

Yet Another Country, Yet Another Transformation Story



Kirloskar Brothers Limited (KBL) executes a unique project in Suriname, involving the development and supply of bi-directional inclined VT pumps and the company's largest ever Autoprime pump.

KBL is trusted by Governments globally for its extensive and vast experience in successfully handling critical water management projects and its reputation as a reliable provider of quality products, solutions and service. In some of the developing countries, KBL has played an integral role in literally transforming their overall economy and landscape and so, obviously, the company becomes a preferred choice for handling important Government pumping projects there. Similarly, based on KBL's past records and accomplishments, The Government of Suriname, a progressing South American country, recently chose the company as a strategic partner for the execution of one of its most

significant pumping projects. The Suriname Government awarded KBL a contract to design, manufacture and commission series of pumps and pumping systems for its existing Wageningen pumping station that forms the lifeline of the Wageningen area rice estate. The pumping station is an integral part of an irrigation project located about 170 km from the capital - Paramaribo. The KBL pumps that form a part of the pumping station are primarily aimed at facilitating drainage and irrigation across the corresponding rice field estate. At the same time, these pumps could also be used for handling waste water with suspended soft solids during rains and floods.

After evaluating the site condition and the project requirements, KBL recommended upgrading the pumping station with 3 BHA2400S sets for irrigation and drainage application and an additional trolley-mounted Autoprime pump set (MF60/65) as a standby purely for dewatering purpose.

The BHA2400S is a grease-lubricated single stage bi-directional inclined vertical

using a tractor or a similar vehicle. The fuel tank capacity is enough to run the pump continuously for approximately 8 hours. During the 8 hours of operation, in mode, the water is pumped from the river to the irrigation canal while, in the Drainage mode, the water is pumped from the drainage canal back into the river. Thus, with the unique bidirectional design feature, instead of installing two separate

Parameters	Irrigation Mode (Pumping In)	Drainage Mode (Pumping Out)
Discharge	28800 m ³ /hr 8000 lps	28800 m ³ /hr 8000 lps
Total Head	2.1 m	1.79 m
Pump Speed	110 rpm	106 rpm

turbine pump. These pumps are equipped with bidirectional squirrel cage induction (Weight 4.7T/motor) operating at a speed of 594 rpm and a single stage helical gearbox (Weight. 5.5T/ GB) with ratio of 4.45. As the set-up carries a bidirectional rotation feature, the single pump can work in either directions to be able to pump water for both the application modes, viz. Irrigation and Drainage. In the Irrigation For meeting the extremely high dewatering requirements of the project, KBL developed the company's largest ever Autoprime pump set with an astounding discharge capacity of 1167 lps. The specially customised pump is also one of largest trolley-mounted Autoprime pump sets in the world. The trolley-mounted Autoprime pump set (MF60/65) is an end-suction horizontal delivery pump equipped with a mixed flow type impeller. It is a mixed flow pump with a high flow capacity and low head. As this is a trolley mounted Autoprime pump set, it can easily be moved from one location to another by

pumps, a single pump can be used for both the drainage as well as the irrigation applications. The operating parameters of the pump supplied:

33.6 million litres of water can be pumped from the cavities/water pockets of the pump set. The operating parameters of the dewatering pump:

Operating Parameters	
Discharge	4200 m ³ /hr 1167 lps
Total Head	8.0 m
Pump Speed	420 rpm
Engine Speed	1800 rpm
Gear Ratio	4.28

The successful commissioning of this signature and unique pumping project in Suriname is yet another addition to the long list of similar government projects executed by KBL.