Design Your Own CM In-House Seminar

Tailor it to Your Needs

one to three days

By: Frank Watts BSME, CCDM

Design your own interactive seminar for Frank's presentation to everyone involved in the CM processes and/or, executive management, operating management, key people.

- Train dozens of people for the cost of sending about two people to a public seminar.
- Emphasize the critical nature of the EDC / CM discipline.
- Set the stage for innovation.
- Learn ways to make real cost reductions.
- Give management / key people appreciation for the strategic significance of the discipline.
- Cover the major issues involved in the discipline &/or at your company.
- Cover ways and means to bridge the gap / tear down the wall between Design Engineering and the rest of the company.
- Defines the "rules" and "trolls" of configuration management.
- Optimize your processes with legacy MRP/ERP/CAD/PDM/PLM systems.
- Learn the keys to fast change processing.
- Find out how to reduce costs by intelligent request and change screening.
- Seminar time can be minimized if preceded by a process assessment / analysis.
- Pick form the following list of Power Point presentations or ask Frank for help!

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Introduction
Why EDC / CM
1.0
Orientation, importance of the discipline, organization, doc control vs configuration management. Bridge the gap between Engineering and the rest of the company.

Documents
Doc Types
0.5
Dividing technical documents into categories - design, manufacturing, quality, service, etc. Who should control them?

Documents
Design Doc Formats
1.0
What should/shouldn't go on Design Docs?

Consistent formats & standards. Who signs the documents? Who gets the signatures?

Documents
Doc File Control
0.5
Minimum file control. Who controls, Rev control, when should control start.

Documents
Product Specifications
0.5
What are product specs and how should they be treated differently than other docs?

Identification
Part Numbers

Configuration Ident
1.0
Significant and non significant part numbers, ideal part number, tab/dash/version numbers, product numbers, release numbers, etc. etc. How to figure out what you need? what should go on the nameplate?

Identification
Marking Product/Parts
0.5
What should be marked? With what numbers?

Is marking always value added?

Identification
Approved Sources
0.5
Approved manufacturers &/or approved sources. First source. Control of sources.

Identification
Interchangeability &

Spares
1.5
What did Eli Whitney do? Is Form, Fit & Function enough? What is? Logic diagram refined - when to change PN and when to change Rev. What are revs for? How do spares fit in? Are the spares decisions important?
BOM
Populating MRP Files
0.5
How/who/when should data be entered into those MRP screens? Should sketch numbers be used? What process should be followed?

BOM
BOM & Parts Lists
1.0
Controlled Engineering Parts List defined. What should/shouldn't go in the BOM. How many BOMs are needed? How many databases for the BOM? Is a single data base obtainable?

BOM
Modular BOM
0.5
When is a modular BOM needed? What are the benefits of modular structure? what are the alternatives?

BOM
Product Structuring
0.5
How many levels should be in the structure? Are more levels good? Is a flat BOM attainable?

Release
Cross Functional Teams
0.5
Proper use of cross functional teams in the release process. Who should be involved? Would they become signers? How should the team function?

Release
Rel Product/Doc/Parts
1.5
What phases are needed in the process? Is there a reluctance to release? Should parts be released before assemblies or top level? How to tell what phase an item/document is "good for". Is a release document needed? How to expedite release. How to track it.

Release
Release Work Flow
0.5
What work elements are required to release an item and how should they be sequenced? Which steps can be done in parallel. Make a release flow diagram.

Release
Non Conformance/

Deviations/Waivers
0.5
Are deviations/waivers needed? What to do with material that doesn't meet the drawing/spec? Are these ways to make fast changes? How to avoid repeated deviations.

Change
Reasons for Change
0.5
What exactly are the reasons for having a controlled request or change process?
Change
Change Request
1.0
Do you need a request for engineering action process? How to tell! Where does the request end and the change start? Another form? How to work off the request backlog! Metrics.

Change
Change Control
1.5

Change
Change From Content
0.5
What should go on the ECO and Why?

Change
Change Forms
0.5
How many forms? What purpose? what does a world class form look like? On line?

Change
Implementation/Trace/

Account
0.5
How to make sure changes are implemented and tracked. How to account/report at a minimum.

Change
Change Effectivity
0.5
How and where to plan the effectivity. Is the plan static? Is a date enough? Who should plan and track the plan?

Change
Fast Change
0.5
Why is speed important? Change metrics. What points to measure. What do fast processes have in common? Benchmarks. The path to speed.

Change
Change Work flow
1.0
What elements are required in a change control process and what sequence should they be performed in? What elements can be performed in parallel? Make a change process flow diagram.

Change
Change Cost
0.5
Finding cost reductions that aren't! Cost form, flow and standards.

Change
Field Change
0.5
What changes should/shouldn't be retrofit? Another form? What process yields the best result?

Implementation
Supply Chain
0.5
What are the recurring CM problems in the supply chain? Are the CM problems repairable? How?

Implementation
Writing Standards &
Work Flow
0.5
What about policies and procedures? Are descriptive, play script or work flow diagrams better? Who should own them? How to flow diagram and write standards.

Implementation
Manufacturing Instruct's
0.5
Are part and assembly manufacturing instructions necessary? What can they do? How does the assembly drawing fit in? Are assembly drawings really needed?

Implementation
Audits
0.5

Implementation
CM Process Improvement
0.5
What are the steps necessary to improve the process? Is a team needed? Reinvent or continuously improve?

Metrics

Implementation
Quality CM
0.5
Quality in the CM processes. ISO and CM.

Attachments
Five Standard

Attachments
0.0

Total
23 hrs
Time shown allows for a five minute break every hour but does not include lunch.
PUBLIC SEMINARS: Frank Watts offers his Engineering Documentation Control / Configuration Management course through the University of Illinois. You may get more information by visiting http://www.tac.uiuc.edu/training/seminars/edccm/.