



**NACE**<sup>®</sup> CALGARY  
INTERNATIONAL SECTION



**KT PROJECT**  
SUCCESS ACHIEVED + DELIVERED

# Top Ten Myths of Third-party Inspection

Roy O. Christensen, RET  
KT Project

NACE Calgary Webinar  
May 27, 2022

# Communication



The Project Management Institute's (PMI's) report *The Essential Role of Communication* stated: **ineffective communication has a negative impact on project success >50% of the time**

**Communication and understanding are key to project success**

# Introduction

Capital projects in energy and other sectors use third-party inspection (inspection) to ensure suppliers' equipment and materials are delivered:

- Complete
- Correct
- On-time

Inspection is also known as:

- Source surveillance
- Vendor surveillance
- Visual inspection

Planning without action  
is futile, action without  
planning is fatal.

- Cornelius Fichtner

# Introduction

Inspection is a misunderstood function because of hidden knowledge gaps. There are many pervasive myths about its:

- Methods
- Objectives
- Strategies

Knowledge transfer is needed! This presentation dispels 10 inspection myths and two supplemental myths with facts.





# Introduction

This presentation applies to inspection at construction sites and supplier facilities for these disciplines:

- Coating
- Electrical
- Instrumentation
- Mechanical
- Welding



# Myth #1

***Inspection is a quality assurance/quality control (QA/QC) function***

**False**

1. Inspection provides a risk management function, not a quality management function (e.g., it is not an ISO 9001, *Quality Management Systems — Requirements* program)
2. Project risk tolerances vary, and the appropriate amount of inspection depends on the project cost, type, and other factors (e.g., complexity, criticality, location, size, and pipeline or plant)

## Myth #2

### *Inspection removes liability*

#### **Wrong**

1. Inspection does not ensure deliverables are perfect or duplicate supplier QC
2. Inspection selectively determines compliance during production
3. Inspectors assume no responsibility for the quality of the procurement documents or the supplier's deliverables



## Myth #3

*Inspection can be set-up ad hoc or as needed*

**It can be, but ...**

1. Properly planned inspection is more effective and value added because it permits a project to identify and correct challenges before significant consequences can occur (e.g., early or on paper instead of during production or construction)
2. A repair at site can cost 10x more than at the supplier's facility and impacts to construction contractors and schedules can be costly!





## Myth #4

***Inspection resources are available whenever and wherever required***

### **Unlikely**

1. Inspection resources may or may not be available when and where needed
2. A smart project plans inspection activities and contingencies during detailed engineering – not when services are needed
3. It is unprofessional to ask an inspector to drop their assignments and commitments so they can solve another project's problem



## Myth #5

*Inspectors are immediately available for a project*

**Unlikely**

1. Like other busy professionals, inspectors keep carefully-planned and demanding schedules
2. Inspectors may be inflexible or unavailable on short notice
3. In many major centers an inspector can only visit one or two suppliers per day, or they may not have a personal vehicle and need to use public transit



# Myth #6

*Inspection expertise is always readily available*

**Probably not**

1. Due to the downturn, industry is losing many talented professionals who cannot be replaced and attrition is increasing as the baby boomers retire
2. A smart project uses strategies and teamwork to manage inspection activities cost effectively, especially if:
  - Available resources are less experienced, or no resources are available locally (e.g., significant travel expenses would be required)
  - Assigning a resource for more than one discipline (e.g., coating, electrical, mechanical, welding, or a combination).



## Myth #8

*An inspector's acceptance of documentation or inspection results is final*

**False**

1. The responsible engineer or site receiver is responsible for final acceptance of documentation and product, regardless of previous acceptance by others
2. There may be additional or other requirements to consider, or a cold-eyes review may identify a deficiency





## Myth #9

***Inspection activities are limited to requirements in the inspection requirements document or inspection and test plan (ITP)***

**Not true**

1. There are several sources of guidance for inspection activities including:
  - Inspection assignment instructions (e.g., hours or number of visits)
  - Inspector's ability to act as the project's eyes and ears
  - SQS coordinator and inspector's knowledge and leadership
  - Other instructions (e.g., by email, phone call, or text)

# Myth #10

*Inspection is a one-size-fits-all solution*

**Never!**

1. Inspection requirements may be similar for a new project; however, a smart project:
  - Assesses and documents important differences
  - Monitors and adjusts plans as needed and throughout all project phases



# Supplemental Myth #1

***Project managers are knowledgeable about inspection***

**Not necessarily**

1. Inspection myths originate from gaps in:
  - Engineering educational curriculum
  - Project management body of knowledge (i.e., PMI. *A Guide to the Project Management Body of Knowledge*, 7<sup>th</sup> Edition)
2. No detailed information or how-to guidelines are provided for inspection

# Supplemental Myth #2

***Procurement managers and supply chain managers are knowledgeable about inspection***

**Not necessarily**

1. Inspection myths originate from gaps in:
  - Business educational curriculum
  - Supply chain management body of knowledge (i.e., SCC. *The Competencies of Canadian Supply Chain Professionals*, 1<sup>st</sup> Edition)
2. No detailed information or how-to guidelines are provided for inspection

# Conclusions

1. There are knowledge gaps in education and industry because inspection expertise is only available as propriety information and tribal knowledge
2. With experienced and knowledgeable SQS coordinators and inspectors, and proper planning, a project can mitigate risk to ensure that equipment and materials are delivered:
  - Complete
  - Correct
  - On-time





# Conclusions

3. Continuous learning is required for career success
4. More can be accomplished by teamwork than individuals working alone
5. Projects succeed when collaboration and communication are used effectively and strategically to plan inspection requirements
6. Knowledge transfer is key to project success, to save:
  - Money
  - Time



# Learn More

To learn more about project success, see these resources:

- Article: [Top Ten Myths of Third-party Inspection](#)
- eBook: [Effective Supplier Quality Surveillance \(SQS\)](#)
- Fact sheet: [Top 12 Myths and Facts About Third-party Inspection \(document\)](#)
- Fact sheet: [Top 12 Myths and Facts About Third-party Inspection \(graphic\)](#)

# Q&A

Do you have:

- Questions to ask?
- Comments to discuss?

# Presented by

Roy O. Christensen, RET, CWB Level 3, API 510, ABSA IPV&PPI

hello@ktproject.ca

+1 403.703.2686

[www.ktproject.ca](http://www.ktproject.ca)



# Supplemental Resources



The KT Project glossary (see inset) reduces the risk of miscommunication and misunderstanding in project settings

To learn more, see: [Successful Projects Need Effective Communication](#)