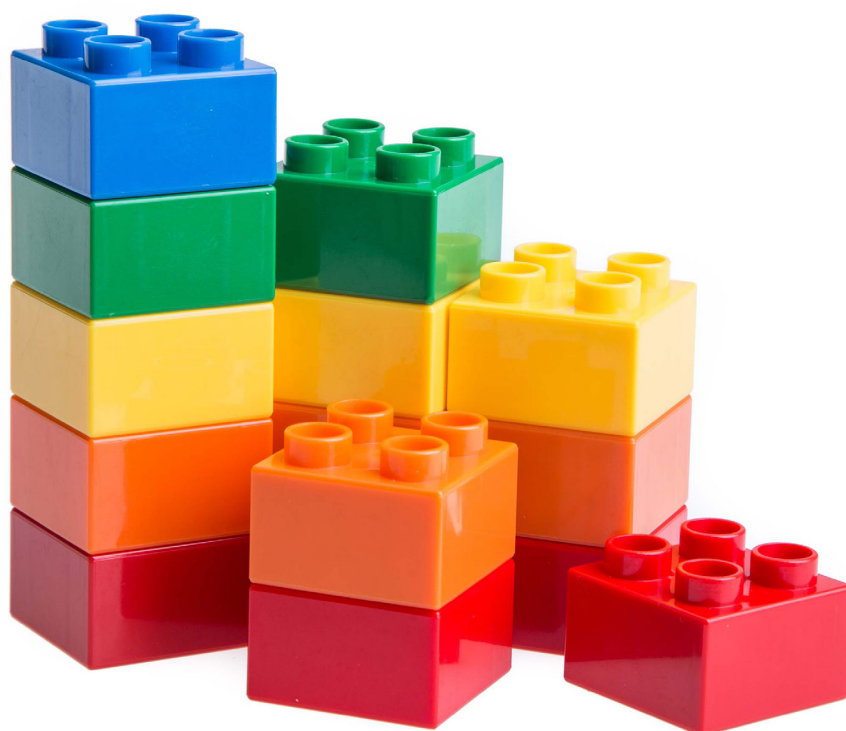


ARTICLE

## Building the future in China

ABB provides power protection to new LEGO factory in China.



Construction of the LEGO Group's first factory in Asia is well underway as the world's second largest toymaker taps into the ever increasing demand in the region. LEGO's sales have tripled since 2007, with Asia playing a big part in its success as their annual sales have increased by more than fifty percent in recent years. The new Asian factory will be fully operational in 2017 and is expected to meet nearly 80 percent of the total regional demand for LEGO.

The factory is located in the city of Jiaxing, approximately 100 km from Shanghai where the LEGO Group is also planning to locate their regional distribution center for Asia. Once up and running, the entire toy manufacturing process will require significant reliable power resources to ensure consistency and maximum productivity.

China's electrical infrastructure is the largest in the world, and the country has the greatest capacity for energy generation, globally. However, demand outstrips supply and the utility grid is frequently overstretched and poor power quality is common. LEGO therefore turned to ABB for a power protection solution designed to improve power factor and reduce harmonics, which will result in an improved reliability of power supply within their Asian factory.

### **The total solution**

Installed in the switch room of the new factory are ten single module PCS100 reactive power conditioners (RPC) which are able to respond instantly to power quality events, while providing continuous reactive power correction.

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01 The PCS100 RPC's  
installed at the new  
LEGO factory in Jiaxing.

### Key benefits

Based on a unique modular design providing high reliability, the PCS100 RPC will provide LEGO's factory with benefits such as:

- Ensuring correct operation of 3-phase rectifier loads, extending their lifetime, by correcting for voltage unbalance
- Lowering maintenance costs by not exposing equipment to poor quality power
- Eliminating the risk associated with traditional power factor capacitor correction systems such as, overheating caused by harmonic resonance problems
- Improved factory supply

Production plants and many other facilities are often confronted with a number of disturbances, from distortion of supply voltage, to harmonics and high inrush currents. An unstable supply can result in downtime, and either reduces the life of expensive electronic equipment or causes damage to it. For that reason, ABB sees a great demand for the PCS100 RPC which is available from 100 to 2000 kVA and responds instantly to power quality events, while providing continuous reactive power correction.

To find out more about ABB's power protection solutions:

Web: [www.abb.com/ups](http://www.abb.com/ups)  
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### Additional information

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