Case study 601 Sykes Pumps dredge boatyard

A boatyard in Devon was having problems with the level of silt sediment building up on the marina bed, meaning that some areas had become too shallow for boats to pass over safely and others were completely restricted. A few options were considered for clearing away the silt, such as using a long reach excavator; however, these were very expensive and could not reach all areas. The next option considered was dredging the area using pumps, so Sykes Pump Hire were contacted to come up with an efficient, temporary solution for moving the silt away quickly, at minimal cost.

One of the main problems and costs associated with traditional dredging is the transportation and disposal of the removed silt. Sykes has experience with this issue and are able to utilise a different method of dredging to avoid this problem.

A Sykes engineer visited site to determine what could be done and the hire of a Sykes MH100 diesel driven, self-priming high pressure pump was organised. The MH100 was selected based upon its high pressure capability (3 – 8 bar) with substantial flow rates (25 –c 100L/S), which suited this application perfectly. The pump (pictured) was set up on a barge and used to pull water out of the marina and force it down two sets of 2" discharge lines. These discharge lines were fitted to lightweight steel tubes, which were then aimed at the bed of silt. The action of the water shooting out at a pressure of 6 bar broke up the silt and mixed it into the water above. The water current in the river then carried the silt away to a deeper area further downstream. This unique process relies on there being a strong enough current in the river to move the silt away, something the Sykes' engineer had already ascertained.

Despite an original estimate of six weeks, the hire was fully completed within just four, much to the delight of the client and users of the marina. Sykes' swift service ensured that money was saved and the entire project went according to plan. It later transpired that the temporary system deployed by Sykes Pumps was significantly cheaper than one implemented by a dredging company on a previous occasion.







Weight 1966 kg with fuel / 1750 kg without fuel Dimension 2600x1100x1800 Noise level typical noise level at 1m dBA = 99 - 105

Performance max head: 82 m, max flow: 100 l/s, Max solid: 25 mm
Fuel tank capacity Max 24h running
Fuel consumption 17.1 l/h
Chassis skid mounted

Pump materials main pump: SG grade iron/ impeller: stainless Steel



SYKES PUMPS 60

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