

FleXinspect BC

Course Information

Course Title:	FleXinspect B & C – Advanced course
Duration & Location:	4 Days, 25-28 May 2027 at BEG Training Center in Munich, Germany
Target Audience:	Operators for inspection equipment, Job Change team inspection
Course prerequisites:	Advanced level course to the Glass Industry
Instructor:	Inspection Trainer
Delivery Mode & Language:	In Person in English

Course Objectives

- Explore the complete FleXinspect B & C machine architecture, including the machine layout, electronics console, power distribution, server, network, security tools, and TwinCAT environment.
- Learn to read machine schematics, identify key electrical components, and understand how power, control, and communication systems interact.
- Use EtherCAT terminal layouts, signal flow, topology, PLC visualisation, and TwinCAT program structure to trace signals and support fault diagnosis.
- Build, optimise, and verify advanced inspection setups for FleXinspect B & C using practical exercises and realistic production requirements.
- Perform encoder and conveyor-ratio calibration, set tracking positions, and fine-tune container tracking for accurate inspection timing.
- Apply a systematic troubleshooting process during guided, hands-on fault scenarios, from identifying symptoms and root causes to implementing and verifying the correct resolution

Assessment Methods

- Quizzes, Assignments, Practical Participation
- Final Group Task

Resources Required

- Personal Protective Equipment
- eLearning platform access (pre-learning)
- Simulation Software (if applicable)

REGISTER NOW

Course Schedule (Daily Outline from 8:00 am to 4:30 pm)

Training Days	Topics	Activities	Expected Outcomes
Day 1	Mastering the FlexInspect B & C architecture: machine layout, electronics consoles, power distribution, server, network, security tools, and TwinCAT integration	- Review training presentation to cover the machine training topics - Trace power, communication, and control paths from field devices to the server - Verify critical server, network, security, and TwinCAT settings	- Understand how every major component contributes to inspection performance and production reliability - Navigate the system confidently, reducing setup delays, basic configuration errors, and avoidable service calls
Day 2	Advanced EtherCAT and TwinCAT diagnostics: terminal layouts, topology, signal flow, PLC visualization, and program structure Precision machine tracking: encoder calibration, conveyor ratios, tracking positions, and container-flow optimization	- Trace live signals from EtherCAT terminals through TwinCAT and PLC visualization - Calibrate encoder and conveyor ratios, then validate tracking positions on the machine	- Locate electrical and communication faults faster by interpreting live terminal and signal data - Maintain reliable container tracking for accurate inspection timing, fewer false rejects, and more stable production
Day 3	High-performance inspection setup: advanced FlexInspect B & C tools, parameter selection, optimization, and result verification Repeatable job-change strategy for consistent quality across products and production conditions	- Build an advanced inspection job from realistic production requirements - Tune parameters and compare detection performance before and after optimization	- Create robust inspection setups that improve defect detection while minimizing unnecessary rejects - Complete job changes more efficiently and reproduce proven settings across shifts and products
Day 4	Systematic troubleshooting: schematics, alarms, live diagnostics, root-cause analysis, corrective action, and recovery verification Production-focused fault isolation designed to reduce downtime and unnecessary component replacement	- Investigate realistic faults using schematics, alarm history, live status, and measured evidence - Apply a repeatable symptom-to-root-cause process, implement corrective action, and verify recovery	- Respond to machine issues with a structured method that supports shorter downtime and faster production recovery - Demonstrate the confidence and practical competence to solve advanced problems with less dependence on external support



