

Reduce the uncertainty in your life

Calibration: Philosophy in Practice Second Edition

A comprehensive and practical guide to the art, science and business of dc and low frequency metrology.

Whether you're a highly experienced metrologist, a student of metrology, a lab manager, or just entering the field, *Calibration: Philosophy in Practice* is the single most important reference tool you can have at your fingertips.

Comprehensive in scope, *Calibration: Philosophy in Practice* is a single 544-page volume comprised of seven separate sections, each addressing a different aspect of dc and low frequency measurement.

More than 300 diagrams and figures illustrate the principles and methodology of metrology today.

Something for everyone.

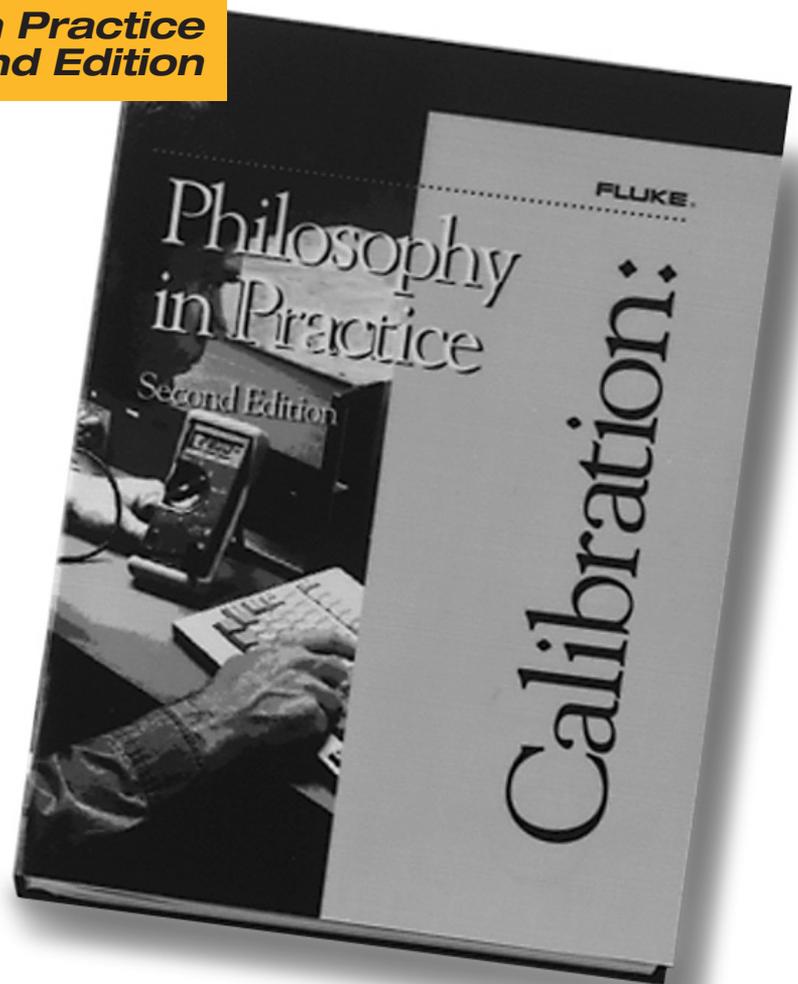
If you're involved in any way with dc and low frequency metrology, *Calibration: Philosophy in Practice* is for you.

Calibration: Philosophy in Practice emphasizes that metrologists can no longer view themselves or their profession as restricted to the laboratory.

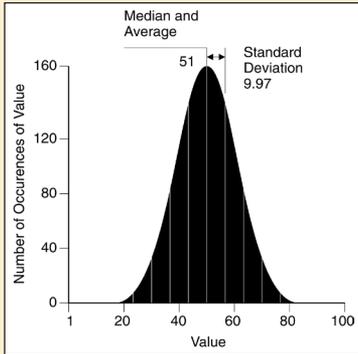
Today's realities require laboratories be successfully run, dedicated to quality, integrated with the needs of their customers, and motivated toward continuous improvement.

Calibration: Philosophy in Practice helps you fully understand what's involved in achieving each of these important goals.

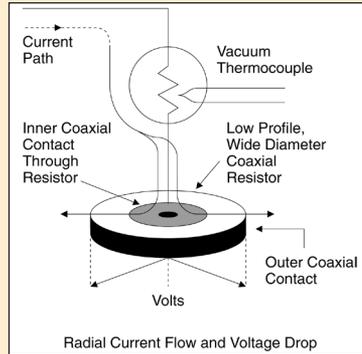
Experienced metrologists will gain new insight about the expanding role of affordable desktop computers in calibration automation and statistical analysis. Also, highly accurate, stable and versatile primary and secondary standards are now on the market, along with computer-ready super accurate multifunction calibrators. How do these new capabilities improve metrology test and procedure design, and affect implementation?



Laboratory managers, on the other hand, are faced with escalating demands and challenges. Today, labs must not only be productive, they must also be innovative and accepting of change. Labs today are also more visible. That's because the use of more and more accurate measuring devices and practices is constantly on the rise. How do changing regulations and standards like ISO 9000, and improvements in equipment and data resources affect today's laboratories? In the face of so many changes, how can sound purchasing decisions be made both from a cost and measurement standpoint?



Everyone from technicians to metrologists will find useful information about statistics.



Illustrations such as this micropot configuration help explain basic concepts behind measurement operations.

People new to metrology rightfully wonder how metrology fits in. What is the scope of metrology and measurement? What are the concepts? Why is metrology so essential to achieving and maintaining product quality? What is the nature of “a standard?” Why is documented traceability to national standards so important? What are some of the more relevant techniques for measuring and comparing laboratory standards?

It’s all right here.

Calibration: Philosophy in Practice leaves virtually no stone un-turned when it comes to the art, science and business of dc and low frequency measurement. You’ll find a wealth of information covered in seven topical sections throughout the book.

Section One: Introduction takes a somewhat poetic look at metrologists and their work in “The Romance of Metrology.” New metrologists will find it interesting; experienced metrologists will identify with many of the thoughts expressed in this section.

Section Two: Universal Elements of Metrology provides a general overview of metrology. It helps you “fill in the blanks,” especially if you’re new to metrology.

Section Three: Primary and Secondary Standards details the higher levels of measurement hierarchy. The nature of measurement standards for several important electrical quantities is covered. So are the proper techniques used to transfer measurement quantities.

Section Four: Calibrators and Calibration takes a close-up look at advanced capabilities available with today’s highly versatile multi-function calibrators. Artifact Calibration and automation of the calibration processes are also covered.

Section Five: Statistics presents metrology statistics from A-to-Z. If you’re an experienced metrologist, this section is especially for you. An “Introduction to Metrology Statistics” is also provided.

Section Six: Laboratory Management focuses on the business side of metrology: facilities, necessary support, audits, accreditation, and instrument specifications.

Section Seven: Practical Considerations for Metrology serves as a useful reference for any metrologist who is actually designing tests or performing calibrations. In addition to the basics, many important, unusual and hard-to-find subjects are covered in “Grounding, Shielding and Guarding,” “A Rogues’ Gallery of Parasitics” and “AC Lore.”

You’ll also find an extensive glossary, full index, plus a useful section on metrology resources.

How to order.

For more information, or to charge your order on VISA or MasterCard call 877-292-ECAL (877-292-3225).

Fluke Calibration. Precision, performance, confidence.™

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Printed in U.S.A. 11/200 1260135D D-EN-N

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