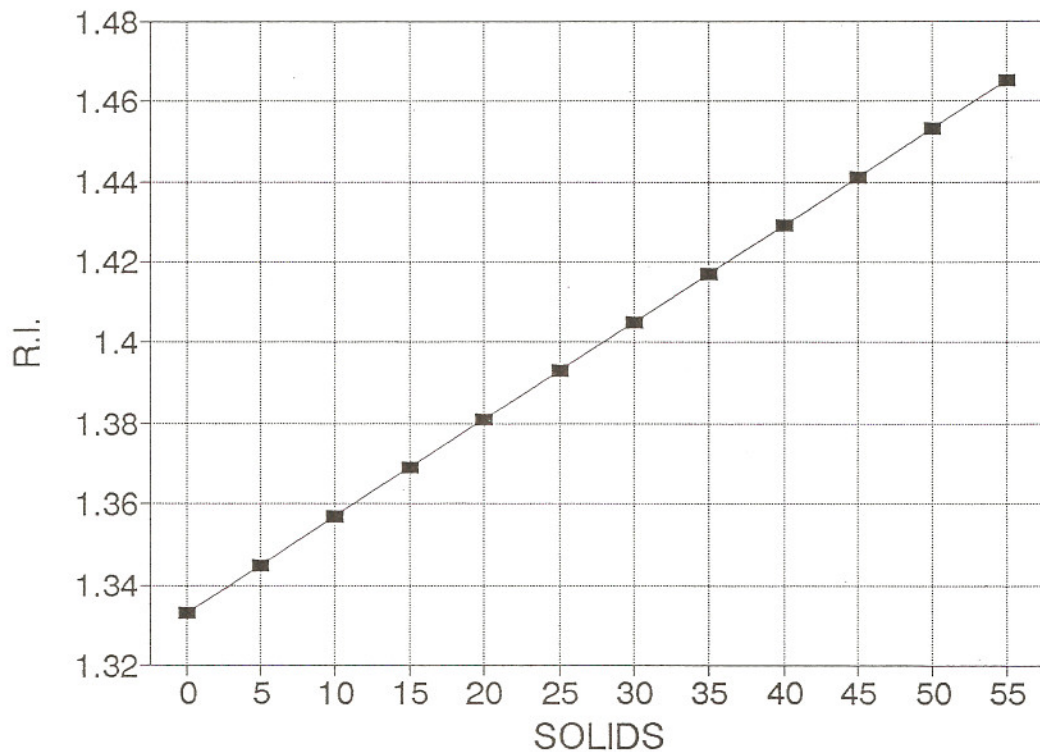
Black Liquor

Refractometers have long proven to be the instrument of choice for black liquor solids concentration. The large change in refractive index versus concentration makes for a relative easy and accurate measurement. The refractometer reads true dissolved solids and is not effected by bubbles, entrained air, or suspended material. This combined in a compact microprocessor based, easy to service design, allows integration into your millwide monitor and/or control system.

An important and overlooked area for refractometers is the pulp washing operation. By monitoring the concentration output the washers can be balanced to meet the needs of the evaporation process. This installation is simple and greatly reduces hand sampling.

In the evaporators, the concentration and temperature output can be utilized to monitor efficiency, detect problems, and operate economically. The product output to storage is the final measurement in this area of the process.

BLACK LIQUOR
R.I. vs CONCENTRATION



REFRACTOMETER APPLICATION AREAS

- ① OUTPUT OF EACH PULP WASHER TO MONITOR THE EFFICIENCY OF WASHING OPERATION.
- ② WEAK LIQUOR CONCENTRATION INTO EVAPORATORS.
- ③ EVAPORATOR INTERSTAGE CONCENTRATION.
- ④ EVAPORATOR OUTPUT TO BLACK LIQUOR STORAGE.
- ⑤ BLACK LIQUOR FROM STORAGE TO CASCADE OR CYCLONE EVAPORATORS.

