

# Latest Features in IEC Certification Kit (for ISO 26262 and IEC 61508)

September 2011

**R2011b**

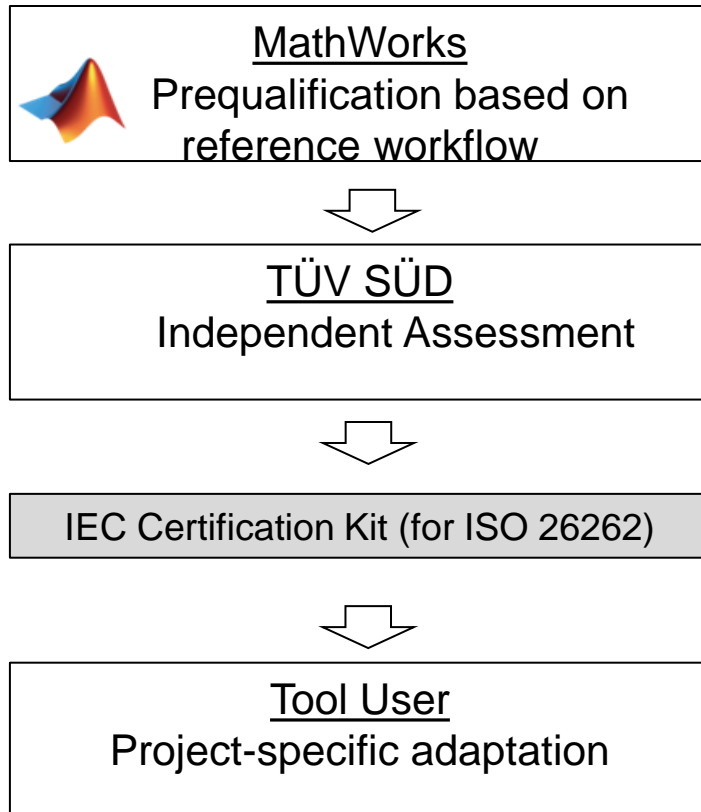
# TÜV Certification of MathWorks Products

TÜV SÜD certified MathWorks code generation and verification tools for use in development processes that need to comply with functional safety standards.

Product	Standards
Embedded Coder	ISO/FDIS 26262:2011 IEC 61508:2010 EN 50128:2001
Simulink Verification and Validation	
Simulink Design Verifier	
Polyspace Client for C/C++ and Polyspace Server for C/C++	
Simulink PLC Coder	IEC 61508:2010 IEC 61511:2003

Note: Above MathWorks products were not developed using certified processes.

# ISO 26262 Tool Qualification for Code Generation and Verification Products



- Products prequalified for all ASILs according to ISO 26262
  - Embedded Coder
  - Simulink Design Verifier
  - Simulink Verification and Validation
  - Polyspace code verifiers
- Products assessed by TÜV SÜD
- Prequalification validated by tool users in the context of their project and tool use cases, then artifacts modified as needed

# ISO 26262 Validation Tests for Simulink Verification and Validation

**Additional Embedded Coder tests**

**Test Procedure**

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1.3.1. Test Model UnconnectedObjects\_PASS.mdl

## Test Report

Expected Result	Pass
Actual Result	Pass (see Model Advisor report for test model UnconnectedObjects_PASS.mdl)

Report name: Model Advisor - Check for unconnected objects Model version: 1.14  
Current run: 01-Jun-2011 18:46:52

**Run Summary**

Pass	Fail	Warning	Not Run	Total
1	0	0	0	1

**Check for unconnected objects**

Identify unconnected lines, input ports, and output ports in the model

**Passed**

There are no unconnected lines, input ports, and output ports in this model.

1.3.2. Test Model UnconnectedObjects\_WARN.mdl