Q-BASE PRESENTATION TO LIRO CONFERENCE

Q-BASE QUALITY MANAGEMENT SYSTEM

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1. WHY HAVE A QUALITY MANAGEMENT SYSTEM

Firstly let's look at what a Quality Management System is. It sounds rather daunting but I can assure you that it need not be.

If we break it down maybe it will remove some of the mystique, intrigue and fear.

QUALITY

- meeting the customers requirements.
- fitness for purpose.
- exceeding the customers needs or expectations.

MANAGEMENT

- looking after
- controlling
- administrative and lead.

SYSTEM

- planned happening
- organised parts or things
- co-ordinated events or happenings.

Thus we can possibly now see that a Quality Management System is really:-

> A controlled means or method to ensure that the customer gets what was agreed they would get.

No problem with that is there. You are all doing that right now. I can accept that you are doing all or most of that now or you would not still be in business.

2. Why should you and your Companies in the timber and logging industry, or any industry or service, need a formalised Quality Management System - Q-Base.

There are many very good reasons. We will look at just a few:-

a) Your client Companies require or demand it.
b) To stay in business.
c) To be ahead of your competition.
d) To formalise what you are doing now.
e) To improve your business efficiency and bottom line.
f) To monitor your improvements and progress.
g) To be seen to have a commitment to quality.
h) To achieve formal recognition by a third party - Telarc.
i) As a stepping stone to the full ISO 9000 Standard.

3. Thats fine but you may now be wondering who and what are Telarc.

Telarc New Zealand was established by an Act of Parliament in 1972, as a not-for-profit, user-funded body which has responsibility for ensuring that the highest technical standards are met in New Zealand's industrial, technical, commercial, regulatory, health care and administrative sectors.

Telarc's original function was the operation of the New Zealand national testing laboratory accreditation programme. In 1983 Telarc's empowering legislation was amended to add the function of the national quality assurance certification authority. Subsequently, Telarc's

role included independent assessment, audit and certification of organisations' quality assurance systems. Certification of Quality systems such as ISO 9000 and Telarc's Q-Base.

4. WHAT IS Q-BASE?

In 1988 Telarc saw the need for a lower level auditable and certifiable quality management system. The ISO 9000 Standards were too high a level; too daunting and to costly in both time and money for many New Zealand companies to contemplate let alone implement. Telarc designed the Q-Base Code of quality management systems as a subset of ISO 9000. Based on the same requirements but not in the same depth of coverage. Complementary to and able to be used as a stepping stone to the full ISO 9000 standards at a later date should this be necessary. Q-Base was designed as a user friendly quality management system for the small to medium businesses of New Zealand. This concept has proven to be a valuable tool of management for many businesses in New Zealand. Many have gained certification in Q-Base and some of these Companies have elected to proceed to and have gained ISO 9002.

Since the development of the Q-Base Modular Training Programme late last year over 200 companies have registered with New Zealand Quality College on this programme. The New Zealand Quality College is currently working with Companies in the development of "particularised" Q-Base Codes for specific industry groups. Some 300 odd companies are currently in this area.

The Q-Base Code was recently franchised into Australia and is developing in that country. Other agencies in countries including England and Thailand are also discussing the franchising of Q-Base into their countries.

5.

Telarc has recently set up the New Zealand Quality Centre and operating in this centre is the New Zealand Quality College. This New Zealand Quality College is running the Modular Training Programme and the "particularising" - working with companies to assist them in the understanding and interpretation of the Q-Base Code into their specific requirements.

The New Zealand Quality College also runs courses and seminars on quality; quality management; the ISO 9000 Standards and the implementation of these standards plus how to write your quality manual.

6. HOW DO YOU ACHIEVE CERTIFICATION?

There are many ways to achieve your Q-Base certification and be listed as a Registered Supplier under the Q-Base Code and earn the right to use the Q-Base logo on your letterheads, invoices and promotional material.

a) Your company must have a commitment to quality and formally declare this - write a quality policy.

b) Study the clauses and understand their requirements.

c) Introduce your policy, commitment, intention and direction to your staff by awareness discussion sessions.

d) With the help of all staff write your Quality Manual - use existing procedures, systems and documentation wherever possible.

e) Start using your Quality Manual and all associated documents, procedures and systems.

f) Check that all requirements of the Q-Base Code have been addressed - do internal checks or audits and carry out any necessary corrective action.

g) Apply to Telarc for Certification.
- Manual review
- On-site audit
- Registration.

Shown above [(a) to (g)] is the general overview and there is a choice of ways and methods for you and your company to proceed in this:-

1. Apply to join the programme and do the rest on your own or use a consultant.

2. Join the New Zealand Quality College

Modular Training Programme and work through the 5 training modules.
These modules explain the requirements of the Code in detail and discuss what is needed to meet each of the clause requirements. There is a checklist at the end of each module.

3. Use the services of the New Zealand Quality Centre and the New Zealand Quality College staff and consultants to "particularise" the Q-Base Code requirements to your specific industry or service requirements. This is economical where there is a group of like companies requiring a Quality Manual.

7. CERTIFICATION

When a company has written its Quality Manual, implemented all the requirements of the Q-Base Code, and carried out any corrective action, the Quality Management System should be monitored by the Company for several months. When the system has been operating successfully for this period application for Certification can be made to Telarc.

An audit for certification has three steps.

1. Pre-Audit visit (optional for Q-Base)

2. Manual Review - done at a Telarc office

3. An on-site audit - at your Companies premises or location.

When all systems are functioning satisfactorily and any conditions cleared Registration as a Q-Base Registered Supplier takes place.

TELARC Q-BASE QUALITY MANAGEMENT SYSTEM

As has been stated earlier Q-Base Code 1992 has been developed from and is a sub-set of ISO 9000. It is the small businesses ISO 9000 equivalent and a stepping stone for those companies that require at a later stage to proceed to full ISO 9000 Certification.

Q-Base is the Quality Management System for small businesses, manufacturing or service.

The Q-Base Code has 9 clauses which a company has to comply with and be certified against in order that it becomes a Registered Q-Base Supplier. Becoming certified against the Q-Base Code also means that the company can use the Q-Base logo in its advertising and promotional business (bromides are available).

The nine clauses are:-

Q-BASE CODE

CLAUSE

1 Responsibility and Authority
2 Document Control
3 Purchasing
4 Training and Work Instructions
5 Inspection Plans
6 Inspection Equipment
7 Inspection Status and Control of Sub-standard Materials
8 Corrective Action
9 Quality Records

Q-Base has been designed to be user friendly but to give a better understanding of the requirements of each clause they are listed under with a brief overview and interpretation.

Clause One
Responsibility and Authority

The "Q-Base" requirement states that:-

"The company must appoint one of its staff to have overall responsibility for quality assurance in the day to day work of the organisation. This must be a senior person with sufficient respect and authority in the company to be able to ensure that all other staff follow the quality assurance programme at all times.

The responsibility and authority of this "Quality Co-ordinator" must be defined in a written job description or similar document. The Chief Executive of the company must review and sign this document to give it official backing, and to demonstrate his/her own commitment to the quality assurance programme".

(Based on ISO 9001, 4.1.2.3)

Yes it is a firm directive. Your company MUST actually name a person who has the ability, seniority, authority and status within the organisation to make sure that the quality programme objectives are carried out at all times. It is also a requirement for you, or your company to put this fact in writing.

To put in simple terms this is saying that the person with overall responsibility for quality assurance in the organisation i.e. the "Quality Co-ordinator" needs to have written down and signed by the "Chief Executive" (The Boss) a job description showing what they are responsible for and their tasks and the authority to carry out those duties.

CLAUSE TWO
DOCUMENT CONTROL

The "Q-Base" requirement states that:-

"The company must have a system for uniquely identifying and controlling all its critical documents to ensure that only the current editions are in use and that no unauthorised changes are made. The document control system must also ensure that copies of documents are given to everyone who needs them so that they are not tempted to rely on memory for critical information. Documents to be controlled include drawings, specifications, work instructions, contracts, inspection procedures etc".

(Based on ISO 9001, 4.5)

Most companies will be identifying and controlling their documents in some or all areas. It is basic logic and common sense and also a safety precaution to prevent out of date or incorrect documents, drawings etc being used. Some smaller companies may not have had or made available the time to put this type of system in place. Has this cost you and your company time and money. Product delivered to the wrong site, incorrect work specifications, out of date documentation will be prevented with document control.

CLAUSE THREE
PURCHASING

"Q-Base" requirement states that:-

"The company must have a system for controlling the materials, components and sub-contract services that it buys. Suppliers and sub-contractors must be selected on the basis of the quality of their products or work and not on price alone. A register of approved suppliers and sub-contractors must be kept with information as to why they were selected as approved suppliers and how they are performing. The company must also have procedures for checking that their suppliers deliver what was ordered, in the correct quantity, to the correct specification".

(Based on ISO 9001, 4.6)

This is making sure that the correct product or service is ordered and that the correct product or service is in turn supplied.

CLAUSE FOUR
TRAINING AND WORK INSTRUCTIONS

The "Q-Base" requirement states that:-

"The company must ensure that its staff are fully trained for the work that they do and that, where necessary, they are provided with written work instructions setting out how the company requires critical jobs or tasks to be carried out."

(ISO 9002, 4.18)

This requires that workers who are doing any work whatsoever must be competent to do that work.

They must have achieved or been brought up to the level of competency or skill needed by the company employing them.

Decide what operation is critical
Decide who needs instructions
Decide on format of instructions
Decide where the instructions are put

Instructions are orders to act and should be helpful. Make sure that they are clear, concise, and easily understood.

Think of the type of person who is going to act on the instruction.

Do they understand technical words - or even English.

CLAUSE FIVE
INSPECTION PLANS

"Q-Base" requirement states that:-

"The company must draw up plans for the inspection of raw materials, components, work in progress and finished products. These plans must state (as appropriate) how the inspections are to be performed, what equipment is to be used, who is to carry out the inspections, how often, how many samples are to checked how samples are to be selected, the pass/fail criteria and the type of inspection records that are to be kept."

(Based on ISO 9001, 4.10)

1. All product or goods that comes into the company for use, rework or having additional work done to them, must be inspected and checked to make sure that it is up to standard and specification before it is used. (Raw material).

2. This includes any product or goods supplier by your customer. (Raw material).

3. Work that is being done in your company must be inspected at specified times. (Work in progress).

4. Work must be inspected when it is completed and prior to sending out to your customer (finished product). Q-Base Code requires that there be inspection from start to finish.

This clause applies to service sector companies as well as manufacturing. Sometimes it does require lateral thinking.

You do need a system in place to monitor the progress and quality of work - maybe a signed check list.

CLAUSE SIX
INSPECTION EQUIPMENT

"Q-Base" requirement states that:-

"The company must ensure that all its measuring, test and inspection equipment is calibrated to an accuracy appropriate for its use. This includes jigs, patterns, gauges and other production aids. All measurements made during inspections and tests must be evaluated, in terms of the accuracy of measurement required and the inherent capabilities of the equipment used, to determine the instrument's calibration requirements. All calibrations must be traceable to the National Standards of Measurement".

(Based on ISO 9001, 4.11)

- The end product or operation being undertaken will determine the relevance of the accuracy needed.

- Management and company policy, plus the customers requirements, will establish the criteria and level of the accuracy needed to be set.

- Q-Base Code requires calibration procedures when the quality of the finished product or service could be effected by measurement.

- The company decides the accuracy needed and then states this in its procedures.

- This stated procedural accuracy is what will be used as the standard for auditing against.

- All measuring, test, and inspection equipment that requires calibration shall be identified - on the unit and in a register which the company must keep.

If you don't use any inspection equipment that requires calibration you will need to state this clearly in your documentation.

CLAUSE SEVEN
INSPECTION STATUS AND CONTROL OF SUB-STANDARD MATERIALS

"Q-Base" requirement states that:-

"All materials and products, as they flow through the production process, must be clearly identified to indicate whether they have been inspected and are suitable for further processing; they have been inspected and have been found to be sub-standard, or are awaiting inspection. Identification may be achieved in a number of ways. Labels or tags may be used or special containers or special locations on the shop floor may be used for various materials in the three status categories.

Once sub-standard materials or products have been detected the company must have formal procedures for disposing of them. They may be scrapped or reworked. They may be sold as "seconds", or offered to the customer at a discount. Whatever decision is made it must be made in a controlled manner by someone with specific authority for such decisions, and it must be recorded."

(ISO 9001, 4.12; 4.13, 4.13.1)

Put into a simple statement:

A company must know the quality condition of ALL product or service at whatever stage in the process

and

The decisions and all details on reject or rework material or areas must be known and recorded.

Again this clause has its origin in the manufacturing arena, however it still requires to be applied to the service sector.

You need to know and MUST have control of Sub-standard material, products, and services.

- Once material, product or service has been identified as sub-standard there must be formal documentation for further action.

- Further action will fall into one of four areas:

  1. Rework - that is carry out repairs, or further work to bring up to specific requirements.

  2. Accept as is with or without repair but with concessions.

  3. Regrade for alternative application.

  4. Reject or scrap.

The company must be aware of, have control over, and be able to take effective corrective action on any faulty or sub-standard workmanship or materials.

CLAUSE EIGHT
CORRECTIVE ACTION

"Q-Base" requirement states that:-

"The company must have a procedure for investigating any incidence of sub-standard product, customer complaints and other quality failures to determine the root cause of the problem. Action must then be taken to ensure that the same problem never occurs again.

(ISO 9001, 4.14)

Simplified: Trouble shooting: preventing faults and sub-standard work happening.

Bad enough having an incident of sub-standard product. Make sure it never happens again. (That would be a literal interpretation of this clause).

Have in place a system that allows the company to investigate and act on the incident. Evaluate and decide what the cause was and implement action and procedures to prevent the reoccurrence,

eg. implement staff training; more detailed work instruction; more resources of one type or another.

CLAUSE NINE
QUALITY RECORDS

The "Q-Base" requirement states that:-

"Records must be sufficient to demonstrate that all essential production processes have been carried out and that all inspections or tests have been undertaken. Quality Records must be retained for an appropriate period. The "appropriate" period will depend upon the nature of the product and the length of time that it will be in use in the marketplace and during which quality problems are likely to come to light.

(ISO 9001, 4.16)

QUOTE : "IF IT ISN'T WRITTEN DOWN IT DIDN'T HAPPEN".

Make sure that the paper trail can be used to prove that all correct and necessary steps and procedures were carried out in a true and timely manner.

Quality Assurance is:-

All those planned and systematic actions necessary to provide adequate confidence that a product, process or service will satisfy given quality requirements.

Quality Records is the formalised record of these actions.

RJ:AC