Simulink Design Verifier Report

simulation/Main Engine/MATLAB Function

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Capitolo 1. Summary

Analysis Information.

Model:	simulation
Release:	R2024b Update 6
Analyzed Subsystem:	simulation/Main Engine/MATLAB Function
Checksum:	3407557294 2954786634 2091006773 3909400092
Mode:	Test generation
Model Representation:	Built on 02-Sep-2025 13:07:06
Test Generation Target:	Model
Status:	Completed normally
PreProcessing Time:	12.162s
Analysis Time:	8s

Objectives Status.

Number of Objectives:	**1**	
Objectives Satisfied:	1	(100%)

Capitolo 2. Analysis Information

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Model Information

File:	simulation
Version:	2.20
Time Stamp:	Tue Sep 02 09:33:11 2025
Author:	

Analysis Options

Mode:	TestGeneration
Rebuild Model Representation:	IfChangeIsDetected
Test Generation Target:	Model
Test Suite Optimization:	Auto
Maximum Testcase Steps:	10000time steps
Test Conditions:	UseLocalSettings
Test Objectives:	UseLocalSettings
Model Coverage Objectives:	ConditionDecision
Add tests for the missing coverage:	off
Include Relational Boundary Objectives:	off
Maximum Analysis Time:	300s
Block Replacement:	off
Parameters Analysis:	off
Include expected output values:	off
Randomize data that do not affect the outcome:	off
Additional analysis to reduce instances of rational approximation:	on
Save Harness:	off
Save Report:	off

User Artifacts

Coverage Data:	n/a
Test Data:	n/a

Capitolo 3. Test Objectives Status

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Objectives Satisfied 4

Objectives Satisfied

Simulink Design Verifier generated test cases that exercise these test objectives.

#	Type	Model Item	Description	Analysis Time (sec)	Test Case
1	Decision	MATLAB Function	function torque_mis = fcn(comZ, F) **executed**	7	1 [0]

Capitolo 4. Model Items

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MATLAB Function 5

This section presents, for each object in the model defining coverage objectives, the list of objectives and their individual status at the end of the analysis. It should match the coverage report obtained from running the generated test suite on the model, either from the harness model or by using the sldvruntest command.

MATLAB Function

#:	Type	Description	Status	Test Case
1	Decision	function torque_mis = fcn(comZ, F) executed	Satisfied	1 [0]

Capitolo 5. Test Cases

Indice

Test Case 1 6

This section contains detailed information about each generated test case.

Test Case 1

Summary.

Length:	0 second (1 sample period)
Objectives Satisfied:	1

Objectives.

Step	Time	Model Item	Objectives
1	0	MATLAB Function	1. function torque_mis = fcn(comZ, F) executed [0]

Generated Input Data.

Time	**0**
Step	**1**
comZ	5.9566
F	[1.9184 -5.4067 9.8142]