

# Measurement Tools 1 Learning System

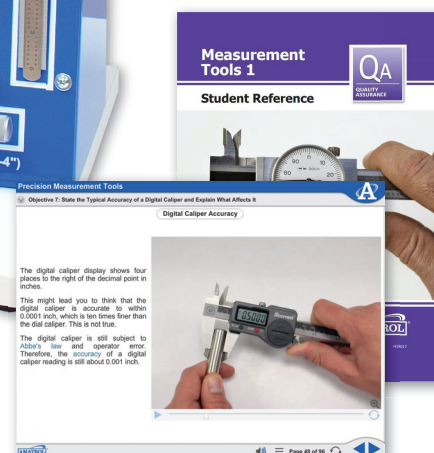
950-MES1

QA

QUALITY ASSURANCE



950-MES1



Interactive Multimedia Curriculum and Student Reference Guide

## Learning Topics:

- Basic Measurement
- Precision Measurement Tools
- Dimensional Gauging
- Statistical Process Control
- Control Chart Operation
- Control Chart Analysis
- Geometric Dimensioning and Tolerancing
- Location Tolerances
- Orientation Tolerances
- Form Tolerances

Amatrol's Measurement Tools 1 Learning System (950-MES1) teaches learners the fundamental principles of measurement, including basic and precision measurement and direct and indirect gauging. The concepts and skills covered in Amatrol's in-depth curriculum are critical and used in every manufacturing plant in the world by inspectors, machinists, manufacturing engineers, and others to determine if parts meet quality standards. After all, the ability to produce quality products begins with determining whether a product meets specified dimensions.

Using Amatrol's comprehensive multimedia curriculum, learners will study a variety of measurement topics, including: digital and dial calipers; dimensional gauging; statistical process control; control chart operation and analysis; geometric dimensioning and tolerancing; and location, orientation, and form tolerances. The learning system also includes industrial-quality components, such as a tabletop workstation, measurement tools like digital and dial calipers, variable length shafts and diameter disks, and more! The combination of robust curriculum with real-world equipment gives learners practical, hands-on experience with instruments they'll encounter on the job.



## Technical Data

Complete technical specifications available upon request.

### Tabletop Workstation

#### Precision Measurement Tools

Dial Caliper  
Decimal Rule, 50th Scale/10th  
Metric Rule  
Tape Measure  
6" Rule  
Micrometer (3-4")  
Micrometer (0-25mm)  
Dial Indicator with Magnetic Base  
1-2-3 Block  
Small Hole Gauge Set

#### Digital Caliper with Computer Interface Cable

#### Standard Parts Package

Variable Length Shafts (10)  
Variable Diameter Disks (3)  
Variable Plates (3)

#### Data Management Software

#### Statistical Process Control Software

#### V-Block and Clamp Set

#### Machinist Square

#### Multimedia Curriculum (N19017)

#### Instructor's Guide (C19017)

#### Installation Guide (D19017)

#### Student Reference Guide (H19017)

#### Additional Requirements:

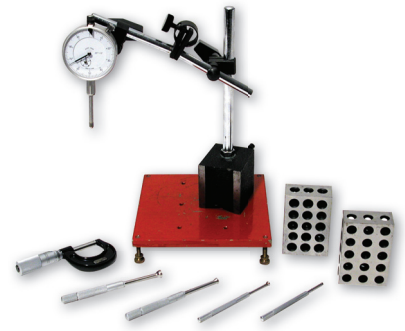
Computer (Visit [www.amatrol.com/support/](http://www.amatrol.com/support/)  
computer-requirements for details.)

#### Options:

Mobile Technology Workstation (82-610)

## Study Measurement Concepts and Practice with Real-World Equipment

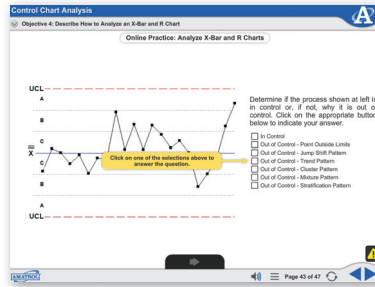
The Measurement Tools 1 Learning System (950-MES1) features in-depth curriculum that teaches essential topics, such as measurement conversion, dimensional gauging, data collection, statistical process control, histogram construction, geometric dimensioning and tolerancing, and location, orientation, and form tolerances. The system also includes a variety of industrial-quality components: dial caliper, micrometer, precision dial indicator, small hole gauge set, machinist square, clamp set, data management software, and statistical process control software. Learners will practice relevant skills and gain hands-on experience with real-world equipment they'll use on the job.



Precision Measurement Tool Set

## Learn How To Construct and Analyze Control Charts

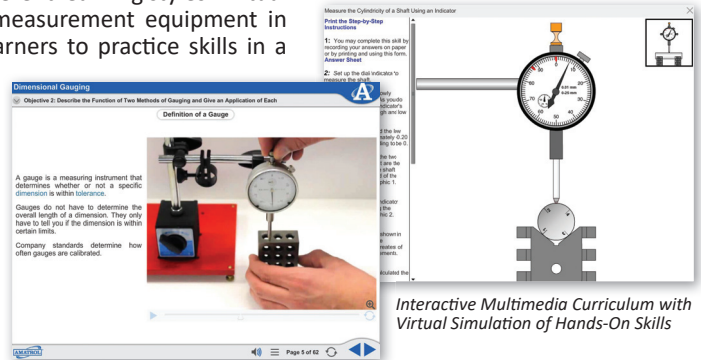
The 950-MES1 curriculum also teaches learners about one of the most important quality tools used in industry today: control charts. Learners will study their function, how they are constructed, and how to analyze the data they provide. Other relevant topics include X-bar and R chart operation and analysis, control chart setup, importing data, and applying control charts to process operation.



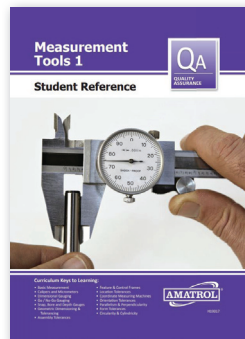
Control Chart Analysis Exercise

## Engaging, Highly-Interactive Multimedia

Amatrol's curriculum features a highly-interactive, multimedia format that includes stunning 3D graphics and videos, voiceovers of all text, and interactive quizzes and exercises designed to appeal to learners with different learning styles. Virtual simulators also replicate measurement equipment in realistic detail to allow learners to practice skills in a virtual environment before transitioning to real equipment. The combination of theoretical knowledge and hands-on skills solidifies understanding and creates a strong basis for pursuing more advanced skills.



Interactive Multimedia Curriculum with Virtual Simulation of Hands-On Skills



## Student Reference Guide

A sample copy of the Measurement Tools 1 Student Reference Guide is also included with the system for your evaluation. Sourced from the system's curriculum, the Student Reference Guide takes the entire series' technical content contained in the learning objectives and combines them into one perfectly-bound book. Student Reference Guides supplement this course by providing a condensed, inexpensive reference tool that learners will find invaluable once they finish their training, making it the perfect course takeaway.

