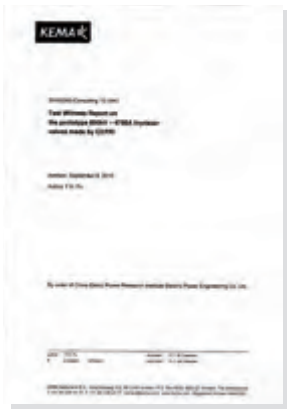
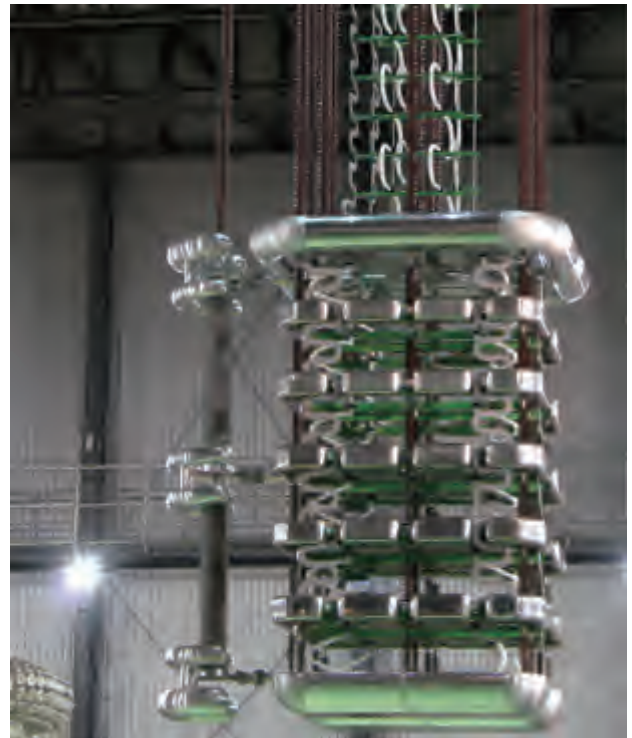


# UHVDC converter valve

Shaping up super highways for future grids

Catering to the booming market for UHVDC applications both in China and abroad, we developed an A5000 type UHVDC converter valve technology. It is rated at  $\pm 1100\text{kV}/6250\text{A}$ , while downwardly compatible with lower voltage applications. The A5000 type valve has passed all the type tests conforming to IEC60700 standard, accredited by KEMA laboratory. The A5000 valve has been used in four UHVDC projects, Jinping-Sunan project, Southern Hami-Zhengzhou project, Xiluodu-Zhejiang project, and Lingzhou-Shaoxing project, all with well proven performance.



## Key technical features

- 9-level thyristor clamped assembly
- Integrated water-cooled resistor
- Triggering with dual power supply
- Low-noise saturated reactor
- High-strength insulation channel
- Up to  $\pm 1100\text{kV}/6250\text{A}$

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# UHVDC project references

Consistent commitment to outstanding performance

## Xiluodu-Zhejiang $\pm 800\text{kV}$ UHVDC transmission project

The 1680km power link will transport clean hydropower from Xiluodu Hydropower station in Sichuan province to the highly industrialized Zhejiang province. Rated at 8GW, this is one of the most powerful transmission lines in the world.

Execution period	2013-2014
Rated DC voltage	$\pm 800\text{kV}$
Rated DC current	5000A
Rated capacity	8000MW
Transmission distance	1680km



## Southern Hami-Zhengzhou $\pm 800\text{kV}$ UHVDC transmission project

This Silk Road of Electricity will transmit coal-fired and wind power from the western frontier of China to its central plains, meeting urgent power needs in the area. It goes through the vast region of Xinjiang, Gansu, Ningxia, Shaanxi, Shanxi and Henan, over a distance of 2210km.

Execution period	2012-2013
Rated DC voltage	$\pm 800\text{kV}$
Rated DC current	5000A
Rated capacity	8000MW
Transmission distance	2210km



## Jinping-Sunan $\pm 800\text{kV}$ UHVDC transmission project

Running through eight provinces and over a distance of 2100km, this project is the largest and longest of its kind in operation worldwide. This transmission link is built to meet the power demand of Jiangsu province in East China.

Execution period	2011-2012
Rated DC voltage	$\pm 800\text{kV}$
Rated DC current	4500A
Rated capacity	7200MW
Transmission distance	2100km

