

Adams Maxwell Enterprise System (AES) 12/4/2025

Home

Job Detail : Management of new Jobs into the System. When a new order is received it will be assigned a unique job based on AM part number which is associated with the customer part number. Includes Order Qty QA requirements, delivery schedules, materials, production status,

Job Matrix

Job Matrix: Historical search of job history by customer, customer part number, or AM part number.

Cross Ref

Cross Reference: Database of AM part numbers / revisions to Customer part number /revisions

Part List

Part List: Database of the part list for each AM part number / revision. Contains required materials and associated suppliers, Inspection, and receiving inspection. Contains a list of engineering and QA drawings / revisions.

Suppliers

Suppliers List: Database of Suppliers and approval status - Imported from Quick Books

Customers

Customer List: Database of Customers - Imported from Quick Books

Materials

Material List: Database of Standard Materials - Imported from Quick Books - Uses as reference when creating Part List.

Processes

General Processes : Manufacturing Processes, Inspection Documents, and Testing Documents.

AS9100

AS9100 : QA Manual, SOP's, Diagrams and Forms

RCCA

Root Cause Corrective Action : Excel Type / Database of RCCA, Open / Close Action items, Customer Complaints

Doc Change

Document Change : Document Change History

Ref Docs

Reference Documents : Industry Customer MIL-Spec , Government , Material Tech Sheets, Material Safety Sheets

Records

Records : Completed Job Tickets, Management Meetings, Audits, Qualifications, Material Certs,

Training

Employee Training Records: Excel Type / Database of Employee Training records , out date and recalls

Calibration

Calibration Records: Excel Type / Database of equipment calibration records , out date and recalls

Equipment

Equipment Maintenance Records: Excel Type / Database of equipment maintenance records , out date and recalls

Permits

Permit Records : Excel Type / Database of Permits and Licenses , out date and recalls

Part List

Adams Maxwell P/N _____ Rev _____ Date _____

Description _____

Customer/OEM _____ Customer P/N _____ Rev _____

Material and Top Drawings

Item	Name	Part/Drawing	Rev	Manf	Per Unit	Unit	RTIP	Mat

Support and QA Drawings / Tooling / Fixtures /Stamps

Description	Drawing	Rev

Developments Notes:

Part List save by Adams Maxwell Part Number and Revision (Would like to have history of revisions)

Part Number tied into Cross Reference—

Item Number generated by program, All other fields free format, Note Mat will be an * if Material Item (Will be used for Job Detail and Kit list for purchasing and kitting by Material Control)

RTIP - Free format—put in appropriate RTIP (Receiving Test Inspection Procedure)

Support Drawings—Just free format

Job Detail

General

PO and Delivery

QA Req

Materials

Production

Materials

Item Name	Description	Qty	Unit	PO No.	Kitted
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Production

QTY	Lot	Status / Notes	Wind	Hookup	Potting	FTest	Ship
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Materials - Will take information on Job Creating from Part List, Line items with * in Material Field, Qty = Job Qty x Per Unit Qty
PO Number and Kitted will be free format entry.

PO and Delivery—Similar to CMIS currently (Screen 5)

General - Display Part Number, Rev both Adams Maxwell and Customer, Have Input to enter Spare Qty and QA Qty (to be added to Job Qty from PO and Delivery Screen), Have sign off blocks for Office, QA, Engineering, and Mat Control.

QA Requirements - We can look at CMIS Screen 2

Production - Wind, Hookup, Potting Ftest/Ship Target Milestone Dates— As complete put ?? (Date field) , 10 Lines plenty

Manufacturing, Testing and Inspection Procedures and Processes

Manufacturing General Procedures

GP125-3 Vacuum Potting	GP301 General Soldering
GP125-5 Vacuum Impregnation	GP310 Lead Attach and Hookup
GP125-12 Dip Impregnation	GP307 Cleaning of Magnetic Devices
GP125-24 Adhesive Bonding	GP309 Magnet Wire Stripping
GP174 Bonding of Pot Cores	GP312 Solder Pot Lead Coating
GP108 Adhesive Setting of Laminations	GP910 Space Level Procedures
GP103 Scotch Weld 2214 Structural Epoxy	GP501 General Packaging Level 1
GP110B Loctite 2038 Adhesive	GP502 General Packaging Level 2
GP110C Loctite EA956 Adhesive	
GP119-1 3M280 Impregnation Epoxy	
GP119-2 3M281 Potting Epoxy	
GP124 RFC1120 Adhesive / Bonding Epoxy	
GP127-2 Stycast 1090 Potting Epoxy	
GP173 RTV615	

Reference Material

- Shelf Life of Epoxies
- Thermal Cycling Reference Table
- Insulated Lead Wire
- Magnet Wire Types

Mechanical Test Inspection Procedures

- MTIP1 Temperature Rise
- MTIP2 Seal Test
- MTIP3a Terminal Strength
- MTIP5a Flammability
- MTIP6—Thermal Shock
- MTIP8m Burn In—AC Constant Current
- MTIP 8n Burn In - No Excitation
- MTIP8r Burn In—No Load
- MTIP9 Solderability
- MTIP11f Internal DPA
- MTIP12 Resistance to Solvents
- MTIP14 Overload Test
- MTIP16 Resistance to Solder Heat
- MTIP20 Life Test
- MTIP15a Radiographic Inspection
- MTIP21 Vibration
- MTIP22 Shock
- MTIP23 Immersion
- MTIP24 Moisture

Electrical Test Inspection Procedures

- Inductance
- DWV / HI Pot
- Turns Ratio / Voltage
- RDC
- IR—Insulation Resistance
- Impedance
- Exciting Current
- Leakage Inductance
- Dielectric Strength
- Hook Up Procedure ETIP31
- Saturation Voltage

Receiving Test Inspection Procedures

- RTIP1 RevF Incoming Material Inspection

Forms (Active Spread , PDF)

- 42-5 Stamp Control
- 42-2 Drawing / Doc Change
- 75-6 Data Recording
- 83-4 Non Confirming Log
- 85-2 RCCA Root Cause Correct Action
- 86-1 Calibration
- Others —

Quickbook Notes - Purchase Orders and Approved Suppliers

A Purchase Order in QuickBooks is a request for Inventory. A “Bill” then records the PO to the Accounting System.

Allows for the purchasing of Inventory Items:

Inventory Item - Name/Service _____

Description _____ (shows up on the Invoice or Sales Form [if resold])

Purchasing Information _____ (Shows up on PO / Bill)

On PO can also indicate if for a Customer (May be able to put Job number here)

PO shows Name, Description, Qty, Price , PO Number , PO Date, and Delivery date of item.

Inventory Data Base— Able to create inventory items and access when generating PO. Can have attachments. Also able to generate Categories.

The inventory item can be modified after it has been added to the PO. For instance an inventory could be for “Magnet Wire per MW-35-C (HAPTZ)” and then the PO can specify/ add “Size AWG#28”.

In Operation for ordering material for a Job we could generate a “Material Pull” list and then use that to either kit the required material / qty from available stock or Issue a PO as needed” Material Traceability would be controlled by PO numbers and recorded in the Job Detail. Would be nice to be able to scan Receiving Certs for each PO into the Quickbooks data base.

Also each Inventory Item can have an associated Category EG: Magnet Wire, TC Wire, Epoxies, Tapes

Approved Supplier List:

QuickBooks would keep active the “Approved Supplier” list. There are some fields in the Supplier File that we should be able to use to indicate “Approved”.

The Part’s List will have the “Manufacturer” field when the item is specific to a manufacturer. Usually in these cases the material would be purchased by an authorized distributor. EG

55028-A2 Core—Magnetic Incorporation is the manufacturer but needs to order from a distributor.

3M280 Epoxy is manufactured by 3M but needs to be ordered through a distributor.

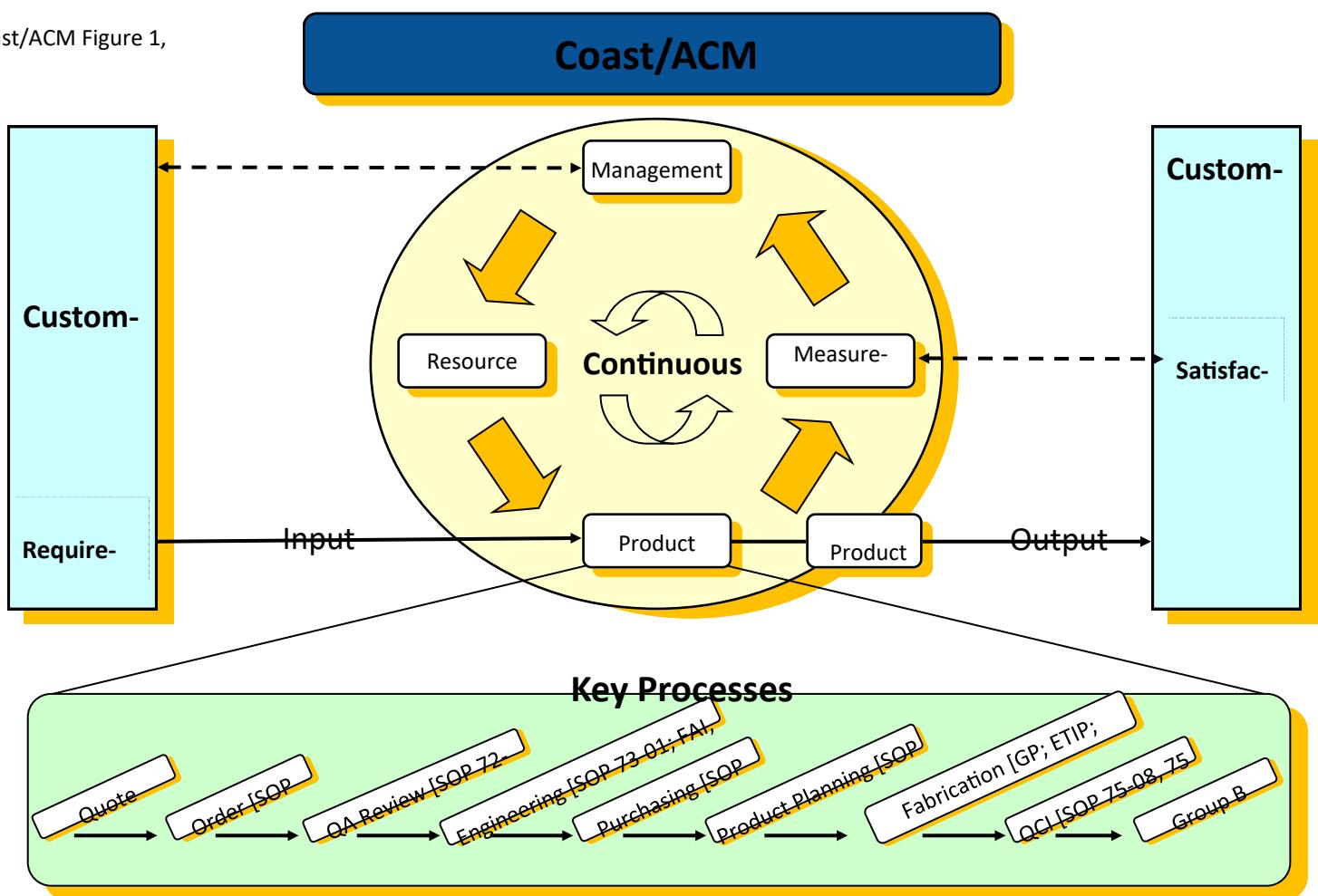
Other times the part’s list will call out an item that does not specify a manufacturer. EG

Magnet Wire per MW-35-C (HAPTZ) can be manufactured by say Phelps Dodge or Essex and ordered through a distributor. That’s why the MIL-Spec or Industry Spec has to be called out.

Part List could allow one of the Clarification Codes in the place of the Manufacturer if helpful.?

Adams Maxwell Enterprise System (AES)

Coast/ACM Figure 1,



Safety

Safety Records : Excel Type / Database of Safety Training and Inspections