

SESSION PLAN

Profibus Systems

TC 070

Description of Profibus Systems And Basic Fault Finding Procedures

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Course Summary and Equipment Requirements

This is a Skills/Information Session.

The objective of this session is to identify the various components and show how they are used to create a functional Profibus network. The participants will also be able to diagnose a fault in a Profibus network using Step 7 software.

It is broken up into the following modules

Module 1 - Network Component Knowledge
Duration - 60 minutes

Module 2 - Network Fault Diagnostics Skill
Duration - 60 minutes

The following equipment is required

- Item 1 - Siemens Step 7 Panel
- Item 2 - Projector
- Item 3 - PCTC PC
- Item 4 - Profibus PowerPoint presentation
- Item 5 - Training notes and module activity sheets

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1 Purpose Statement

At the end of the session the participants will be able to identify the various components and show how they are used to create a functional Profibus network. The participants will also be able to diagnose a fault in a Profibus network using Step 7 software.

2 Introduction

2.1 Why the Participants have been Chosen

The participants of this course have been chosen because of the implementation of new equipment at Water Corporation sites. Knowledge of the types of equipment and how to diagnose faults during maintenance and callout situations will aid the participants to correct a fault situation easily and confidently.

2.2 Where This Course Fits in

This course is part of the training structure being presented in the area of Communications. The Communications area will cover all aspects from equipment identification to high-level data transfers.

2.3 Objectives of the Course

- Module 1: At the end of this session you will be able to identify the various components and show how they are used to create a functional Profibus network.
- Module 2: At the end of this session you will be able to diagnose a fault in a Profibus network using Step 7 software.

2.4 How the Session Will Run

This session is fully described in the training notes "Profibus Systems.ppt".

Skills Session –

A Skills session requires the following Skills demonstration and practice sessions. If there are more than 5 to 7 steps in a description of a skill, the session may be divided up into smaller sessions that each repeats the following structure.

Demonstration Section

- Silent demonstration
- Explanation Demonstration
- Check Demonstration

Practice Section

- Controlled Practice
- Own Pace Practice
- Test

Knowledge Session –

A Knowledge session requires the following structure. If a given session becomes extended it can be divided up into smaller sessions. Half an hour for a whole EAR session is suggested.

Explanation

Activity

Revise

2.5 Motivation for the Attendees

This session will enable the participants to easily and confidently work with Profibus networks.

2.6 Prior Experience

Determine who has had prior experience.

Do they want to proceed directly to the test?

Would they be willing to demonstrate what they know as it is addressed in the course?

3 Test

The test for this session is:

Module 1: Complete the Cable Systems Activity sheet.

Module 2: Complete Part 1 and Part 2 of the Module 2 Activity sheet.

Note: test must be

- Valid to the material covered
- Quick to set and take
- Reliable – clear answers
- Cover a good sample of the course
- Discriminate between attendees who now know the material and those who don't.

4 Summary

Help is available from the Process Control Training Centre staff, the local Siemens representative, System Support Group members.

What happens next?

You can book an appointment at the Process Control Training Centre to refresh your skills and clarify or discuss any issues arising from field experiences.