1. The FIBREFLOW drum repulping system is an assembly of fundamentally proven major components, tailored to produce high quality pulp from secondary fiber.

2. The system operates as a continuously rotating drum. Recycled papers are introduced into the high consistency impregnation zone, sometimes in conjunction with caustic soda and deinking chemicals, and dilution water is added to achieve approximately a 15% consistency. Alternately lifted and dropped, the furnish travels longitudinally through the 1° sloping drum during this deflaking action without degrading the contaminants inherent in all such furnish. In the low consistency screening section of the FIBREFLOW drum additional dilution water is added to the partially processed furnish via showers. This results in a 4% consistency, and allows for fiber passage through the screen plates to the bottom vat. The contaminants are rejected through the end of the drum and conveyed to disposal. See Figure 1-1.

Figure 1-1. Typical Flow Diagram
3. The FIBREFLOW drum experiences low maintenance costs as all the drum parts are stationary. The screening section is not hampered by plugging as the dilution water from the showers is added through a hood at the top, driving down through the perforations. This action forces any fiber bundles, which tend to plug the holes, back into the slowly rotating drum. Effective deflaking is accomplished with minimal electrical energy consumption; losses involved in sustaining drum rotation are very low.

4. Output is of high quality due to efficient screening and lack of contaminant degrading. The relatively high consistency operation minimizes chemical usage as well.

5. Reliable operation, low maintenance requirements, minimal energy and chemical consumption and high quality output are the documented history of this design.