

# OPTIMISED WATER SOLUTIONS

PUMPS & SYSTEMS FOR WATER SUPPLY &  
WASTEWATER CHALLENGES

## 24\*7 WATER SUPPLY TO JHUNJHUNU DISTRICT IN RAJASTHAN

### 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.

Jhunjhunu, an ancient town in the state of Rajasthan, is located in the northeastern part of the state. The town of Jhunjhunu is the district headquarters. Currently, the water supply service in Jhunjhunu is unreliable coupled with quality issues and huge distribution losses. The Government of Rajasthan has joined hands with a leading EPC contractor.

### TO OVERCOME THE CHALLENGES

Rajasthan government has introduced a scheme under RUSDP (Rajasthan Urban sector development Programme) to invest in water distribution and sewage network to cover 100 percent of the city's area/road length, while sewerage works will be confined to the smaller area considering ongoing sewerage.

### HIGHLIGHTS

- Designed a water supply network to reduce NRW by up to 7% within District Metering area
- Includes overall 12% and pressurized water of 12m at the consumer end
- Service level improvement from 75 to 135 litres per person (capita) per day (LPCD)
- The project is funded by the Asian Development bank

## BENEFITS ARISING FROM THIS PROJECT

- Individual metered connections to 100% households
- Uninterrupted continuous water supply
- Efficiency improvement in water supply

## OUR SOLUTIONS

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, unequal elevation in water supply networks, and uninterrupted water supply at all distribution points along with optimisation of energy and maintenance costs.

## OUR SUPPLY

For 24\*7 water supply applications after the water intake and treatment process, Grundfos has supplied 34 number of NK pumps model for an uninterrupted water supply to the city.

## OUTCOME

The customer was delighted with Grundfos solutions and pumps' performance. 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 indicators. The customer is witnessing the desired pumps' performance and energy savings at the site and confident that our solution will be helping them meet performance indicators.

## 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.