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## Guinness World Record: HUBER supplies technology for the world's largest water treatment plant in Egypt

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Clean water for the Sinai Peninsula: The water treatment plant in Bahr El-Baqar (Egypt) has recently been awarded by Guinness World Records as the world's largest plant of its kind. The Berching-based company HUBER supplied 128 Sludge Turner SOLSTICE® units for the large-scale project, from which about half a million people will benefit in the future.

- HUBER delivers 128 HUBER Sludge Turner SOLSTICE® units
- Capacity: over 2,000,000,000 m<sup>3</sup> of water per year (over 64 m<sup>3</sup> per second)
- Total area: 650,000 m<sup>2</sup>
- Chief Technology Officer Dr. Johann Grienberger: "Innovative technology to correct ecological imbalance in the future."

The Bahr El-Baqar drainage canal runs from the Egyptian capital Cairo along the Suez Canal through Lake Manzala into the Mediterranean Sea. Partially untreated municipal and industrial wastewater as well as polluted surface water from agriculture have so far led to an ecological imbalance.

### Total order volume of 700 million euros: joint venture brought HUBER on board

To solve this problem, the joint venture Orascom Construction and Arab Contractors was awarded the contract to build a water treatment plant for almost 700 million euros in 2018. Among others, the joint venture brought HUBER SE on board: the Berching-based company is supplying its innovative technology for sewage sludge drying with solar energy for the world's largest sewage sludge drying project.

"Pollution of the Bahr El-Baqar drainage canal has so far led to a severe ecological imbalance in the region. With our innovative technology, we are helping to treat very large volumes of water. The fact that more than half a million people will benefit from this major project makes us proud," says Dr. Johann Grienberger, Chief Technology Officer of HUBER SE.

### HUBER plants dry sewage sludge for reuse

The purification process produces very large quantities of sludge during water treatment. To reduce the amount of sludge to be disposed of, the sludge is dewatered with the help of machines and dried by the fully automatic and solar-powered sludge turners. The 128 HUBER Sludge Turner SOLSTICE® units dry the sludge produced during water treatment to a quarter in mass and volume and turn it into granules. Depending on their composition, the dry granules can be used as fertilizer or efficient heating medium.

### 475,000 tons of dewatered sewage sludge per year: fully automated drying process using solar energy

Overall, the proportion of dry residue from 475,000 tons of dewatered sewage sludge will be increased from 24 to 75 percent. As a result, only 15,000 tons of stable dry granules have to be disposed of. In the future, a total of 128 HUBER Sludge Turner SOLSTICE® units will operate in 16 greenhouses on eight lines each.

In addition to the 128 sludge turners, HUBER supplies the fully automatic sludge feed and discharge system by means of moving floor systems and HUBER Screw Conveyor Ro8 T units. These have a total length of three kilometers, which corresponds to the length of about 30 soccer fields. In addition, the Berching-based company supplies the control system for the entire solar drying plant and the complete detailed process engineering.

Find an informative animation at YouTube with function and process of the 128 Sludge Turner SOLSTICE® units for the large-scale project in Bahr El-Baqar:

<https://youtu.be/VmVJJl27Dj8>



Aerial photo of the Bahr El-Baqar plant ;  
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HUBER SRT system – solar sewage sludge drying with the HUBER Sludge Turner SOLSTICE®



HUBER Sludge Turner SOLSTICE®



A double shovel is ploughing through the sludge bed and turning the sludge as the machine is moving through the greenhouse

Learn more about the world's largest water treatment plant:

<https://www.guinnessworldrecords.com/world-records/86215-largest-water-treatment-plant>

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