

RELIABLE & COST - EFFECTIVE WATER DISTRIBUTION

SAVE ON ENERGY COSTS

24*7 WATER TO A THIRSTY CITY UNDER RAJASTHAN URBAN INFRASTRUCTURE DEVELOPMENT PROGRAM

SCENARIO

Rajasthan is a semi-arid region with severe water resource constraints: while being India's largest state by land size with a population of 80.7 million as of 2021, it has only 1% of the country's estimated water resources. For drinking and irrigation, 90 percent of Rajasthan's population is reliant on groundwater.

Sri Ganganagar is the northernmost city in the Indian state of Rajasthan, located close to Indian and Pakistani Punjab borders. Though being a planned city, the water supply at present in Ganganagar is intermittent, unreliable, and suffers from huge losses and quality issues. To address this, Government of Rajasthan has joined hands with a leading EPC contractor.

HIGHLIGHTS

- Designed a water supply network to reduce NRW by up to 7% within District Metering area
- Includes overall 12% and pressurized water of 12 meters at the consumer end
- The project is funded by the Asian Development bank

BENEFITS ARISING FROM THIS PROJECT

- Increased availability of potable water at the appropriate pressure to all households including urban poor
- Reduced time and costs in accessing alternative sources of water
- Better public health particularly reduction in waterborne and infectious diseases
- Reduced risk of groundwater contamination
- Reduced risk of contamination of treated water supplies
- Improvement in quality of water bodies due to disposal of treated effluent meeting disposal standards

OUR SOLUTIONS

To overcome the challenges, that the city faces resulting in unsustainable water demand we came up with solutions using the technology. Grundfos has engaged with an EPC contractor and designed the pumping solution for the water supply scheme for the project. Since the project involves extreme weather conditions and advanced digitalization technologies like LiDAR for the topographical survey; Geo-penetration Radar Technology for mapping underground utilities; GIS mapping of all assets for monitoring. Pumps should be resilient enough to handle different situations and operate.

OUR SUPPLY

For the 24*7 water supply application after the water intake and treatment process, Grundfos has supplied 20 no's of NK pumps model for an uninterrupted water supply to the city.

OUTCOME

A set of solutions for these problems were offered that are easily adaptable to other possible circumstances. Grundfos has delivered on energy-efficient water transfer solution to GangaNagar water problems, and the customer was ecstatic with the results. Moreover, EPC contractor holds the key of 10-year O&M of the project, where 30% of the operation fee will be linked to the fulfilment of performance indicator.

BENEFITS OF THE PUMP

ENERGY EFFICIENCY

All Grundfos end-suction pumps can be equipped with motors that carry the Grundfos Blueflux label, representing the very best from Grundfos within energy-efficient motor technology.

RELIABILITY

Backed by comprehensive pump know-how and carefully selected materials, the Grundfos end-suction range is renowned for its outstanding reliability.

COMPLETE RANGE

The range comprises a full series of close-coupled and long-coupled end-suction pumps in both cast iron and stainless steel.

FLEXIBILITY

Grundfos end-suction pumps can be configured and optimized for seamless operation in any application.

DEMANDING ENVIRONMENTS

Grundfos end-suction pumps handle even the most demanding liquids and environments. Reliable, efficient – a pump you can trust.

GLOBAL REACH

As a truly global supplier Grundfos offers delivery, service, and commissioning expertise on every continent, and always in the local language.