## Announcing the first natural ester filled 750kV transformer

Shanghai, China: CHINT, a Chinese energy company, develops FR3° fluid-filled 750kV transformer in cooperation with Cargill

As one of China's largest enterprises and the country's largest low-voltage electrical appliance manufacturer - CHINT has pioneered the first 750kV natural ester-filled transformer. This achievement is a result of the technical collaboration between CHINT and Cargill's experts.

CHINT decided to fill this single phase 120MVA transformer with Cargill's FR3® fluid, a plant-based natural ester, due to FR3 fluid's K-class rating, as well as it's enhanced fire safety, biodegradability, extraordinary dielectric properties for ultra-high voltage use, and the comprehensive knowledge of Cargill team on aspects of designing and manufacturing ester transformers. Assessments

passed all FAT tests at once under 3rd party witness, Power Industry Electrical Equipment Inspection and Testing Center of State Grid Corporation of China.

After many successful cooperation in the 35kV~220kV range, Cargill and CHINT's long-term cooperation ushered in a new milestone, and also raised the application voltage level of FR3 natural ester to a new height.

FR3 fluid has the highest fire point (360°C) among all K-class fluids for transformers. Furthermore, FR3 fluid has been proven to extend the insulation life of transformers by up to eight times and reduce



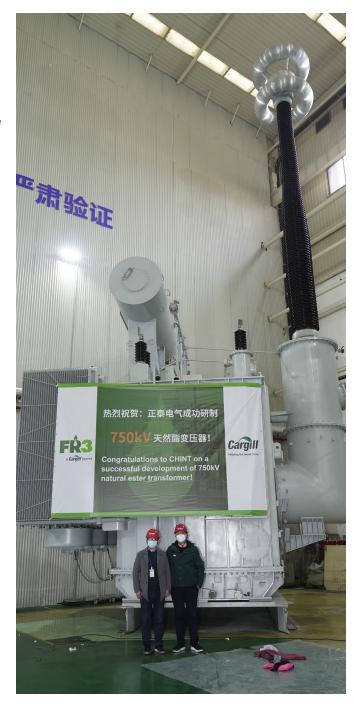
"Through winding structure and main insulation optimization, exit turret simulation improvement, cooling system verification and other research, 750kV natural ester transformer passed the rigorous third party witness tests, it reflects CHINT's capabilities in designing complex insulation systems and manufacturing ultra-high voltage transformers, it also verified the feasibility of using natural ester transformer up to a 750kV voltage level."

Mr. Huang
Manager of Design Department
of CHINT Transformer Division



maintenance needed to keep the transformer running at its top output compared to mineral oil filled transformers.

The latest 750kV transformer strengthens CHINT's offerings and benefits the communities and industries it serves. CHINT is continuing to innovate and partner with Cargill for its natural ester filled transformers. Cargill is thrilled to provide bio-based solutions, such as FR3 fluid, that help companies like CHINT as they continue to push the boundaries of what is possible with more sustainable solutions like natural ester dielectric fluids.



## If you have further questions do not hesitate to **reach out to your local representative.**

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