

CASE STUDY

Yantai Guhe Electric — China

Improving water supply reliability



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The client

Yantai Guhe Electric manufactures installation panels for pumps and provides some of the leading brands in the HVAC and fluid control segment with pump system control solutions. This means that the company produces and distributes over 1,000 panels annually. It is safe to say that Yantai Guhe Electric needs reliable motor starting solutions that are easy to integrate into its own products. In the past Yantai Guhe Electric experienced problems in certain areas of its motor control systems. When building panels for a new pump system, supplying a residential area in Chengdu Longhu with water, the company found itself in the need of assistance from ABB.

The challenge

Pumping water through vertical pipes demands a motor controller that can handle the way fluids behave. This is especially important when stopping the motor that runs the pump. When doing this with star delta starter it will usually create water hammering. A phenomenon which over time will inflict extra stress on the motors and damage the pump system significantly. Yantai Guhe Electric's past motor control systems were not dealing with this issue which reduced the overall reliability, produced by this over time reduced the lifespan of the products significantly. Another drawback from this was the extra maintenance and service which

was needed in order to maintain the machinery at working standard.

The ABB solution

Deciding to use ABB's softstarters in the pump system control panels changed Yantai Guhe Electric's situation in an extraordinary way. Thanks to ABB's softstarters having torque control, the issue of water hammering when stopping pumps was eliminated. The results that followed were very pleasing for Yantai Guhe Electric with downtime being reduced by 20 percent and cost of maintenance reduced by 40 percent. Yantai Guhe Electric is now exclusively specifying ABB's softstarters for the two upcoming years. A pair of tangible effects on Yantai Guhe Electric's business is that it now saves \$30,000 annually and it has an increased order growth of 20 percent, thanks to ABB.



Reduced maintenance costs by 40%

For more information, please contact your local ABB representative or visit www.new.abb.com/low-voltage/products/softstarters