

## PROFIBUS Commissioning & Maintenance Course

A one-day course designed as an add-on to the Certified PROFIBUS Installer Course covering the practical techniques of fault finding on "operational" PROFIBUS networks.

### Why an additional day of training?

The one-day Certified PROFIBUS Installer Course gives an excellent introduction to PROFIBUS technology and how to properly layout and install networks. The verification and faultfinding methods taught are however generally limited to non operational networks and static testing.

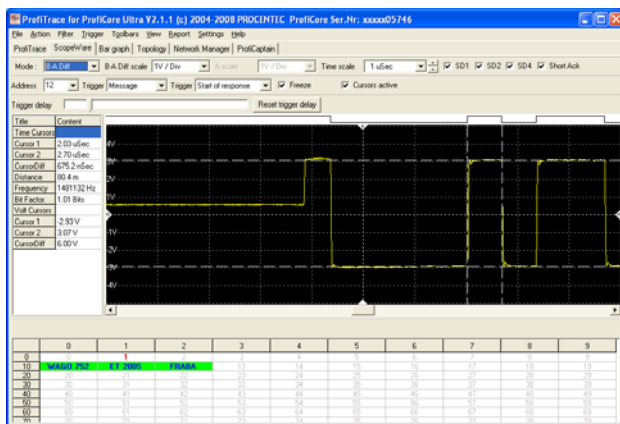
The 4/5-day Certified PROFIBUS Engineer Course covers the full in-depth theory and practice of PROFIBUS operation and faultfinding. Although it is desirable to have one or two fully qualified PROFIBUS Engineers, it is by no means essential that all maintenance personnel be so highly trained.

The PROFIBUS Commissioning and Maintenance Course provides an intermediate level of training covering faultfinding and maintenance techniques for application on operational PROFIBUS systems.

### What does the course cover?

This is a practical course based around a working PROFIBUS network. Each pair of students has a rack of devices and laptop with ProfiTrace Ultra for PROFIBUS device exercising and faultfinding.

Techniques taught on the course include the use of ProfiTrace Ultra to diagnose network faults, device faults and I/O problems. Students also learn how to use the built-in digital storage oscilloscope to diagnose and locate a wide range of cable, connection and device faults.



The course teaches how to quickly interpret standard and extended diagnostic messages that are part of the standard PROFIBUS protocol to diagnose peripheral faults on working devices.

The image shows a screenshot of the ProfiTrace Ultra software's message list. The table has columns for 'Frame No.', 'Slave No.', 'Message', 'Device', 'Msg type', and 'Resp/Par'. Several rows are highlighted in yellow, and some are circled in red. The messages include 'Start of response', 'End of response', and 'Data Exchange'.

### Why must I do the Installer Course first?

The Maintenance Course teaches how to find and locate faults in working PROFIBUS systems; however the technician must have a good understanding of the types of faults that can occur and their causes. The Certified PROFIBUS Installer Course provides the basic grounding which is essential to understanding the more advanced techniques covered in this course.

The course is available for on-site delivery and at selected locations around the country for up to 12 people. The course can also be delivered overseas providing a cost effective alternative to sending staff to the UK.



Engineers at Castlemaine Brewery, Brisbane

As an optional addition to the on-site training, we can offer half a day of on-plant training for the engineers who take the Installer and Maintenance Course. This can involve supervised checking of a working system at the customer's site.

Note that responsibility for plant production and personnel safety will remain the responsibility of the Company should this option be chosen. Please see the conditions of supply at our web site.



Commissioning and maintenance training in Perth

**Course options**

Because this course is not certified or accredited by PROFIBUS International, the syllabus can be altered and optimised to meet your exact requirements.

**Some Companies that have had on-site Commissioning & Maintenance training**

- |                              |                           |                             |
|------------------------------|---------------------------|-----------------------------|
| Alstec Ltd                   | Diageo Ltd (Belfast)      | Nissan                      |
| Astra Zeneca                 | Earth Tech Engineering    | Ocado                       |
| ATG                          | GCAJV                     | Sabic Europe Petrochemicals |
| Atkins Water                 | GE Healthcare             | Siemens (Singapore)         |
| Avecia                       | ITT Water and Waste Water | South West Water            |
| BA (Heathrow)                | J N Bentley               | Thames Water                |
| BAe Systems (Barrow)         | Johnson Mathey            | Tyco Flow Control (Sydney)  |
| Boulting Group               | KMI Plus                  | UK Gas Technologies         |
| Bridges Electrical Engineers | L J Monks (N Ireland)     | Vanderlande                 |
| Brisbane Water (Australia)   | Lloyd Morris              | Vauxhall Motors             |
| Castlemaine (Australia)      | Manchester Airport        | Watson-Marlow               |
| Dairy Crest                  | Masterfoods               | Westbury Dairies            |
| De Beers (South Africa)      | May Gurney                | Yorkshire Water             |

**A sample of comments from previous attendees**

- “Very practical course, I am sure the techniques that were taught will be useful.”
- “All I’ve got to do now is convince my company to buy me a ProfiTrace kit!”
- “The course was excellent, you are a great teacher Andy”
- “Thank you. Our engineering team have really benefitted from your experience and teaching”
- “Great course, the extra half-day on our plant was the icing on the cake.”

**Booking Information**

For dates, costs and booking information contact:

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