

## WASTEWATER PUMPS FOR YAS ISLAND

REFERENCE: YAS ISLAND | ABU DHABI

Abu Dhabi banks on "Made in Germany" quality

Challenge:

Transporting high volumes of waste water

Built-in components:

2x MX2456ASC-PU74

3x MX3470-FU124

6x MX2350ASC-TU54

2x CTP50M35/2D

Medium

Waste water, aggressive groundwater

Field of business:

Waste water and sewage systems

## PROJECT DESCRIPTION

One of the largest and most natural islands in the Abu Dhabi Emirate is Yas Island. It is located east of Abu Dhabi City and only a few kilometers from the airport. Abu Dhabi's ruling family is investing over \$ 40 billion here in order to make the island into a spectacular new part of the city. Yas Island is 25 square kilometers in size, about 7.5 kilometers long and 6.5 kilometers wide, offering the visitor a wonderful 32 km long coastline.

Where until recently there was still nothing but a dry desert, a red sail now clearly stands out in the Arab sky. A sail of gigantic proportions, as it has become a tradition in Abu Dhabi. The most famous attraction is the Formula 1 race track "Yas Island Circuit" and Ferrari World, the largest theme park in the world.

Also being developed on Yas Island are several luxury hotels, Abu Dhabi's largest shopping mall with 300,000 square meters of retail space, golf courses, shops, restaurants and much more. A lot of high-end real estate, such as villas and apartments, is planned.

The development of Yas Island is very expensive since the straightened coastlines that are filled up to create new land are surrounded by a navigable canal and thus made accessible from the sea.

This makes Yas Island one of the most spectacular and expensive projects in the United Arab Emirates.

After full completion of the mega project in 2013, the living and working population of the island is expected to be about 110,000. Because of this enormous growth in population, the lively influx of tourists and the accompanying rapid rise in wastewater production, 11 powerful HOMA pumps with ASC (Additional Solids Cutting) system are in use, reliably pumping the daily flow of wastewater to the clarification plants.

In addition, two stainless pumps of the CTP series pump down the aggressive groundwater.

## THE FOLLOWING PUMP TYPES ARE IN USE:

2x MX2456ASC-PU74

6x MX2350ASC-TU54

3x MX3470-FU124

2x CTP50M35/2D

The MX series pumps used are characterized by a very high operating efficiency. The powerful hydraulic system ensures a high discharge pressure as well as a high degree of efficiency. Compared to others, the pumps provide more

power along with greater smoothness and low operating costs. Another feature of the installed pumps is the ASC system. This is an upstream cutting system that chops solid particles before they enter the pump.

Including a spherical clearance of up to 100mm, the pump is doubly protected against any blockage and is thus optimal for pumping effluent and wastewater with particularly problematic, for example, long-stranded or stringy solid matter, plastic parts, etc. This in turn increases the lifetime the pump, as the load is taken off shafts, bearings and seals.

The stainless steel submersible motor pumps of the CTP series are used for pumping corrosive and abrasive media, chemically aggressive effluent and wastewater as well as liquid chemicals. Because of the spherical clearance of 50 or 70 mm, they are particularly suitable for use in media with coarse solids and fibrous contents, for industrial wastewater disposal as well as for pumping liquid chemicals in industrial processes.

## **PROJECT PICTURES**



