

QCMaster™

QCMaster is a quality control and inspection software package developed by Innovation Matrix, Inc., for specifying and/or training parts for optical inspection.

Designed for machine vision configured computers, QC Master utilizes a menu system and multi-window interface for the setup and running of inspection applications without computer programming knowledge. Capable of communicating with motion control devices and external computer systems, QCMaster simplifies your inspection workcell management. The Statistical Process Control (SPC) feature not only collects data but provides extensive analytical and reporting capabilities.

QCMaster software is ideal for pharmaceutical, semiconductor, hard disk drive parts, mechanical assembly, automotives, and light manufacturing industries that manufacture high quality products. QCMaster can significantly increase your products' quality and help identify manufacturing issues.



Features

- High Precision measurement with sub-pixel gray processing.
- Unique SAT (Show and Train) teaching:
 - Creates standard product inspection criteria by “showing” and “training” the parts thereby eliminating the need for specific manufacturing tolerances or descriptive inspection criteria
- Powerful library loaded with utilities for graphics, mathematical functions, peripheral drivers and statistical functions.
- Real-time communication to the host computer and peer devices.
- Reliable inspection sequence management.
- Easy product parameter management database.
- Rich peripheral options library.
- Supports a wide variety of CCD cameras.
- User-friendly GUI menu, vision processing and status windows.
- Multi user privilege levels for secure maintenance of the system.
- Automatic Data Logging for certification purpose and/or SPC analysis.
- Shift Management:
 - Identify files in the production lot
 - Identify operators for each shift
 - Contains all measurement statistics logged per shift

Available Options

- Control Panel
 - For industrial operator-machine interfacing, an optional control panel can be connected to the PC's I/O modules to interface with the QCMaster menu system.
- Barcode reader
- XY-theta Stage
- Lighting Control Unit
- SPC – Statistical Process Control for process analysis and improvement
- Digital I/O
- Analog I/O

Statistical Process Control (SPC)

SPC provides a system for monitoring, controlling and, improving a process through statistical analysis through four basic steps:

- Measuring the process
- Eliminating variances in the process for consistency
- Monitoring the process
- Improving the process to it's best target value

Camera Options

Wide range of camera interfacing selections:

- RS170
- Firewire – IEEE1394
- Ethernet
- USB

System Requirements

Recommended minimum systems

- Windows 2000, XP
- 266 Mhz Pentium
- 32MB RAM
- Windows 2000, XP