

A Mono® NOV Discreen® Saves Migratory Fish

A turnkey project managed by Mono® NOV, including the installation of a Discreen®, is enabling United Utilities PLC to fulfil its obligations under Section 14 of the Freshwater Fisheries Act, while containing the cost of compliance within reasonable levels. Haredon Intake, near Dunsop Bridge in the attractive Trough of Bowland previously had a problem with migratory fish from the river entering the intake - a challenge which the equipment from Mono has solved.

Implementation of conventional filters at the plant, which serves the Preston area with 6.6 million gallons of water per day, was judged impractical as they would have required regular maintenance to clear leaves and debris, whilst conventional screening technology would have been prohibitively expensive and difficult to install at this particular site. Consulting engineers were initially called in to evaluate how best to comply with legislation and meet the specific on-site requirements and decided that the Discreen was the best solution. As Mono has a dedicated Projects Team, United Utilities asked Mono to not only manufacture and supply the Discreen, but also manage this turnkey project.

The Mono Discreen has a 2.2 kw motor and is economical in its 24/7 all-year-round operation. The screen is constructed using a number of shafts each fitted with discs that overlap and intermesh with corresponding shafts. The shaft rotation forms a gentle conveying action across the face of the screen to the discharge point, whilst allowing water to flow through the disc stacks. Individual comb bars are fitted to the first and last shaft to eject screening solids which remain in the main flow. This removes the need to collect and manually dispose of extracted debris, significantly reducing

labour and disposal costs, whilst the gentle rotating action of the discs do not harm aquatic wildlife.

The responsibilities of the Mono Projects Team included M & E design and installation, construction of ramps to permit equipment delivery, manoeuvring of heavy equipment to the remote rural location, as well as the digging of trenches for cable ducts leading to the control room. After lowering the Discreen into its support frame (which allows easy removal for any routine maintenance) the remote control panel was mounted adjacent to the Discreen. This control panel intermittently stops and reverses the Discreen to ensure the discs are free of debris. Final commissioning and training of the site operatives completed this turnkey project.

Available to fit various channel widths and depths, the Discreen has the ability to screen up to 95% of solids, dependent on the aperture size required. Mono screens are ideally suited to water abstraction intakes, inlet works, storm overflows and pump stations. They can be combined with a Mono Muncher® to screen and grind solids for the protection of pumps, or as part of a complete extraction package for screenings removal, compaction and dewatering.



Discreen:	CL1508 Discreen
Product:	River water
Capacity:	1220m ³ /h
Pressure:	2.2kW motor



Mono Pumps Ltd
Martin Street, Audenshaw
Manchester, M34 5JA England
T. +44 (0)161 339 9000
E. info@mono-pumps.com
www.mono-pumps.com

Mono® NOV

One Company, Unlimited Solutions