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Choosing a Quality System: A Comparison of ISO 9000 and ANSI Z540

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Choosing a Quality System

A Comparison of ISO 9000 and ANSI Z540

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Choosing A Quality System

• Why use a Quality System \textit{(Excuses Against)}
  - ‘We’ve done it this way forever…..’
    • Does not mean there isn’t a better way.
    • Does not mean your doing it right
    • Just means the system has never been evaluated
  - ‘We’re compliant with ….’
    • How do you know?
Choosing A Quality System

- Why use a Quality System \textit{(Excuses Against)}
  - ‘We produce a good product, I’ve never heard any complaints
    - Have you been listening
    - Have you asked your customers
Not enforced • Not monitored • Personnel and management failed to make it work.

We use to have that - but it didn't work.

How do you know it isn't broke if you don't check?

Don't fix it if it ain't broke.

(Excuses again)

Why use a Quality System •

Choosing A Quality System
Choosing A Quality System

- Why use a quality system. *(Reasons For)*
  - Changing global and national economies.
    - Force changes in how companies conduct business in order stay competitive.
    - Trade barriers
    - Trickle down to even the smallest companies.
  - Customers impose quality system requirements
    - To meet their customers requirements.
Choosing A Quality System

• What is the benefit
  
  (Similarities between both systems)
  
  – Requires Documented Processes
    • Say what you do - do what you say.
  
  – Requires Management Commitment
    • State management commitment to quality
  
  – Requires Audits of the Processes
    • Verify the processes are performed according to procedure.
Choosing A Quality System

• What is the benefit
  – Requires you establish benchmarks and set goals
    • Monitor and measure your system
  – Requires Corrective Actions
    • Customer complaints
    • Audit Findings
    • Failing to meet objectives
Choosing A Quality System

- What is the benefit
  - Requires use of trained and qualified personnel.
    - Personnel have to have the knowledge and skills to perform their job.
      - Formal Schooling
      - On the Job Training
      - Continuous Training
Choosing A Quality System

• What is the Benefit
  – Continuous Improvement
  • Process Evaluation (*Audits, Corrective Action*)
    – Reduce costs
      » Reduced Rework
      » Prevent Lost business
    – Increase Productivity
      » Better, Faster & Cheaper (Choose three)
Choosing A Quality System

- Differences between the two systems
  - ANSI
    - specifically written for calibration and testing labs
  - ISO
    - Broad scope - pertains to manufacturers as well as service providers.
Choosing A Quality System

• Differences Between the two systems
  – ANSI Requires you prove proficiency by participation in:
    • Measurement Assurance Programs
    • Proficiency Testing
    • Inter-laboratory comparisons
  – ISO relies on continuous process improvement to achieve proficiency
Choosing A Quality System

• Differences between the systems
  – ANSI results in Certification
    • The Quality Management System meets the requirements of the standard
    • Laboratory is capable of performing measurements within the scope of the competency
  – ISO results in Registration
    • The Quality Management System meets the requirement of the standard as it pertains to the scope of registration.
Choosing A Quality System

• Costs
  – ANSI Based on number of disciplines being accredited.
  • Number of auditors and technical assessors.
  • Number of proficiency tests.
  • $3000 for 1st discipline plus $800 for additional field
  • plus travel costs for auditors and assessors
  • Pre assessment and post assessments
Choosing A Quality System

- ISO can cost less
  - Based on the size of the company
    - Larger companies require more time and/or auditors
Choosing A Quality System

Example Based on a small (<10 employees) calibration laboratory performing three measurement areas in Chicago, Il.

• ANSI Z540 Costs  
  (NVLAP estimate)  
  – Three (3) Disciplines  
  – Four (4) member audit team traveling from various parts of the US.  
  – Three (3) day audit  
  – Optional  
    • one (1) day pre audit  
    • Follow up audits

• ISO 9000 Costs  
  (Using Local Assessor)  
  – Flat Rate for audit  
  – Two (2) member team from local area.  
  – Three (3) day audit  
  – Yearly follow up audits  
  – Optional  
    • one (1) day pre-audit  
    • Follow Up audits
Choosing A Quality System

- **ANSI Z540**
  - $4600 ($3000 1st discipline + $800 for each additional field)
  - $2500 (Per Diem & Travel for four auditors for three days)
  - $500 (application fee)
  - $3000 (billed at cost, estimate of $1000 for each discipline)
  - $10600 (total for 1 year does not include out years)

- **ISO 9000**
  - $5000 (Flat Fee, includes application fee)
  - $250 (miscellaneous travel expenses, local auditors)
  - $2000 (Two (2) Yearly Follow up audits)
  - $1800 (pre assessment)
  - $9050 (total for 3 years)
Choosing A Quality System

- Summary
  - Both systems verify the Quality Management System
  - ANSI requires you prove your capabilities
  - ISO can be less expensive.
Choosing A Quality System

• Summary
  – What system to use depends on your customers' requirements.
  – Budget
  – Company goals