## Waste Water

## Application Data No. 78 09/98

## Mono® NOV Solves Another Fishy Problem

To ensure effective river water abstraction and final product quality, NutraSweet Kelco in Scotland is using a low cost L Series Discreen from Mono<sup>®</sup> NOV to screen up to one million gallons of water per day abstracted from the River Milton.

A division of Monsanto, NutraSweet Kelco is the world's largest producer of alginate, a by-product of seaweed which is used as a natural thickener in the food, pharmaceutical, textiles and pet food industries.

The efficiency of the production process and the quality of the final product is heavily dependent upon the thorough screening of river water to remove all debris, such as twigs, logs and leaves. The gentle operation of the L Series Discreen has proven to eliminate possible harm to the local fish livestock, whilst also preventing them entering the pump intake.

Before installation of the L Series Discreen, NutraSweet Kelco had used gravel filter beds which quickly clogged with leaves, particularly in the Autumn, preventing the optimum quantity of water being abstracted. In addition, they had to be manually cleaned on a regular basis to remove the debris, thus creating a secondary disposal problem which was costly in terms of labour and loss of production.

The L Series Discreen is constructed from a series of cantilevered shafts, each fitted with overlapping and intermeshing, high impact, engineered polymer discs, with an aperture size suitable for the level of screening required. The rotation of the disc shafts provides a gentle conveying action of solids across the face of the screen to the discharge point.

Independent tests have proven a capture rate efficiency of 95% ensuring the protection of pumps and associated process plant.

Fully self-cleaning and with low maintenance requirements, the L Series Discreen is fitted with individual comb bars which continually remove debris from the final disc stack for discharge back into the main river flow.

Following the successful performance of other Mono equipment on site, NutraSweet chose the L Series Discreen for its compact, modular construction. It can be simply retrofitted to existing installations without the need for complex foundations, and tailored to suit the exact width and depth of channel.

As the point of abstraction is over two miles away from the plant, the L Series Discreen was supplied with a control panel and telemetry system which will immediately sound an alarm within the plant to warn of any system failure. This is vital for ensuring the plant can operate continuously with minimum downtime and disruption.



Discreen:	CL1504ZNL
Product:	River Water
Capacity:	200m <sup>3</sup> /h
Drive:	1.1kW motor



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