

Managing Quality in Long Distance Supply Chains

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Quality Challenges for International Procurement

- Difficulty identifying competent and ethical suppliers – ‘Cultural Occlusion®’
- Different perceptions of contracts
- Translation of specifications, tolerances and expectations of conformance across languages and cultures = defect opportunities
- Translation of workmanship standards across languages and cultures = defect opportunities

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Cost Challenges for International Procurement

- Long delivery timing, equally long replacement delivery timing – Identify issues at the factory
- Market (in)tolerance for delivery delays
- Gap inventory requirements and related costs that erode offshore savings – For both logistical and quality buffer and gap stock
- Reverse logistics for defective materials

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Selecting a Qualified & Ethical Supplier

- Web sites can deceive. Beware of “virtual” companies
- There’s a difference between “virtual” and “collaborative” companies
- Virtual companies usually lack process and other operational controls
- Collaborative companies may or may not be competent and well controlled
- “Real” companies – with many or all processes under company management – are typically best

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Selecting a Qualified & Ethical Supplier

- Assessments of ownership and financial conditions are challenging but not impossible
- Promises by management are not always carried out by staff – Evaluate the management dynamics, not just the facilities and QMS
- Agree on conformance and replacement cost responsibilities before placing any orders
- Check references carefully for clues related to ‘quality of experience’ - No company gives out bad references

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Manage the Entire Supply Chain

- A major omission by many companies is the failure to manage the upstream supply chain – Frequently not as reliable in distant locations
- Suppliers to your supplier must be fully qualified
- Inspections and verifications of input quality may be required prior to use in your product
- Classify quality oversight investment levels for inputs to match the impact of defects on your product – Critical, Major, Minor – the same as used for defect classifications of final products
- Ability to inspect inputs in final product

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Methods and Tools of QA Different With Distance!

- Supplier capability audits and 'registrations' (ISO9001, TS16949 & Others)
- First article inspections – witness sampling
- Product testing – initial and/or periodic
- FMEAs – DFMEA & PFMEA
- Capability studies
- In-process inspections
- Pre-shipment Inspections & sampling plans
- Container loading supervision

Corrective Action Management Different with Distance!

- Root cause analysis
- Process audits
- Process flow failure analysis
- Corrective action plans
- Corrective action verification

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Methods of Assuring Conformance

- Reliance on sellers' assurances of quality and conformance (Factories or Trading Companies)
- Inspection upon receipt of shipments
- Buyer's local and/or distant QA personnel inspecting at source locations
- Third party quality services (3PQ)
- Combining internal and external resources

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Local Expertise Needed Staff or 3PQ

- Engineering support – Including translation of drawings and specifications
- Specification development – Far more detail
- Inspection plan development - Deeper than Local
- Local production order control – Time zones
- Quality systems development – Cross cultural
- Use “industrial” interpreters – Know the content
- Local support of negotiations

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Summary

- Avoid 'Strategic Overshoot®'
- Think in three dimensions
- Assume nothing
- Do your own research – Abandon all preconceptions

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