Greater efficiency in the straining of apple juice, and substantial cost savings from a reduction in wash water consumption, have been achieved at the Hereford factory of H P Bulmer Holdings plc thanks to the installation of two Russell liquid solid separators supplied by Russell Finex Limited.

One of the separators is employed for the treatment and reclamation of wash water after it has been used for cleaning the belts of a number of belt presses. Previously the water was simply discharged as effluent. The other separator is used for the straining of apple juice from one of the belt presses. Each press consists of two hydraulically-loaded continuous belts, between which the apples are progressively pressed to remove the juice for cider making. At the end of this process, the belts are separated for washing before travelling around again to the pressing stage.

The purpose of the first Russell liquid solid separator is to remove apple particles and any other contaminants from the wash water. By allowing a large proportion of the water used to be reclaimed in this way, the Russell liquid solid separator has reduced the company’s water bill. The second Russell liquid solid separator is used for the straining of apple juice discharged from one of the newest presses. This has been found to give much greater efficiency than the rotating drum screen used for straining apple juice on the existing presses. With the rotating drum screens, solids tend to build up causing the flow to be restricted and some of the juice to overflow to the solids sump. But these problems have been completely eliminated by the Russell liquid solid separator. The result is more controlled screening, improved product quality, high yields and improved flow rates.

The unique action of the separator helps to keep meshes clear of oversize particles, ensuring unrestricted liquid flow. An integral spray system is fitted to back wash meshes in place without the need to strip down the machine.

Constructed from stainless steel throughout, the machines are easy to maintain and clean down and are totally enclosed to protect the strained product from airborne or other contaminants.