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## Replacement of 4 Multi-Rake Bar Screens with the Passavant® Cable-Operated Bar Screens in 32A PS in Doha, Qatar

### Situation

Four Multi-Rake bar screens of a competitor were in operation in the pumping station PS 32A in Doha, Qatar at different locations. However, the operator was experiencing more and more differences with these screens for prolonged use. The Multi-Rake bar screens were not able to carry and lift the heavy items and bulky screenings such as wood, stones and metal parts from the bottom of the channel. The rakes were bent and the chain and the lower sprocket wheels was broken several times. Due to the significant depth of the pumping stations (12 m & 15 m), the repair work was always associated with an enormous amount of personnel. The Aqseptence Group has been asked for advice and for a quotation to provide reliable and robust screen capable of handling this application at large channel depths. The proven Passavant® COB-C was proposed and finally commissioned by the customer.



## Customer

Metito  
Doha, Qatar

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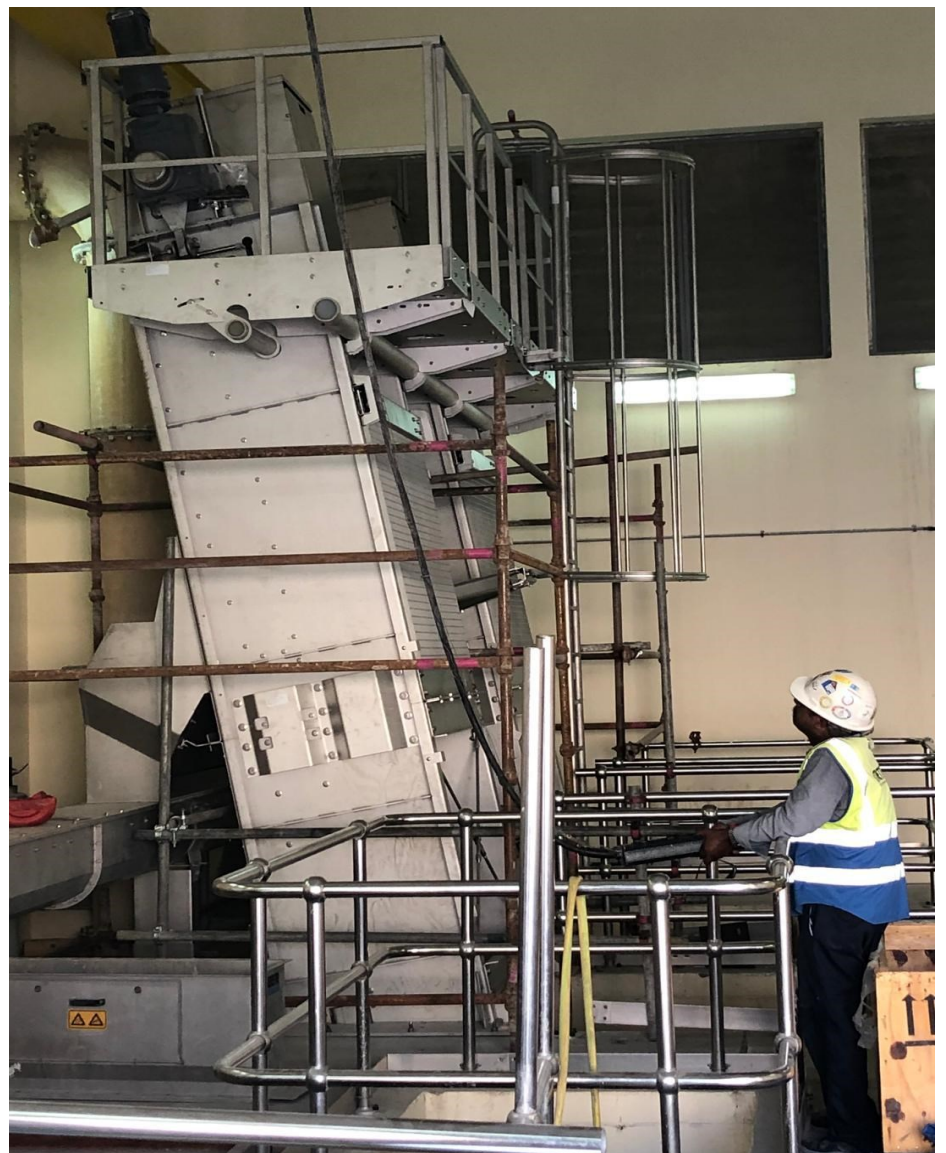
## Commissioning

March 2019

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## Advantages

- Intelligent PLC control enables COB screen to remove even extremely bulky screenings or screenings deposits in front of the screen by repeating the cleaning cycle from every position as often as necessary
  - No sprocket wheels within the submerged area
  - Slack-rope control for easy operation
  - All maintenance from above the water level
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## Solution

Additionally the two Multi-Rake Bar screens supplied at the lower pumpstation (LLPS) were replaced by two Passavant® COB-C screens using the existing conveyor and wash compactor. The other two Multi-Rake Bar competitor screens at the HLPS Multi-Rake Bar screen were replaced as well by two Passavant® COB-C screens and screw conveyor –SF 360. The whole equipment has been connected to the existing wash compactor. All level sensors and control panels were provided to ensure a fully automatically operation of the whole system. The new screens are running.

## Technical Details

### 2 sets of Passavant® COB-C 1500 x 4500 x 50 @ LLPS-PS :

Maximum flow rate:	7,560 m <sup>3</sup> /h/screen
Channel width :	1,500 mm
Channel depth:	15,200 mm
Gap width:	50 mm
Bar rack height:	4,500 mm
Installations Angel :	80°

### 2 sets of Passavant® COB-C 1500 x 4600 x 50 @ HLPS-PS :

Maximum flow rate:	9,720 m <sup>3</sup> /h/screen
Channel width :	1,500 mm
Channel depth:	11,800 mm
Gap width:	50 mm
Bar rack height:	4,600 mm
Installations Angel :	80°

### Noggerath® Spiral Conveyor SF-360

Throughput capacity:	5 m <sup>3</sup> /h
Trough width:	360 mm
Length:	6,800 mm



**Aqseptence Group GmbH**  
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11 February 2021