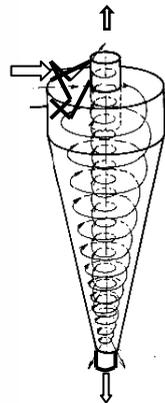




COVEY CASE STUDY

Our client was experiencing poor cleaner performance, and difficulty in obtaining spares for its three-stages of canister cleaners.

The main problem was that although the cleaners worked quite well when recently cleaned, they soon began to block and then efficiency dropped and wear of elements increased. Because of the canister design, it was not possible to clean elements without completely stopping production. A second problem was that the throughput of the cleaners changed fairly regularly, and hence they were rarely operating at maximum efficiency. When we inspected the units we found a third problem – some of the elements were exhibiting re-verse flow, and actually re-introducing the rejects into the accepts stream.



It was apparent that the cleaners would need to be replaced, but money and space were limited. Fortunately, we located some much older, but still fully serviceable, modular cleaners on a disused machine at another of the company's sites. These could be modified (larger frames and improved troughs and instrumentation) but they had far too large a footprint to install in place of the existing units.



We identified an opportunity to relocate a few pipes and create a new platform on a pipe bridge structure close to the existing cleaners. This gave an added advantage that most of the modification work could be done while the plant was still running, with the switch occurring during a short, scheduled shut.

After the changeover, the mill saw an immediate improvement in cleanliness of the pulp (from hovering around the specification limit to an order of magnitude below). Because we had installed more than the minimum number of cleaning elements in a modular arrangement, elements could be cleaned or replaced on the run, and the number of elements in use could be adjusted to maintain optimum pressure drop even when the throughput changed.

