

BUXTED CHICKENS CUTS WATER RATE BY £34,000 p.a.

A new effluent screening process at Buxted Chickens' Ripon factory has reduced parts per million of settleable solids by 66% within weeks of installation. The investment of £26,000 in two Russell Finex, non-vibratory, liquid/solid separators will be recouped in months, say Buxted.

Buxted's Engineering Manager, Bob Wilkinson, says that Yorkshire Water Authority figures confirm their predictions and show that from a peak of 900mg/litre settleable solids in effluent, the average today is around 300mg/litre. The biological oxygen demand (B.O.D.) has been reduced significantly and a water rate which had reached £100,000 per annum, is now around £66,000 per annum.

When Buxted's water rate soared to £100,000 annually, the company decided to invest a total of £55,000 in improved waste and offal handling equipment and preliminary coarse screening. But the major improvement came from the two Russell Finex separators, plus blow-pots and pipework to remove the solids, costing £4,000 to install.

The totally enclosed, stainless steel, Russell Finex separator caters for 15,000 gal/hour so two were needed at Buxted where up to 20,000 gal/hour is sometimes reached in continuously processing up to 250,000 birds each week for major national food supermarkets. Processing takes place over a sixteen-hour day, but the separators also work through the night when cleaning and maintenance take place.

So far, say Buxted, the 200 micron, polyester screening sleeves in each separator are self-cleaning and show no sign of 'blinding' with fat. Buxted are continuing to test the limits of fine screening by monitoring the effects of going down to 150 micron screens. Russell Finex can provide screens as fine as 10/20 micron for this separator when used in food and similar effluent applications.



The Buxted separators have fixed speed 2hp motors, but variable speed motors are available from the manufacturers for applications where conditions change according to the material being handled.

Another flexible feature of the separator is the ability to tilt the separator body, which pivots within its frame by 25° from the horizontal. This allows Buxted to increase or decrease the retained water content of the separated solid effluent to achieve the optimum consistency for air-blowing into the collecting vehicle's tank.

This significant improvement in environmental control at Ripon, one of Buxted's five regionally located factories, is also highly satisfactory for Yorkshire Water Authority. Russell Finex, after this convincing demonstration of the performance of the new liquid/solids separator, following an earlier application in which it showed it can deal with wool scourings in Bradford, predicts a wide market for this machine.