Business Improvement and Standards

Statistical Techniques

'Understand the basics of these Statistical Tools.'

Measurement System Analysis (MSA)

- Course / Delegates' Objectives
- Measurement System Variability
- ISO/TS 16949 Requirements
- Measurement System Error
- Location error
  - Bias, Linearity, Stability
- Spread errors
  - Repeatability & Reproducibility
- Gauge R&R Study
- Analysis of Results – Graphical
- Attribute Gauges – Gauge R&R
- Auditing
- Customer Specific Requirements

Statistical Process Control (SPC)

- Course / Delegates' Objectives
- Goal of Standards, e.g. ISO/TS 16949:2002
- Process Control
- Variation
- Distribution
- Location; 'Setting'
- Spread; 'Variability'
- Variables & Attributes
- Control Charts
- Process Capability
- Auditing
- Customer Specific Requirements

FEEDBACK EXAMPLES

"Ease with which complicated mathematics was conveyed to everyone."

"Showing how to apply SPC in the workplace."

Business Improvement and Standards

"Time to make that business decision"

TM

sys

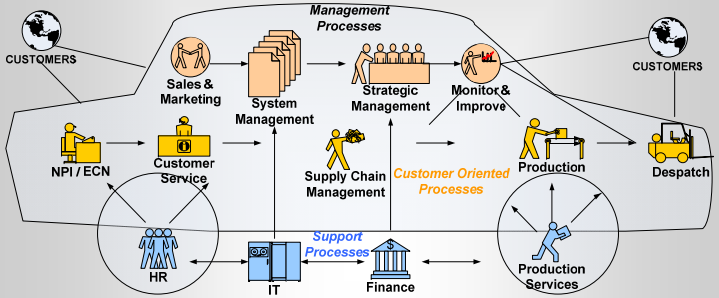
yes

Systems Yield Success

Core Tool Training

sys ***wants to help you improve your business using the Process Approach & obtain third party Approval.***

This is done by providing Training, including on NPI, see page 2, FMEA, see page 3, & SPC / MSA , see page 4, & Consultancy Support, see brochure, e.g. identifying your key processes, as per example below.



Example 'SYSTEM MAP' Showing 'Sequence & Interaction' of Key Processes

Products are delivered by professionals with competency in:

- *Third party assessment,*
- *Group management positions*
- *Training & qualifying in industry & ISO/TS16949:2002 third party assessors .*

We cover standards such as:

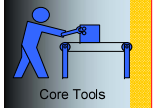
- *ISO9001:2000 & ISO/TS 16949:2002*
- *Integrated management frameworks.*

I look forward to hearing from you, ***Alan Keffler*** *07947 676705*

Contact SYS on; sales@systemsys.co.uk , or the website.

www.systemsys.co.uk

New Product Introduction e.g. APQP & PPAP



'Understand these Product Introduction Frameworks'

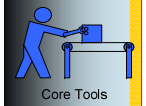
- **Course / Delegates' Objectives**
- **Quality Planning: Why / Who?**
- **Product Quality Planning Timing Chart**
- **APQP Phase I**
  PLAN & DEFINE PROGRAMME
  Inputs & Outputs: (Inputs for section II)
- **APQP Phase II**
  PRODUCT DESIGN & DEVELOPMENT
  Outputs: (Design) **FMEA, Design Review**
  Outputs: (APQP Team)
  Control Plan, Cause & Effect Diagram
- **APQP Phase III**
  PROCESS DESIGN & DEVELOPMENT
- Outputs: **Measurement system analysis**
- **APQP Phase IV**
  PRODUCT & PROCESS VALIDATION
- Outputs: Variation, **Process Capability**
- **Part Approval: PAP**
- **PPAP AIAG PPAP Manual**
- **Reporting Requirements;**
  Submission, Records
- **APQP Phase V**
  FEEDBACK, ASSESSMENT,
  CORRECTIVE ACTION
- Outputs: **QCD, Improvement.**

FEEDBACK EXAMPLES

"Good Knowledgeable of the Trainer. Lots of Group Participation."

"Very hands on and became specific to our needs as a company."

Failure Mode & Effects Analysis FMEA



'Get real benefit from this Risk Analysis Tool'

- **Course / Delegates' Objectives**
- **Goal of ISO/TS 16949**
- **Successful Implementation**
- **Plan Do Check Act**
- **Inputs; Measurement Tools (QOS)**
- **FMEA process**
- **Creation**
- **When should you create an FMEA?**
- **Who should be involved?**
- **Support Documents**
- **Block Diagram**
- **DFMEA**
- **PFMEA**
- **FMEA Elements (Form)**
  Function
  Failure Mode
  Effects of Failure
  Potential Causes
  Controls
  Severity, Occurrence, Detection scores
  Risk Priority Number
  Actions
- **Auditing**
- **Customer Specific Requirements**
- **Workshop**
  Creation of Documents

FEEDBACK EXAMPLES

"Hands on dealing with real issues."

"Learning how to do FMEAs."