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Maschinen für die Abwassertechnik im Kommunal- und Industriebereich



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Permanent installation of the 2 Screw Press Q-PRESS® units

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Cake from Trials

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Trial plant on test at Dairy Crest

Following successful trials using the HUBER Technology pilot plant Screw Press Q-PRESS®, Dairy Crest Creamery in Davidstowe went ahead and purchased 2 off HUBER Screw Press Q-PRESS® units complete with polymer dosing, pumps and controls. This has now been followed by a third order to cover for expansion of the effluent plant which has now been successfully installed and commissioned.

Four different sludge streams arise from Dairy Crest's modern effluent plant and it was initially thought they might behave differently with regards to polymer requirements and dewatering potential. Bench tests were carried out on all 4 streams individually and various combinations were followed by full scale tests and it was agreed that the 4 streams could be combined and an acceptable result could be achieved by combining all 4 streams. The DAF sludge aided the dewatering of the biological sludge and a suitable polymer was found to bind up the fines in all 4 feeds. By combining all 4 streams the system was simplified and a large saving in pipework and controls was made.

Originally the DAF sludge was dewatered on a Belt press and the other sludge's were not possible to dewater efficiently on the belt press so they were taken away by tanker in a slurry form at ~4% Dry Solids. The belt press was awkward to use and the building required constant housekeeping to keep it clean and tidy. The totally enclosed HUBER Screw Press Q-PRESS® is much cleaner and reliable to operate.

On the permanent installation HUBER supplied all the pumps which pump the combined sludge into a common sump, 3 off Screw Press Q-PRESS®, the polymer dosing package, the conveyors and the control panel. Each Q-PRESS® discharges the cake via a conveyor into a farm trailer for spreading by a solids muck spreader as opposed to liquid spraying. The volume reduction was 4 to 6 times the feed volume thus reducing transport and disposal costs.

HUBER Technology worked with Williams Industrial Services to install the 3rd Q-PRESS® and were pleased to of found the solution that Dairy Crests required.

The permanent Q-PRESS® units have now been running for over 6 months and consistently supply cake suitable for spreading by muck spreader and clean filtrate to return the flow to the effluent plant. The Q-PRESS® with its low power and volume reduction fit well in the ethos of Dairy Crest in reducing their environmental impact of running Europe's largest mature Cheese production plant.

The trial plant is supplied as a complete package and incorporates; the Q-PRESS®, the polyelectrolyte (poly) dosing unit, the sludge feed pump, the flocculation reactor and the control panel. The container also comes with a conveyor that is positioned under the discharge point from the Q-PRESS® and allows cake to be deposited outside the container.

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Key benefits of the Q-PRESS®:

- Digestate volume reduction
- Reduced storage and transport costs
- High quality fertilizer

For more information please contact Tony Clutten, Process Sales Manager Tel: 01249 765050 Mobile: 07525224521 Email: tchuber.couk

Related Solutions:

■ HUBER Solutions for the Dairy and Milk Processing Industry

Related Products:

■ HUBER Screw Press Q-PRESS®

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