

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

**Home**

**Job Detail**

Job Detail : Management of new Jobs into the System. When a new order is receive 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 indicated 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 generated 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 indicated "Approved".

The Part's List will have the "Manufacture" 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 ti 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,

