

Project Highlights

Project Name: New Sand Wash/Quarry Supply Water Pumps & Sludge Pumps. Equipment Supplied: 17 customised process supply pump sets comprising of 8 Long coupled pump sets, 6 Sydex Progressive Cavity Pump sets, 2 multistage pump sets and 1 Booster Pump Package.



Doyle Pump & Engineering were engaged to work in collaboration with specialist industry consultant in the design and supply of purpose fit pump sets for a new sand washing/quarrying plant. As part of the design specification, Doyle Pump & Engineering provided a complete hydraulic and engineering design with detailed pipe sizing, technical data, CAD drawings and pumping solutions to meet specific end user requirements.

Due to the nature of pumping environment, the client's brief included a requirement for robust, reliable pump solutions with efficiency and ease of maintenance in mind.

The Brief

With a new plant to be built and specific installation requirements, the team at Doyle Pump & Engineering were equipped to provide insight and application knowledge in hydraulic and system design. Working in collaboration with a specialist industry consultant through all aspects of the project, our team were engaged to specify pump requirements, provide input in control design and recommend and supply turnkey equipment.

The Recommendations & Solutions

- Design and propose long coupled, heavy duty, end suction water supply pumps with high efficiency electrical motors.
- Design and propose heavy duty progressive cavity pumps with high specification electrical motors to suit the harsh working environment.
- Design and propose heavy duty vertical multi-stage water supply pumps.
- Pump sets to be supplied mounted on 316 S/S base plates, where applicable or hot dip galvanised plates, to ensure long life, thus simplifying future maintenance.
- We recommended the washdown constant pressure system pumps to be installed as 2 Duty/ Parallel pumps for built in redundancy.

The Outcome

Doyle Pump & Engineering supplied 17 customised water supply pump sets, comprising of ISO radially split cased pumps with heavy duty stainless steel impellers, Sydex specialised progressive cavity pumps fitted with high specification motors, and vertical multi-stage pumps for water supply and constant pressure boosting. All pump sets were customised to operate in the harsh pumping environment and to the specific installation requirements of the end user.



