

CPD

CONTINUING PROFESSIONAL DEVELOPMENT



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N. Minikin & Sons Ltd is recognised by The Chartered Institution of Building Services Engineers as a Continuing Professional Development Course Provider and has agreed to meet the criteria for such courses as laid down by the Institution.

Minikin are a Patron of The Chartered Institution of Building Services Engineers and fully support education, research and good practice within the building engineering services industry.

Minikin provide the following courses for building services engineers at consultant's or contractor's offices (a lunchtime seminar for example) or at CIBSE regional meetings (an evening programme perhaps).

These courses can count towards 1 hour of your CIBSE CPD requirements.

Course Leader: Paul Boughton *EngTech AMIMechIE LCIBSE AMIOA*

Speakers: Paul Boughton

Paul, who currently holds the position of Technical Manager at Minikin, has spent over 16 years specialising in the control of thermal expansion, noise and vibration in pipework and plant. His expertise is freely offered to any engineer seeking additional knowledge in this technological field.



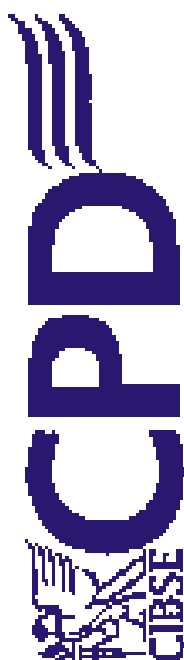
Dave Tickle *DMS*

Dave, who is an established member of the Minikin team, has over 30 years experience in the building services industry. He served his apprenticeship with Haden Young and subsequently moved into project management and design. He has spent the last 16 years designing methods to control movement of pipework.



Dave Shakeshaft

Dave, who is an established member of the Minikin team is qualified to HND standard in Building Services Engineering and has over 20 years experience in the industry. After serving his apprenticeship with Brightside Engineering he worked as a senior engineer on a number of prestigious projects. He has spent the last 13 years giving advice on pipework movement control to consultants and contractors.



N . MINIKIN AND SONS LIMITED
TECHNICAL ADVISORS & SUPPLIERS TO THE BUILDING SERVICES INDUSTRY

COURSE TITLE: THE CONTROL OF THERMALLY INDUCED EXPANSION IN BUILDING SERVICES PIPEWORK

Level: Aimed at mechanical services engineers who have the responsibility of designing or installing pipework systems within buildings.

Course Summary: This course aims to introduce the engineer to the problems associated with thermally induced expansion in pipework and discusses two solutions:-

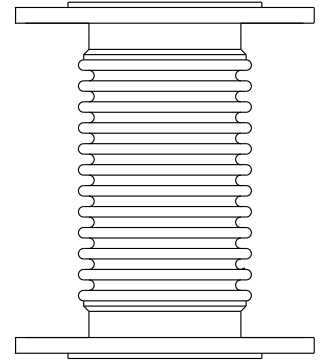
- * Control using inherently natural means.
- * Control using expansion joints.

Other important subjects are also covered:-

- * The correct use of anchors, guides and supports.
- * Calculation of forces.
- * The benefits of using cold-draw.

Examples are given throughout the course.

A brief history of expansion joint development is normally included.



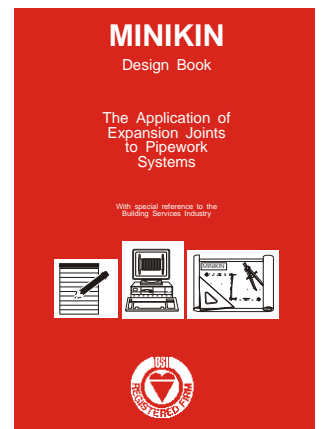
Questions and Answers: A short time is allowed following the presentation for questions and answers. This time will be dependent on how much discussion there is. If attendees wish to discuss a particular project, then we will probably make an appointment to spend more time considering the complexities of the system in question.

Free Book: A free design book entitled "The Application of Expansion Joints to Pipework Systems" is available to all attendees.

Whilst this book details the subjects in the course, every aspect of thermally induced expansion, movement control and the use of expansion joints can not be covered.

Every installation is different, posing different problems. However, our Engineers are available to give every possible assistance and to discuss your system.

Please call on their expertise.



Certificate: An attendance certificate for CPD purposes will be printed and posted as required. This course can count towards 1 hour of your CIBSE CPD requirement.



COURSE TITLE: THE CONTROL OF NOISE AND VIBRATION FROM BUILDING SERVICES PIPEWORK AND PLANT

Level: Aimed at mechanical services engineers who have the responsibility of designing or installing pipework systems and plant within buildings.

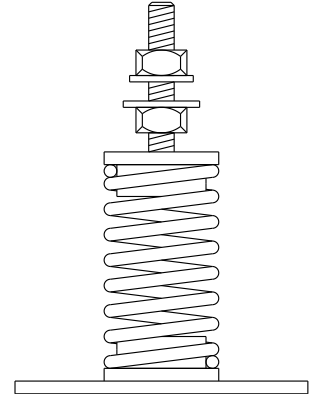
Course Summary: This course aims to introduce the engineer to the problems associated with noise and vibration in pipework and plant and discusses two solutions:-

- * Control using inherently natural means.
- * Control using vibration isolators.

Other important subjects are also covered:-

- * The correct use of spring supports and flexible connectors.
- * Calculation of isolation efficiency (or transmissibility).

Examples are given throughout the course.



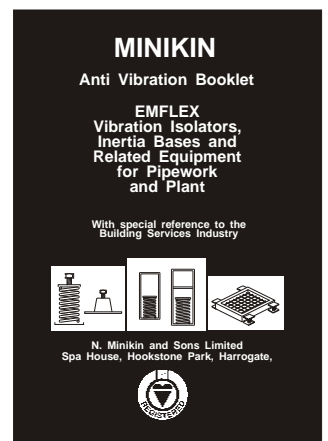
Questions and Answers: A short time is allowed following the presentation for questions and answers. This time will be dependent on how much discussion there is. If attendees wish to discuss a particular project, then we will probably make an appointment to spend more time considering the complexities of the system in question.

Free Book: A free “Anti Vibration Booklet” covering design and product information is available to all attendees.

Whilst this book details the subjects in the course, every aspect of noise and vibration control can not be covered.

Every installation is different, posing different problems. However, our Engineers are available to give every possible assistance and to discuss your system.

Please call on their expertise.



Certificate: An attendance certificate for CPD purposes will be printed and posted as required. This course can count towards 1 hour of your CIBSE CPD requirement.



Certificate

This is to certify that

A N Other

attended the presentation

**THE CONTROL OF THERMALLY INDUCED EXPANSION
IN BUILDING SERVICES PIPEWORK**

given by

Paul Boughton

at

Building Engineering Services, Newtown

on

1st January 2000

and is entitled to a total of

One

CPD hour/s

Signed for N.Minikin & Sons Ltd Paul Boughton Course Leader