
Grundfos helps protect the Australian cotton industry

NEW SOUTH WALES, AUSTRALIA: Cotton has been grown in Australia for more than 150 years. Due to a lack of reliable water supply, however, it did not become a major industry until 30 years ago. With their heavy emphasis on reliability, Grundfos pumps are excellently suited to support this important industry. And they can do even more than simply provide water where it is needed: a Grundfos submersible drainage pump is helping to prevent the spread of cotton disease, Fusarium Wilt, at a large cotton gin at Trangie in New South Wales, Australia.

TOPIC:

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LOCATION:

Australia

COMPANY:

Grundfos A/S

The Situation

Auscott's Trangie Cotton Gin has a huge 50-acre open air cotton pad which is used to store up to 1,600 cotton modules, each weighing up to 18 tonnes and measuring 12 metres by 3 metres.

The pad is located next to a cotton field. Before the project described here was initiated, rainwater would drain from the cotton modules onto the gravel base of the pad, and from there it would seep into the adjacent cotton field. This presented a risk of infecting the unharvested cotton with Fusarium Wilt, a relatively new disease that could be dangerous for the Australian cotton industry.

To prevent rainwater from seeping from stored cotton into the cotton fields, a large 18 million litre dam has been created alongside the cotton pad. The water will drain into this dam of its own accord.

The Grundfos Solution

At the far end of the dam, the company Western Irrigation and Pumping has installed a submersible Grundfos drainage pump. This pumps water from the dam through a 200 mm pipe to a low-

lying paddock located one kilometre away. The water is pumped at a rate of 60 litres a second.

The pump operates on a float control system, which means that it only pumps when the water level in the dam reaches a certain point.

The Grundfos system was chosen over a more traditional centrifugal pump for a variety of reasons, with a key benefit being the Grundfos SmartTrim feature. On traditional pumps, resetting the impeller clearance can be a complicated and costly task, as the pump has to be disconnected, removed, and dismantled.

By contrast, SmartTrim allows the resetting to be carried out on site by simply adjusting three screws to restore the impeller to factory settings. This allows the pump to maintain peak efficiency, and no special tools are required.

“The installation itself was easy,” says Western Irrigation and Pumping Trangie Branch Manager, David Bell, “although it was severely hampered by having to be undertaken during the cotton harvesting season when the gin was constantly the scene of semi-trailer vehicle movements.”

The Outcome

The Grundfos pump used at the Trangin Cotton Gin has provided efficient and reliable service since it was first installed, and the Smart-Trim feature continues to be a benefit to the customer.

On a more general note, the flooding and drainage problem seen at the Trangie Cotton Gin is not unusual, and many other cotton gins could benefit from similar installations.

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