

MP300 moves to Mangreen



Plant from Aggregate Processing Solutions delivers environmental savings for Lafarge Aggregates

A modular ‘off-the-shelf’ multi-component washing and screening system introduced to newly opened Mangreen Quarry by Aggregate Processing Solutions – the specialist washing division of the Finlay Group – is playing a key role in the delivery of major water-management efficiencies for Lafarge Aggregates.

Central to the operations at the Norwich-based site is the Terex Finlay MP300 washing plant, which is processing aggregates using water that is recycled under a comprehensive water-management system.

Lafarge Aggregates have created a natural settlement lagoon at the quarry from which water is collected and pumped around the washing system before being recycled and reused, providing a major reduction in the amount of abstracted water needed to operate the site.

As well as supporting the water-management programme, the plant supplied by Aggregate Processing Solutions has been designed with a low profile, to reduce the visual impact of the operations on site.

The Terex Finlay MP300 – which features a Cedarapids 16ft x 6ft screen, Terex Finlay 206 log-washer, dewatering screen, oversize conveyor and rear conveyor – is itself a reused system. The plant was originally introduced on a contract basis at Lafarge Aggregates’ Brooksby Quarry, in Leicestershire, where it was used to open up the site.

After a successful two-year period at this location, Lafarge Aggregates purchased the plant – which had produced 500,000 tonnes of material – and moved it to Norwich to open up their new Mangreen site.

Now fully operational, the MP300 is supported by a Terex Finlay 390 Hydrascreen high-performance portable screening plant, together with a Terex Finlay Sandmaster mineral-classifying cyclone and dewatering

unit, which incorporates a centrifugal rubber-lined slurry pump, vertically mounted hydrocyclones, collection tank and dewatering screen. Both of these units were also brought to Mangreen from Brooksby Quarry.

The processing plant is completed by a new Terex Finlay 683 Hydrascreen three-way-split scapling, screening and stockpiling unit, also supplied by Aggregate Processing Solutions. ➤



Sand Processing



Mangreen is processing glacial sand and gravel which, when extracted, has a significant top coating of clay. However, the equipment from Aggregate Processing Solutions is designed to produce a clean product at high volumes – with the machinery currently producing high-quality 40mm, 20mm, 10mm and oversize products, as well as soft and sharp sands. The flexibility of the plant means that these sizes can be changed to meet demand.

Mangreen is a major supplier of materials in and around Norwich, supporting Lafarge's

three Readymix sites located within a 30-mile radius of the quarry, as well as an on-site bagging plant. It is currently operating the first of four phases, with 1.2 million tonnes of aggregate to produce.

Colin Ellis, Lafarge's multi-unit manager at Mangreen, worked with John Dunne, managing director of Aggregate Processing Solutions, to introduce the Terex Finlay MP300 and the other plant to the site to help create the complete washing and screening system.

'The results have been really impressive,' commented Mr Ellis. 'We are producing 160

tonnes/h and we are very pleased with that.'

He added: 'After taking delivery of the plant, the company set about introducing some modifications to fit the needs of the site. These included an upgrade to the catwalks to create a more static, low-level plant and to ensure ease of access to the machinery's components. These changes mean we enjoy the benefits of a static system, while still having a fully-mobile plant.'

'We have also rubber-lined the screens to further reduce the noise levels, in keeping with our environmental policy. The equipment is working together very well and we have the benefit of excellent service and back-up support from John and the team at Aggregate Processing Solutions.'

Mr Dunne said: 'This installation demonstrates our ability to introduce machinery on site from an 'off-the-shelf' design, and enhance it to a specification that meets the exact needs of the client – leading to the delivery of high volumes of product, combined with significant environmental benefits.'

Set up by the Finlay Group in 2004 to provide a bespoke, turnkey solution in the provision of screening, washing and crushing equipment, Aggregate Processing Solutions sell complete systems as well as contracting and hiring out processing equipment. The company has recently opened a new office in Cambridge to support the work of its headquarters in Stafford and provide a platform for growth in the southern region.

For further information visit: www.apswashing.co.uk