

# Turnkey Triumph for Mono<sup>®</sup> Projects Team

The projects and installations team from Mono has completed a successful project for Anglian Water at a pumping station in Norfolk.

The pump station handles the wastewater from the surrounding houses and the existing submersible pumps were unable to successfully accommodate the variable flow rate. Anglian Water required a more efficient pumping system and also needed to upgrade the recently adopted station to bring it in line with current standards.

A Mono Munchpump package was therefore deemed the ideal solution as the package provides all the savings associated with small bore discharge pipework with the added benefit of low running speeds, reducing wear and maintenance. The package installed comprises of two SB Munchers and Compact C range pumps, in a duty/standby arrangement. The SB Muncher macerates any solids within the wastewater and the pumps then transfer the flow to the local sewage works for treatment.

Combining a Mono progressing cavity pump with a Mono Muncher allows the use of small bore pipework that is a more cost effective solution to the traditional 4" rising main sewer and offers the further advantage of eliminating the risk of solids settling and septicity. As the equipment is surface mounted and installed in a clean, dry environment, access for maintenance is more user friendly than submersible pumps, with no lifting equipment out of dirty sumps and one-man accessibility.

The SB Muncher is a twin shaft, low speed high torque grinder. Each shaft is fitted with a series of interleaving cutters that allow liquid to pass through, trapping and macerating solids with their high torque cutting action. Low operating and cutter tip speeds dramatically reduce mechanical wear, and also offers greatly reduced noise levels when compared to high speed macerators.

The positive displacement action of the Mono pump allows the speed to be set independent of pressure, allowing slow speed operation of the unit. This contributes significantly towards low wear rates, reduced energy consumption, extended component life and greater reliability of the overall pump package. Pump capacity can be set to generate a consistent and improved sewage flow that helps improved effluent handling at small wastewater treatment plants. The efficient maceration of the sewage also eliminates the need to screen at inlet level, with no associated labour costs for disposal of screenings.

Munchpumps consume less than 50% of the energy of a comparable submersible pump and the SB Muncher is so reliable as a sewage macerator that a 3 year warranty is offered.

Total design, installation and commissioning are available from Mono, through their experienced projects team. This complete service made Anglian Water confident that Mono could solve their problems. The installation involved removing all the existing equipment and installing the Munchers, pumps, suction and delivery pipe work and valves into a new GRP kiosk, which had a size restriction of 3m x 2m, to avoid infringement on local land boundaries.

Commenting on the installation Paul Eve from Anglian Water said, "We needed pumps which could accommodate a variable flow rate of between 3.6 – 10.8m<sup>3</sup>/h. There are cheaper alternatives on the market but it is worth paying a little extra for a complete package from a company you can depend on."



Munchpump: **2 off C14K Compact C Pumps  
2 off CB201 SB Munchers**

Product: **Raw Sewage**

Capacity: **3.6 - 10.8m<sup>3</sup>/h**

Pressure: **2 bar**

Pump Speed: **70 - 328 rpm**

Drive: **2.2kW motors**



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