



Aviation Maintenance Curriculum

Fluid Lines and Fittings Course Syllabus

Summary:

Upon completion of this course, the student will understand the common materials, applications, preparations, installations and repairs of rigid and flexible fluid lines used in various pressurized fluid systems. Students will learn the proper material and fitting selection as well as preparation methods for fabrication and repair of rigid fluid lines. Learners will also gain an understanding of the various aspects of proper rigid and flexible hose assembly installation.

Course Number:

FAA-ACS-AM-ID-FLF

ACS Reference:

Fluid Lines and Fittings (AM.I.D)

Topics Covered:

1. Materials used for rigid and flexible fluid lines
2. Proper fittings for material types and applications
3. Procedures for fabricating rigid and flexible fluid lines
4. Installation and inspection criteria
5. Human factors involved with fabrication, installation, and inspections of fluid lines

Activities:

- A. Inspections for proper installation of lines
- B. Fabrication of rigid fluid lines and fittings
- C. Fabrication of flexible fluid lines and fittings

Revision Number: 02

Revision Date: 07/27/21

Original Issue Date: 07/13/21



Fluid Lines and Fittings Course Outline

Overview

- Course Introduction

Module 1: Rigid Fluid Lines

- Lesson 1.1 - Introducing Rigid Fluid Lines
- Lesson 1.2 - Rigid Fluid Lines Materials
- Lesson 1.3 - Fabricating Rigid Fluid Lines
- Lesson 1.4 - Rigid Fluid Line Identification, Fittings, Installation, and Repair

Module 2: Flexible Hose Fluid Lines

- Lesson 2.1 - Flexible Hose Fluid Line Materials, Construction, and Inspection
- Lesson 2.2 - Flexible Hose Installation
- Lesson 2.3 - Risk Management and Human Factors Associated with Fluid Lines

Each Lesson contains the following:

- Video lecture
- Multiple readings with interactive animations
- Assigned readings in the applicable FAA 8083 Chapter
- Activities
- Summary Points and Key Terms

Each Module contains the following:

- Summary Points and Key Terms
- Module quiz
- Module Critical Thinking Activity

Educate Workforce Simulations included in this course include:

- Fabrication of rigid fluid line
- Fabrication of flexible fluid line

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