

PoDFA Metallographic Analysis Training Course

Duration: 4.5 Days

Program

Who should attend?

- ◆ Metallographers with experience in cutting, mounting, polishing and the use of an optical microscope.

Training objectives:

At the end of the training course, attendees will be able to:

- ◆ Identify main types of inclusions under optical microscope
- ◆ Sample and prepare PoDFA or Prefil samples
- ◆ Perform accurate counting of each inclusion type and calculate the total metal cleanliness in mm²/kg.

Location

ABB Bomem's main office and manufacturing site in Quebec City, Canada

- ◆ Click [here](#) to access a road map to our facility from the Quebec Airport (Jean-Lesage Airport).
- ◆ Click [here](#) to access tourist information sites.

Date

- ◆ To be determined upon demand.

*Approximately three training sessions are given every year.



Schedule

DAY 1	Introduction Sample Preparation (Part 1)	<ul style="list-style-type: none"> ◆ Welcoming remarks and guided tour of ABB Bomem Inc. ◆ PoDFA Technology video presentation, filter certification ◆ General ABB presentation, PoDFA-f and Prefil presentations ◆ Metal Sampling <ul style="list-style-type: none"> Crucible preparation, safety equipment Each participant takes PoDFA and/or Prefil samples ◆ PoDFA Standard Practice Instructions (Part 1) <ul style="list-style-type: none"> Receiving, Cutting and Mounting specimens
DAY 2	Sample Preparation (Part 2) Inclusion Identification	<ul style="list-style-type: none"> ◆ Polishing specimens ◆ Survey of Inclusions <ul style="list-style-type: none"> Presentation and description of each inclusion type ◆ Review of each inclusion type under microscope
DAY 3	Inclusion Identification and Counting	<ul style="list-style-type: none"> ◆ PoDFA Standard Practice Instructions (Part 2) <ul style="list-style-type: none"> PoDFA evaluation presentation Grid and Estimate Method ◆ Template presentation ◆ 20 µm rule (Exercises) ◆ PoDFA specimen evaluation
DAY 4	Inclusion Counting	<ul style="list-style-type: none"> ◆ PoDFA specimen evaluation (continued). ** Each participant should evaluate at least one sample using the GRID method at 50X, 100X, 200X and one with the ESTIMATE method. <ul style="list-style-type: none"> ◆ Comparison and discussion of the results.
DAY 5 (AM)	Examination Session and Varia	<ul style="list-style-type: none"> ◆ PoDFA examination ◆ Choice to review one of the workshops (i.e. polishing) ◆ Conclusion and questions

ABB
 585 Charest Blvd East, suite 300
 Quebec, QC G1K 9H4 Canada
 Telephone: +1 418 877 2944
 Telefax: +1 418 877 2834
 Email: <mailto:metal@ca.abb.com>
 Internet: <http://www.abb.com/analytical> (click on "metallurgical analyzers")

