FUEL CELLS AND HYDROGEN JOINT UNDERTAKING

STACK-TEST

Critical Parameters and Control Strategies for Comparable PEFC Stack Characterization

(A0503)

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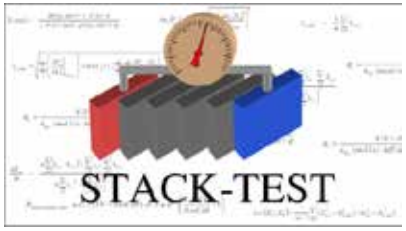
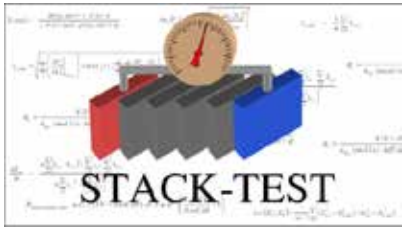
Stack-Test: FCH-JU GA 303445

Overview



- General approach of Stack-Test
- Test procedures for stack sensitivity
- Polarization curve measurements
- Stack performance test programs
- Application specific test operation conditions
- Conclusion

Conclusion



Focus of test procedures on:

- Critical parameters and stack safety
- Reliability and comparability of test results

→ Sequences from most stable to most critical TOCs

TMs for TIPs influencing the stack performance:

- Stack sensitivity: Impact of one parameter on stack performance
- Polarization Curve: Steady-State curve in 2 h
  → Independent from dwell time and load steps

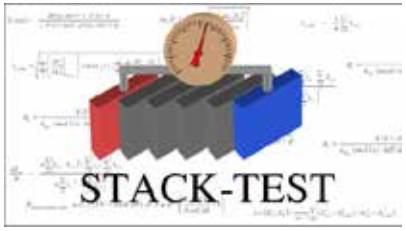
TMs can be combined to different TPs:

- Stack Performance Mapping: Combination of sensitivity TMs

Recommended TOCs for different applications

All TM and TP documents can be obtained: stacktest.zsw-bw.de

Acknowledgement



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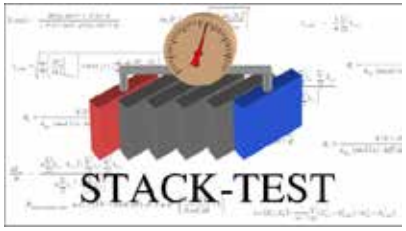

Thank you very much for your attention!

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