### Engineering and Testing of High Voltage Overhead Line Insulators and Fittings



## PFISTERER

### PFISTERER – The Scientific Partner for Overhead Line Topics

PFISTERER runs its own laboratories for high voltage testing, vibration damper testing, conductor self-damping testing and material investigations. In these laboratories, design, type and sample testing are carried out in accordance with the appropriate standards and in the presence of inspectors if required.

# PFISTERER 's High Voltage Laboratory in Altdorf, Switzerland

The laboratory resources are in charge of research and development as well as routine quality testing. This ensures that the products are in a leading position worldwide in terms of service performance and product consistency, even for bulk volume supplies.



### Test Set-Up for Damper Testing

The laboratory infrastructure comprises:

- AC test equipment, dry and wet up to 1000 kV
- impulse voltage generator up to 1600 kV
- salt fog chamber
- combined material tester for tracking / erosion and hydrophobicity
- devices for damper and conductor testing



The use of latest FEM simulation programmes ensures the safe and reliable design of new components to meet stringent customer requirements.

#### Vibration Study.

A programme for performing vibration studies enables the conductor vibrations for different damping configurations to be accurately calculated. As a result, the right type of dampers and their exact position can be evaluated in order to achieve the required damping characteristic, even in the planning stage of a transmission line. Aditionally, PFISTERER has developed its own programme to simulate insulator set performance during load transfer situations. Repairing

