



The right fit

ABB partners with a family-owned company to power floating flow pumps

OSCAR AVELLA – Partnership can be defined as a collaborative agreement between two or more parties in which all participants agree to work together to achieve a common purpose or undertake a specific task and to share risks, resources and competencies. ABB has a strong history of successfully forming partnerships with companies, big and small. A recent example is the story of how a small, family-owned Colombian engineering company is transforming traditional irrigation systems in the Middle East, and the key is a floating flow pump powered by ABB process performance motors.

1 Floating pump powered by ABB motors



tors. Last year, ETEC placed an order with ABB for 38 process performance squirrel cage induction motors → 2 to run the floating pumps destined for irrigation projects in the Middle East. “We decided to partner with ABB Motors and Generators, because they have a worldwide technical reputation that would guarantee the product that we were about to offer,” says Thiriez.

The floating pump design requires a motor with a small frame that is also totally self-cooled with an enclosed fan and has high efficiency and low temperature rise. Thanks to its comprehensive portfolio, ABB was able to meet these requirements exactly: high energy efficiency (IE2 and IE3)¹, combination rated power Vs frame,

ABB process performance squirrel cage induction motors run the floating pumps.

and thermal margins that allow motor operation in outside environments up to 55°C at an altitude of 0 m above sea level.

By partnering with ABB, ETEC was able to ensure a cost-effective solution with the floating pumps by using ABB high-efficiency process performance motors. ETEC offers the pump design with ABB’s electric motors when a power source is available either by running cables into an electric network or through a local generator. For the floating pumps an electric motor has distinct advantages over a

2 Breakdown of ordered ABB process performance squirrel cage induction motors

Quantity	Output	Description
8	371 kW	– M3BP – Frame size 355
15	336 kW	– 380 V, 50 Hz – 1,500 rpm – IP55
15	485 kW	– IM2001

combustion motor – there are fewer failure points, less preventive maintenance and lower operating costs.

For ABB the partnership means long-term customer relations, an increase in the process performance motor business, and an important order intake. After the initial order, ABB received an additional order of 55 motors for the Middle East irrigation project. ABB continues to work with ETEC to develop a general performance portfolio for serial pumps, also increasing participation with process performance motors together with ABB softstarters to offer a complete pump solution.

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Footnote

¹ IE2 refers to high-efficiency motors according to IEC 60034-30 (2008); IE3 refers to premium-efficiency motors according to IEC 60034-30 (2008).

Founded by Eric Thiriez in Cartagena, Colombia, ETEC’s initial goal was to build stationary flow pumps for government companies. Because, in some locations, the shore would be too soft for the weight of the stationary pumps, ETEC had to find an alternative to heavy construction. A pump floating in water was the solution.

The floating pumps are complete, integrated units, designed for continuous operation and capable of handling more than 5,000 l of water per second → 1. They can be installed and placed in operation in a short period of time, without the need for the civil construction work typically required for other types of pumps with similar or lower flow rates. The floating solution is applicable to a wide range of high capacity pumps, from axial flow to mixed flow and multistage pumps, and are used to move water in aqueducts, agricultural and aquacultural farms, flood control and irrigation systems.

Running the pumps

To power their floating pumps ETEC chose ABB’s process performance mo-

Title picture

ABB process performance motors are designed for demanding applications and energy savings.