

eM-Test Expert V8G1 Installation Notes

Realizing Your Manufacturing Vision

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Fixture Cost Enhancements

Fixture cost scope

The fixture design profile can only be used with eM-Test Expert V8G1.

Assumptions and dependencies

There are two new machine interfaces. The Nailset interface has been modified, and the Flowchart interface has been integrated into the fixture cost.

For each profile, the cost list is linked to these files,

- ✎ Nailset.asc
- ✎ Fixture design profile
- ✎ Cost.asc. This is a text file report and includes an accessibility summary and cost report for each profile.

Feature Specifications

New flowchart

A fixture cost step has been added to the **Test FlowChart** box. The fixturecost.exe is shown in the fab/option folder of the **Flowchart Editor** dialog box.

Nail Size and Nail Shape Statement boxes

Two windows have been added to the **NAIL_SIZE Statement** box where you can enter the cost for each shape. You can also include the cost for drilling the fixture, inserting and wiring the receptacle, and fitting a probe into the receptacle.

Two windows have been added to the **NAIL_SHAPE Statement** box where you can enter the cost for hole sizes that do not have shapes defined.

New Nailset.asc syntax

Current syntax

```
NAIL_TYPE(1,M:0.100,T:1,CIRCLE,0.025);  
NAIL_TYPE(2,M:0.075,T:2,CROSS,0.025) ;  
NAIL_TYPE(3,M:0.05,T:3,BOX,0.025);  
NAIL_SHAPE(4,1,T:1,C:Green,CIRCLE,0.040,"Crown 100 Mil") ;  
NAIL_SHAPE(7,2,T:7,C:Yellow,CIRCLE,0.030,"Crown 75 Mil") ;  
NAIL_SHAPE(13,3,T:13,C:Red,CIRCLE,0.020,"Crown 50 Mil") ;
```

New syntax

```
NAIL_TYPE(1,M:0.100,T:1,NC :<INT>,EC :<INT>,CIRCLE,0.025);  
NAIL_TYPE(2,M:0.075,T:2,NC :<INT>,EC :<INT>,CROSS,0.025);  
NAIL_TYPE(3,M:0.05,T:3,NC :<INT>,EC :<INT>,BOX,0.025);  
NAIL_SHAPE(4,1,T:1,NC :<INT>,EC :<INT>,C:Green,CIRCLE,0.040,"Crown  
100 Mil");  
NAIL_SHAPE(7,2,T:7,NC :<INT>,EC :<INT>,C:Yellow,CIRCLE,0.030,"Crow  
n 75 Mil");  
NAIL_SHAPE(13,3,T:13,NC :<INT>,EC :<INT>,C:Red,CIRCLE,0.020,"Crown  
50 Mil");
```

New syntax attribut

KIT_COST (<INTegeR>);

Calculation of the Fixture cost

Nail Advisor dialog box

In the **Nail Advisor** dialog box you are now able to,

- ☞ Choose the profile you want shown.
- ☞ Individually select a profile.
- ☞ Select all of the available profiles.
- ☞ Remove all of the profiles.
- ☞ Remove a single profile.
- ☞ Output results to the screen or to an ASCII file.
- ☞ Select the name of the output file.
- ☞ Launch the calculation process with the **Calculate** button.
- ☞ Close the program.
- ☞ Check the running status.

Cost calculation

For each profile that is calculated, you need to extract the following:

- ☞ Number of nets.
- ☞ Number of non-accessible nets.
- ☞ Number of nails for each shape.
- ☞ Number of nails for each size.
- ☞ Number of nails numbered 32000.
- ☞ Number of pushdowns for each type.
- ☞ Cost of the kit.

Notes

- ?? You can calculate the cost and coverage and output the rest to the output file.

Standard profile

Tool	Number	Name	Unit Cost	Cost
T1	711	Crown 100 Mil	11	7821
T2	4	Crown 75 Mil	16	65
T1	260	Extra	0.25	65

Kit	15000
Total	22950
Number of net	980
Non-accessible net	12

Full profile

Tool	Number	Name	Unit Cost	Cost
T1	650	Crown 100 Mil	11	7150
T2	47	Crown 75 Mil	16	752
T3	78	Crown 50 Mil	28	2184
T1	112	Extra	0.25	28

Kit	15000
Total	25114
Number of net	980
Non-accessible net	0

Project Manager

New features in the Project Manager

- ⌘ Differences between two jobs can be shown at the same time.
- ⌘ You can change the language.
- ⌘ In the **New Revision** dialog box, you can browse for the name of the file you want to open.

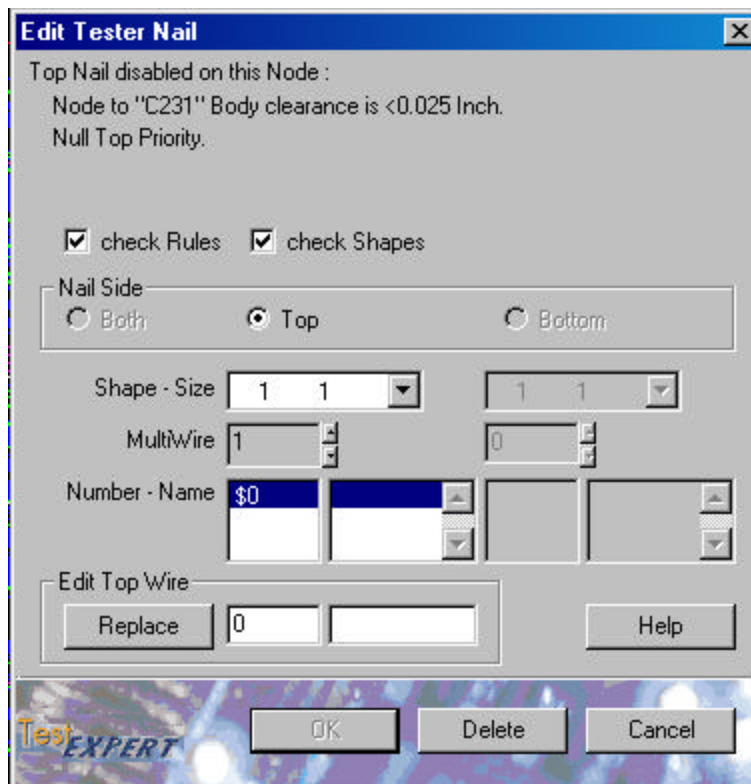
Fixture Design

In the **Fixture Design** box, use the **Datums** button to access the defined origin, datums and fiducials.

Edit Job Version

The **Edit Job Version** dialog box shows the CAD version.

Edit Tester Nail dialog box



Use the **Edit Tester Nail** dialog box to edit nails directly from the top, bottom, or both sides of the circuit. To open the **Edit Tester Nail** dialog box, move the pointing device over the pad you want to edit in the drill cursor mode, and type **e**.

Edit Tester Nail dialog box options

Check Rules. Check if the nail must match all criteria defined in the nail rules.

Check Shapes. Check if you want to update any changes to the shape or size of the nail.

Nail Side. Choose the side of the circuit to edit nail information.

Shape. Choose the shape of the nail, as defined in the ShapeID of the NAIL_SHAPE rule. Current shape information is shown unavailable and cannot be changed.

Size. Choose the size of the nail, as defined in the ShapeID of the NAIL_SIZE rule. Current size information is shown unavailable and cannot be changed.

MultiWire. Choose 1 to set define 1 wire per nail. This is changed if multiple wires are connected to the same nail. The MultiWire corresponds to the MultiWire Rule. Current MultiWire information is shown unavailable and cannot be changed.

Number. The number of the nail. The current nail number is shown unavailable and cannot be changed.

Name. The name of the nail. Current nail name is shown unavailable and cannot be changed.

Replace. Enter the number you want to change the nail to, and click **Replace**.

Notes

?? Information previously defined in the **Edit Tester Wiring** dialog box is now defined in the **Edit Tester Nail** dialog box.

Nails Rules

Electrical Attributes dialog box

In the **Electrical Attributes** dialog box, you can force nails using the list of nodes defined in the **Search Node** dialog box.

In the **Device Name/Part Name** box, you can choose,

NodeSet. To show the list of available filters that can be used for nodes.

PartSet. To show the list of available filters that can be used for parts.

Nailset dialog box

The nail access can be chosen from a list of parts defined in the **Search Part** dialog box.

BOMCheck

In the job screen of the **Main** window, the **Bomcheck** icon is now shown as the **Libcheck** icon.

Input Processors

HP-EGS

The HP-EGS is a new input processor.

Mentor

The Mentor input processor recovers the differences of the same board if it is defined in the Mentor file (defined as Multi_assy in the Mentor file).

EM-Test Expert dongle

Dongle service

The dongle service looks for the dngrsvc.exe file and defaults to the academi/directory.

Platform

The dongle runs under Windows NT or Windows 2000.

Installing

In the [Service] section of the Dngrsrv.ini file, there are two statements that can be modified if you want to run several dongle services. There is one dongle service for each eM-Test Expert installed.

ServiceName=. Specify a unique service name to avoid generating an error when the service is installed.

ServiceDisplayName=. Specify the name you want shown in the **Service Manager** window. The string (Tecnomatix) is added to this name in order to quickly search for the dongle service in the service manager window.

The path to dngrsvc.exe is stored during installation. You must uninstall the service before renaming the eM-Test Expert directory. Any modification to this path signifies a new installation.

Installing the service

To install the service type « **dngrsvc -install** ».

Uninstalling the service

To uninstall the service type « **dngrsvc -remove** » and restart the station.

Setting up

A new statement has been added to the **dngsrv.ini** file: **Path=<directory>**, which lets new services access the network drives. This statement is used to specify a local directory for the read and write **seat<nn>.dat** files.

Example

If the service is installed on an NT server and the Academi\ folder is stored on the C drive, the c:\fabmaster\fabuser folder is used to store the seat<nn>.dat files. The fabmaster\ folder is shared with read and write permissions so the user can view the fabuser\ folder.

In the dngsrv.ini, the statement path is **=c:\fabmaster\fabuser**. The users statement path, **fabinstall=(insert your directory drive letter):\fabuser**, is defined in the **usrinit.asc** file.

Starting

The service starts with Windows NT. It can also be started after the installation without restarting Windows. Select the dongle service in the **Service Manager** window, right click and choose **Start**.

Notes

?? The Rainbows driver must be installed on the computer running the service.

Information and error messages

Messages are stored in the **Event Viewer**. For example, when the service is started a message is written to the **Event Viewer**, which stores the number of licences.

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