

KOTEL WG 5 and 6 Extended Workgroup Meeting

Thursday 19.04.2012

Proactive, cost-effective product lifecycle care
- Share, create and learn -

Program

- 08:30 Coffee
- 08:50 Agenda, participant introduction, expectations for the day (Klaus Kangas, ABB Oy Drives)
- 09:15 Lessons learned: previous year general case studies (Risto Heikkinen, Vaisala)
- 09:30 Group 1 introduction: Tailored accelerated life testing based on field failure and usage stress data (Helge Palmén, VTT)
- 09:50 Group 2 introduction: Product environmental compatibility (Olavi Nevalainen, VTT)
- 10:10 Coffee break
- 10:20 Group 3 introduction: Failure precursors & on-site product diagnostics (Arto R. Salminen, ABB Oy Drives)
- 10:40 Formation of groups
- 11:00 Lunch and registration fee payment
- 12:00 Group work (generic case study for each group)
- 14:30 Group 1 presentation
- 14:50 Coffee break
- 15:00 Group 2 presentation
- 15:20 Group 3 presentation
- 15:40 Summary & discussions
- 16:00 Sauna, dinner, and brainstorming
- 19:00 End of day

KOTEL WG 5 and 6 extended workgroup meeting, 19.04.2012: Proactive, cost-effective product lifecycle care – Share, create and learn

Date & time: Wednesday 19.04.2012 8:45-19:00

Place: Hotell Rantapuisto, (Vuosaari), Ramsinniementie 14, Vuosaari, 00980, Helsinki, <http://www.rantapuisto.fi/rantapuisto/>, Puh. (09) 31911. Meeting room: Messuhallin takkatila + rooms

Language: Finnish (presentation material can be in English/Finnish)

Registration fee: 116-170eur (for one participant, price depends of the overall registering amount in the meeting day)

Material: Summary .ppt document will be sent afterwards by e-mail to participants. Document can also be found from WG 5 & 6 (closed) internet pages

Participants: 36 (max)

Generic case story

- Company named "Green Solution" is located in Finland
- Company has sold products in Finland for 5 years, products have work very well and field failure rate has been below 1%
- Estimated production during mass production will be thousands products per year
- Products are electric control units with integrated sensors for waste water systems
- Company has proto and pilot manufacturing in Finland, mass production has been started 2 months ago globally in low cost countries
- Components and services (R&D, installation, etc.) are/can be bought globally
- Manufactured product specifications: weight:10kg, Size: 30x30x30cm, IP Class: IP21, product is sold globally
- Company has experienced few "interesting" failure cases. Some reliability studies are done, but very often seen as waste of time, because people already know how to design very good products that will never fail...
- *Disclaimer: This example company and product was created for extended meeting generic case -story. If a similar named company exists, this story has nothing to do with it. KOTEL take no responsibility of any actions done according to this generic case solution and extended meeting.*

Notice

- Timetable is suggestive (except the lunch)
- Information of the meeting room can be asked from the hotel reception
- There is a projector, cables and internet connection at least in the main meeting room
- There are towels in the sauna for everyone
- There could be minor changes/focus for the topics by WG 5 & 6
- Alternative group work, if 1-4 subject is cancelled in a short notice: How to turn customer lifetime requirement to product requirement during concept phase (brainstorming with mindmap, challenges & opportunities): (Arto Salminen/Klaus Kangas/other)

Registration

- Send name, e-mail, phone number and company name to organizers latest two weeks before the extended meeting day. Registration will be paid together to the hotel reception after the lunch. Fee amount depends of the number of the final participants arriving to the meeting at the given date, so that is why the fee is written to xxx-xxeur format. Fee includes all the named expenses in the agenda. See the first page for Registration fee.
- Currency: cash, general credit and bank cards. hotel room reservations, costs (and other personal costs) are to be handled between the participant and the hotel. More information of the hotel can be found from the first page.
- Due to the limited number of participants, places will be filled according to the registering order. Limitation: From one company only 3 participants, but if there is space, more can participate until max event participant amount is reached.
- When registering to this extended WG 5 & 6 meeting, the participant approves the information written in this document.

Cancelling participant registration

- Participant should inform organizers - as early as possible - to have time to find replacements.

Cancelling extended meeting event

- If the extended meeting is cancelled by the organizer (WG 5 & 6), an e-mail notice cancellation will be send to the registered persons and to WG 5 & 6 mailing list participants. *Notice: No costs concerning participant room booking, travelling, or other costs will be covered by WG5 & 6 to participants.*

Organizers and contact persons

- KOTEL WG 5 and WG 6: Klaus Kangas (WG 6) (klaus.kangas@fi.abb.com) and Risto Heikkinen (WG 5) (risto.heikkinen@vaisala.com)

Welcome!

Klaus Kangas, Risto Heikkinen, WG5 and 6



Appendix

Subject proposals for future events

1. Introduction for each group x could be: short introduction for (and possibility to also include: lessons learned / best practices / based to theory or practice / proposal / challenge / real life case / ...)
2. DOE (Design of Experiments)
3. AST (Accelerated stress testing): Case: How to implement HASS on HALT basis
4. Specification of design lifetime
5. Cost effective derating
6. Application based testing
7. Business risks
8. Prognostics & smart infotonics: WLAN, 3G, and GPS solutions?
9. Disturbance based failure detection
10. Stresses, e.g. Vibration / ESD / temperature / humidity / ...
11. Risk assessment on system and interface level (PHA, potential hazard analysis)
12. Environmental testing to fulfill product operation environment requirement
13. JBD (job to be done) solutions by using smart infotonics
14. Environmental penalty charges (presently high), emission requirements
15. Customer requirements: needed to be able to make product requirements, test plans, consider standards, etc.
 - a. E.g. for generic case: waste water environment esd, temp, humidity, ...IP, corrosive,
16. Reliability/Environment standard update: standards IEC 60068-2 vibration, ip, temp, salt mist, mil 810G, Lloyd's test 1, EMC 61000. Approvals CE, ...
17. Other proposals?