



## **ABB Spreadsheet Validation Process Training.**

### **Description and Deliverables**

Training will be provided for how to perform the ABB Spreadsheet Validation Process. This will include a 2-day training course and all generic documentation provided.

ABB Spreadsheet Validation Process Training		
ABB Spreadsheet Validation Training Package	2 days + all generic documents	Price upon request

This course will provide a complete guide to validating spreadsheets. It will focus primarily on validating the spreadsheet itself, but will also touch upon the whole validation project that may involve use of 3<sup>rd</sup> party software combined with spreadsheets.

The course outlines the full project lifecycle for spreadsheets including the following key topics.

- What are the issues with spreadsheet validation?
- Choosing an approach that allows efficient validation
- Project planning and resourcing
- Spreadsheet specifications
- Spreadsheet qualification
- Maintaining compliance
- Macro validation

The course will define the need for a generic and repeatable approach to spreadsheet validation and the use of key tools and document sets that allow the process to be both efficient and effective.

The course will highlight key areas of concern associated with fitting the spreadsheet validation process into your traditional QA and Validation processes.

The course will highlight some of the key concepts that need to be mastered to ensure the success of your spreadsheet validation project.

The course will convey the learning and experience that ABB Process Solutions have encountered in developing a successful spreadsheet validation process.

**Course Content**

Session	Time	Deliverable Items Included
Introduction to the course – Presentation	15	Presentation Printout
Introduction to Spreadsheet Validation <ul style="list-style-type: none"><li>• Presentation</li><li>• Exercise 01 – What do we need to consider?</li></ul>	45	Presentation Printout Exercise 1 Questions
User Requirements Specification – Presentation	20	Presentation Printout Generic Spreadsheet Specification (Word format)
Break		
Spreadsheet Reformatting and Development <ul style="list-style-type: none"><li>• Presentation to introduce the example spreadsheet</li><li>• Exercise 02 – Develop a spreadsheet</li><li>• Exercise 03 – Documenting the URS</li><li>• Complex example spreadsheet presentation</li></ul>	70	Presentation Printout Exercise 2 Questions & ABB Exercise 2 spreadsheet Exercise 3 Questions & Exercise 3 Answers Blank URS Forms Example Client Spreadsheets
Spreadsheet Reformatting – DaCS and validation Restrictions <ul style="list-style-type: none"><li>• Presentation</li><li>• Exercise 04 – Update to developed spreadsheets</li></ul>	35	Presentation Printout 07 Exercise 4 Questions



Session	Time	Deliverable Items Included
Questions and Answer Session	30	Example Client Spreadsheets
Break.		
Functional Specification	10	Presentation Printout Generic Spreadsheet Specification (Word format)
Functional Specification <ul style="list-style-type: none"><li>Exercise to complete Functional Specification - Exercise 05</li></ul>	35	Exercise 5 Questions & Exercise 5 Answers Blank Functional Specification Forms Functional Specification Forms on PC (Word format)
Spreadsheet Qualification Protocols	30	Presentation Printout Generic Spreadsheet Qualification Protocols (Word format)
Break		
Spreadsheet Structure and Calculation Testing <ul style="list-style-type: none"><li>Presentation</li><li>Exercise 06 – Performing Spreadsheet Testing</li></ul>	55	Presentation Printout Addition Testing forms, calculators, PC Exercise 6 Questions & Exercise 6 Answers
Lunch		
Converting Spreadsheets into DaCS <ul style="list-style-type: none"><li>Demo on all clients</li><li>Investigate any errors and Q&amp;A session on DaCS/Excel compatibility</li></ul>	30	On Screen Demo Example error spreadsheets



Session	Time	Deliverable Items Included
Completing the Qualification Documentation	30	Presentation Printout
Changing Spreadsheets and Change Control <ul style="list-style-type: none"><li>• Presentation</li><li>• Exercise 07 – Changing a DaCS controlled Spreadsheet</li></ul>	35	Presentation Printout Exercise 7 Questions & Exercise 7 Answers
Break		
Procedural Controls	25	Presentation Printout ABB guidelines SOP for spreadsheet development. ABB guidelines SOP for spreadsheet testing. ABB SOP for spreadsheet use ABB SOP for spreadsheet maintenance
Exercise 08 - FDA Onsite Audit <ul style="list-style-type: none"><li>• ABB Feedback</li></ul>	40	Exercise 8 Questions & Exercise 8 Answers
Questions and Answers Session	30	
Break.		
Additional Topics – Presentation	40	Presentation Printout
Exercise 09 – Efficiency	20	Exercise 9 Questions & Exercise 9 Answers
Complex Spreadsheets and Macros – Presentation Exercise 10 – Testing Macros	60	Presentation Exercise 10 Questions & Exercise 10 Answers
Questions and Answers Session	20	Example issues sheet to aid discussion