Equipment & Systems Engineering Solutions

EHF: Electical Harness Flattening

Course Code	EDU-CAT-E-EHF-F
Brand & Release	CATIA V5R17
Duration	1 day
Language	English
Level	Fundamentals
Method	ILT

Training Material References

Instructor Foils: EDU-CAT-E-EHF-FI-V5R17
Foils: EDU-CAT-E-EHF-FF-V5R17
Exercises: EDU-CAT-E-EHF-FX-V5R17

Objectives

In this course you will learn how to flatten an electrical or geometrical harness integrated within the DMU and how to modify the bundle segments of the harness to fit your drawing in order to build the harness documentation

Participants' Profile

Electrical V5 users

Prerequisites

PRO-F: CATIA Tools for Proficient Users
EHI-F: Electrical Harness Installation
ELB-F: Electrical Librarian

Content

Introduction to Harness Flattening
Harness Flattening parameters
Extracting data
Harness flattening modifications
Synchronize
Links visualization
Reports
Drawing
Catalog text template creation
Graphic Replacement

Exercises

Ex. 1: Harness Documentation / Electronics & Electrical
Ex. 2: Harness Flattening / Electronics & Electrical
Ex. 3: Harness Documentation (2) / Electronics & Electrical
Ex. 4: Harness Flattening (2) / Electronics & Electrical

Equipment & Systems Engineering Solutions

ELI: Electrical Librarian & Harness Installation

Course Code	EDU-CAT-E-ELI-F
Brand & Release	CATIA V5R17
Duration	2 days
Language	English
Level	Fundamentals
Method	ILT

Training Material References

Instructor Foils: EDU-CAT-E-ELI-FI-V5R17
Foils: EDU-CAT-E-ELI-FF-V5R17
Exercises: EDU-CAT-E-ELI-FX-V5R17

Objectives

In this course you will learn how to build and manage an electrical components catalog, to design a harness integrated within the DMU and then connect the bundle segments to electrical components.

Participants' Profile

New Electrical V5 users

Prerequisites

Catalog Editor
art Design
CATIA V5 basics (mandatory)

Content

Introduction to Electrical Librarian
Electrical Componentas Definition
Electrical Librarian Catalog Management
Electrical Assemblies
Introduction to Electrical Harness Installation
Electrical Harness Settings
Geometric Bundle definition
Position Electrical Devices
Bundle segment Definition
Managing a Branch Point
Delete Branch
Split a Bundle segment
Transfer Branches
Instantiate a protection
Adjust Diameter
Links Management
Local slack management
Support Management
Measure geometrical bundle inertia
V4/V5 Migration
Wires Management
Importing electrical external data for 3D implementation

What is new in this release

New course built from the V5R16 Electrical Librarian and Electrical Harness Installation courses

Exercises

	Ex. 1: Creating a catalog (10min) / All sectors Ex. 2: Defining a set of electrical components (40min) / All sectors Ex. 3: Store components in a catalog (15min) / All sectors Ex. 4: Define an assembly with the components from the catalog (15min) / All sectors Ex. 5: Create a protection and store it into a catalog (15min) / All sectors Ex. 6: Bundle Segment Definition (15min) / All sectors Ex. 7: Create an adaptative support and position Bundle Segment (30min) / All sectors Ex. 8: Link a bundle segment (10min) / All sectors Ex. 9: Add a Support to a Bundle Segment (5min) / All sectors Ex. 10: Add Local Slack to Bundle Segment portion (5min) / All sectors Ex. 11: Manage the bundle segment section (30min) / All sectors Ex. 12: Transfer Branches (15min) / All sectors Ex. 13: Instantiate a Protection (15min) / All sectors Ex. 14: Adjusts Diameter (10min) / All sectors Ex. 15: Split a Bundle Segment (10min) / All sectors Ex. 16: Define a Bundle Segment (20min) / All sectors Ex. 17: Harness Design / All sectors Ex. 18: Geometrical bundle inertia / All sectors Ex. 19: Knowledge (20min) / All sectors Ex. 20: External Data (30min) / All sectors Ex. 21: Electrical Harness installation / All sectors Ex. 22: Car Door / All sectors

Equipment & Systems Engineering Solutions

EWR: Electrical Wire Routing

Course Code	EDU-CAT-E-EWR-F
Brand & Release	CATIA V5R17
Duration	0.5 day
Language	English
Level	Fundamentals
Method	ILT

Training Material References

Instructor Foils: EDU-CAT-E-EWR-FI-V5R17
Foils: EDU-CAT-E-EWR-FF-V5R17
Exercises: EDU-CAT-E-EWR-FX-V5R17

Objectives

At the end of this course, participants will be able to:
- Route wires in a harness.
- Route signals in space reservation system
- Use knowledgeware for segregation rules

Participants' Profile

New V5 CATIA electrical users

Prerequisites

CATIA V5 Part Design
CATIA V5 Assembly Design

Content

Introduction to Electrical Wire Routing
Import External Data
Wires Management

Exercises

Ex. 1: External Data Exchange (60min) / All sectors
Ex. 2: External Data (60min) / All sectors
Ex. 3: External Data Exchange (60min) / All sectors