

Lowara gets Presidential treatment in 'The Land of Fire'

The Flame Fountain, Baku Park, Baku, Azerbaijan

Azerbaijan has long been called 'The Land of Fire' due to the visually stunning natural gas fires which blaze continuously on the hillside of the Absheron Peninsula. This has proved to be the inspiration behind the Flame Fountain sculpture which resembles a vast flame bursting from the Earth's surface.

The Flame Fountain stands 30 metres tall and forms the centrepiece of a new public park recently built as part of a regeneration project in the area on the Hedar Aliyev Avenue, the main highway leading into the city.

The triple helix shaped monument is equipped with over 700 banks of LED lights, 1,600 metres of glass rod cladding rails and stands imposingly in the middle of a large fountain pool, transforming the skyline into a spectacular water, light and sound show.

Reaching new heights

During the stunning display, thousands of gallons of water is pumped continuously throughout the fountain pool at a maximum capacity of 1400 mc/h, at some points reaching as high as 37 metres into the air.

With a monument of this stature the Flame Fountain is set to become a landmark within the capital city. It was imperative that the pumps used were reliable, could deliver water at the necessary force required while at the same time being capable of distributing thousands of gallons of water each day for the water display.

"Water forms an integral part of the monument as a whole. If this is not transferred correctly, we have no display."



The Flame Fountain in all its glory in Baku Park.



The President Illham Aliyev and his wife Mehriban survey the Flame Fountain and its surroundings.

The specifiers decided to invest in market leading single stage hydraulic pumps which could pump large volumes of water both sufficiently and cost effectively.

A market leading solution

Expert installer Luca Soffritti owner of Neon Alpina Fontane was instructed to find an ideal solution to the specifier's requirements.

Having worked with Lowara's portfolio of high quality products for a number of years, Luca Soffritti was quick to explain the benefits of the new range of Centrifugal Electric Pumps which can transfer water up to 700 cubic meters per hour and has heads of 100 meters - ideal for the Flame Fountain display.

During the water display there are 26 Lowara Centrifugal Electric Pumps used in total which transfer thousands of gallons of water each day through the fountain, all of which can deliver an operating pressure of up to 16 bar.

With the pumps being able to operate at such a high level, the pumps are used in cycle rather than all at the same time making the system more energy efficient and cost effective.

Presidential approval

The Flame Fountain was officially opened in a ceremony held in the presence of the President, Illham Aliyev and his wife Mehriban. The city celebrated with a dynamic display of light, fire, water and music, creating different articulated water and light patterns making an unforgettable eye-catching show.

"The monument is in use all year round so a system of pumps which could maintain an efficient and consistent operation level was crucial."

Using market leading products has created a pumping system which delivers energy and cost savings as well as reducing the need for regular maintenance.



END USER: Baku Park
 CLIENT: Neon Alpina Fontane, Cento (Ferrara), Italy
 COMPLETION: 2011
 XYLEM'S ROLE: Manufacturer
 XYLEM SCOPE:
 Design and manufacture a range of single stage centrifugal electric pumps capable of delivering heads of over 100m.

LIST OF LOWARA CENTRIFUGAL ELECTRIC PUMPS SUPPLIED FOR BAKU PARK FOUNTAIN:

n° 3	FHE 50-160/55/P	ELP 40/69
n° 2	FHE 65-125/55/P	ELP 40/69
n° 3	FHS4 80-200/30/P	ELP 23/40
n° 18	FHS4 80-250/55/P	ELP 40/69

FHE: close-coupled by means of an adaptor bracket with an impeller keyed directly to the special motor shaft extension

FHS: with a bracket, adaptor and rigid coupling keyed to the standard motor shaft extension

Cast iron pump body and AISI 316L stainless steel, laser-technology welded impeller

FH SERIES APPLICATIONS

Water circulation and transfer in civil industrial and agricultural sectors
 Pressure boosting
 Water supply
 Circulation of hot and cold water in heating and conditioning systems
 Industrial washing

The Lowara centrifugal pumps are specifically designed to pump chemically non-aggressive water and liquids making them the ideal solution for outdoor fountains.

The maximum operating pressure for Lowara's range of centrifugal electric pumps is 10 bar for temperatures ranging up to 140°C