



Grand
Projects'21

On site Testing of ultralong DC cables

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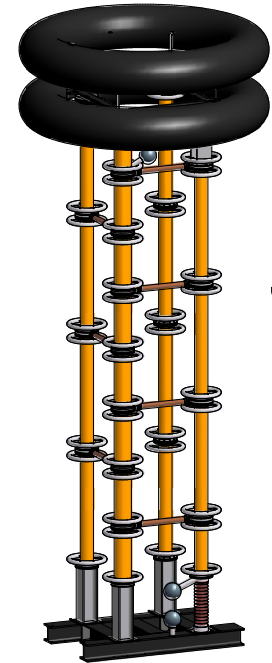
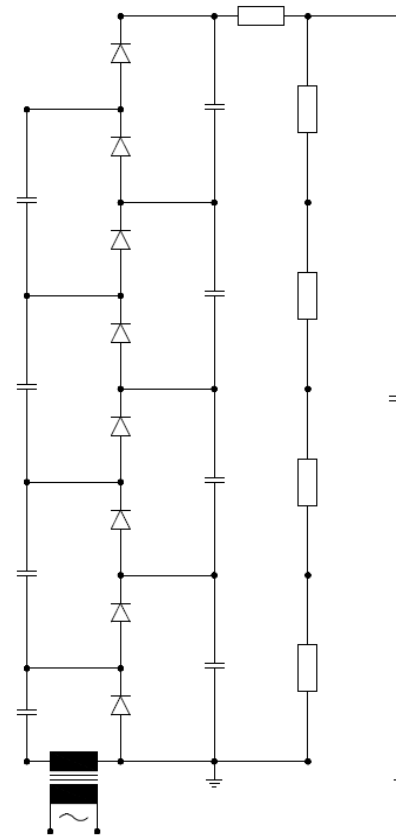


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State of the Art DC Test Systems

cascaded - called Greinacher or Cockcroft Walton

- +
 - Small footprint
 - Low input power
- - Low test current (range mA)
 - No integrated discharging



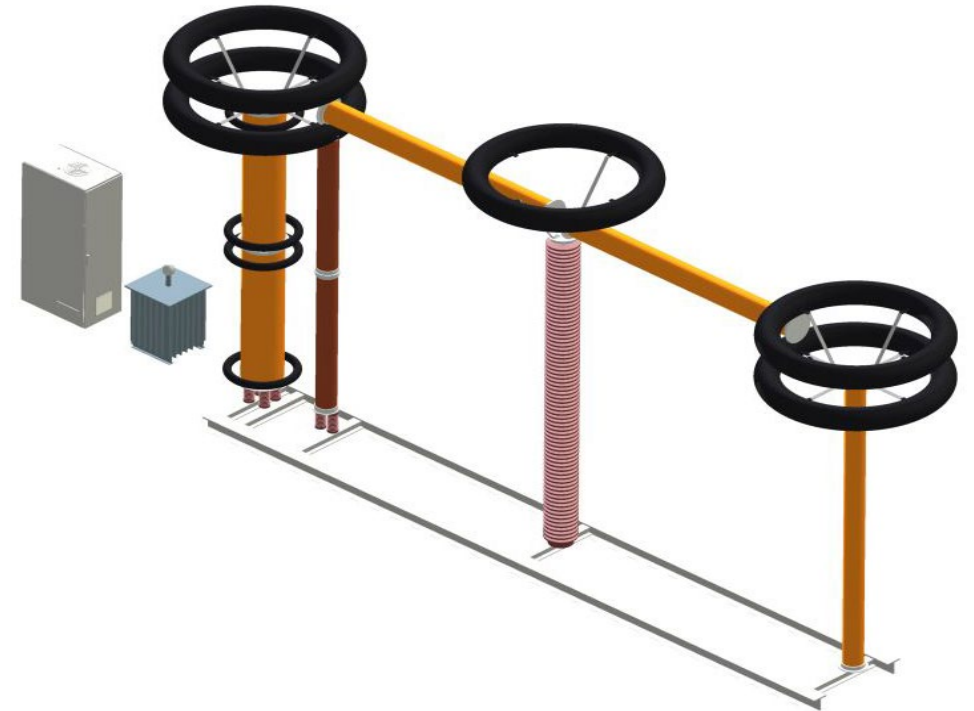


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Advanced DC Test Systems

called **DCC**_{charging}**D**_{ischarging}

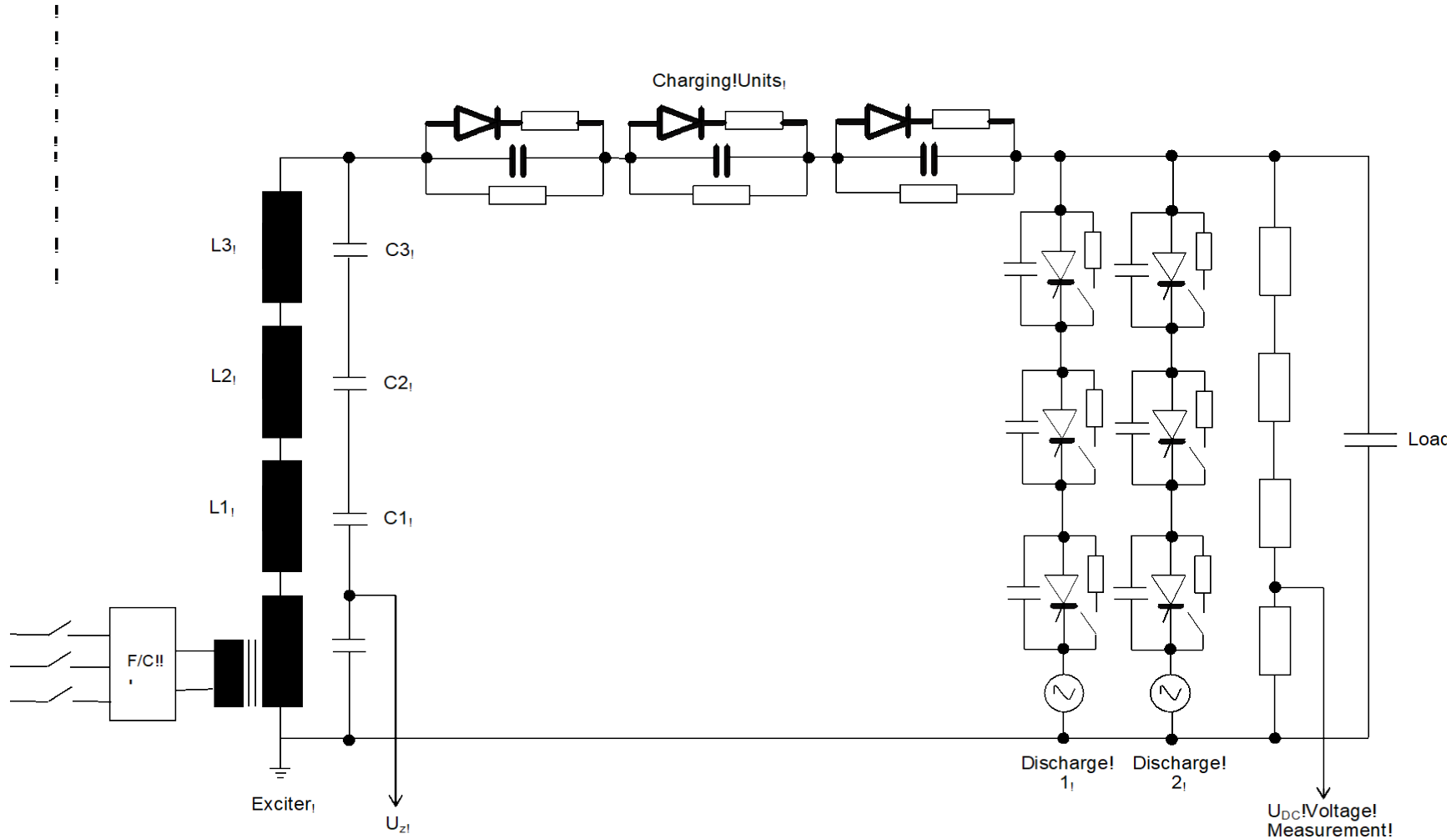
- +
 - High test current (up to 10A)
 - Fast charging
 - Fast discharging
 - Emergency discharge in sec.
 - Integrated or external discharging
- - Large footprint
 - Clearances for high voltages (2 times peak voltage)





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Advanced DC Test Systems - Technology

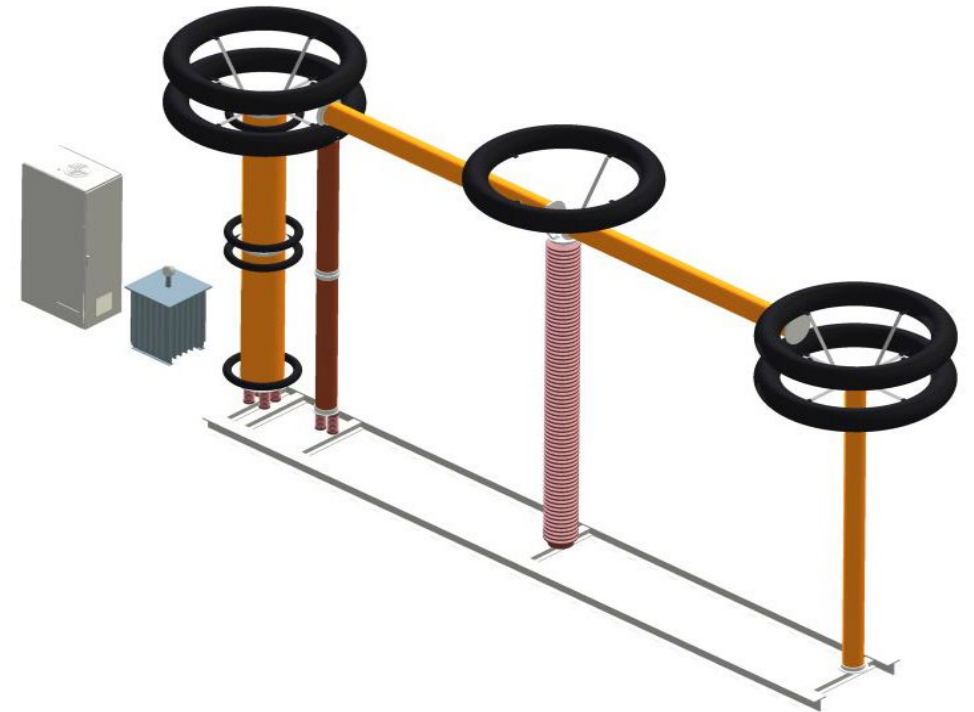




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Outline Data

Maximum output voltage:	600 kV DC (upgradable to 1200 kV)
Maximum load capacitance:	10 μ F
Maximum charging time (up to max. voltage):	60 min
Maximum discharging time:	30 min
Emergency discharge time:	<10 s
Input power (3 phases, 400V):	50 kW
Accuracy of output voltage measurement:	<5 %
Automatic output voltage stabilization:	<1 %
Dimension (l x w x h):	7 x 3 x 5.5 m (ca. 15 x 3 x 10 for 1200 kV system)
Total system weight (incl. power supply):	6000 kg (ca. 8000 kg for 1200 kV system)





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Thank you for your attention!