ORACLE PARTNER

DEX ENGINEER APPLICATION

DEX Engineer accelerates the design and creation of test, recertification, and repair processes for reverse logistics. DEX Engineer enables the online creation of detailed custom checklists and documentation that guide technicians through each step in a test, recertification, repair, and quality control procedure. The software includes an electronic approval system to ensure accuracy. DEX Engineer enhances the efficiencies already provided by DEX Recertification and DEX Repair.

KEY FEATURES

- Custom revision-controlled, checklists, test procedure, and documentation creation with electronic approval system
- Automatic or random generated quality audits
- Automatic planning and scheduling for checklist development and updates
- Compulsory, multi-step pass/fail process routing system
- Compulsory checklist for each routing step
- User-defined, multi-level and multi-user security
- User-configured quality process coding system for use in checklist and procedure creation
- Documentation tracking and reporting
- Test equipment calibration and preventative maintenance
- Common failure data
- Ranked failure analysis knowledge base
- Online documentation
  - Process checklists
  - Procedures
  - Schematics
- Location Sensitive Messaging (LSM) automatically alerts users to special handling requirements
- Paperless environment

DEX Engineer Overview

DEX Engineer is a module of the reverse logistics solution suite developed by DEX Systems, the IT solutions division of DEX. DEX Engineer is a robust, streamlined and very easy to use front-end extension to the Oracle® E-Business Suite. It is specifically designed to help guide engineers through the creation of the checklists and procedures that technicians will use during test, recertification, repair, and quality check processes.

Designed to tackle real world issues, DEX Engineer provides control and predictability throughout this entire development process. Our fully automated system allows clients to create custom diagnostic tests, repair checklists, quality inspection documents, schematics, and other documentation for use in test and repair operations. DEX Engineer helps to enforce a uniform business practice to ensure consistent quality.

DEX Engineer enables three crucial capabilities:

- Custom Test and Repair Checklist Development
- Quality Audits
- Automated Checklist Development and Update Planning

Custom Test and Repair Checklist Development

DEX Engineer gives users the ability to create their own custom checklists for testing, recertifying, repairing, and performing quality checks on products. Checklists can be specific to a customer, to a product group, or to an individual part number. Checklists prescribe both a Routing and a Process for each item.

Routing specifies the steps the product must go through during the test or repair cycle, for example: perform a visual inspection, clean, do a functional test, etc. (see "Checklist Routing" example).

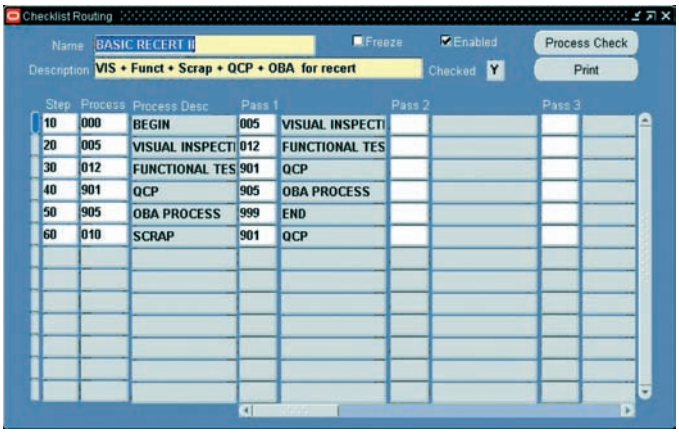

Figure 1: Checklist routing example

The Process stipulates exactly what must be done to the item at each Routing step, for example: check for frayed cables, clean, etc. It can also specify which component parts should be replaced when specific faults are detected. (see "Online checklist" example)

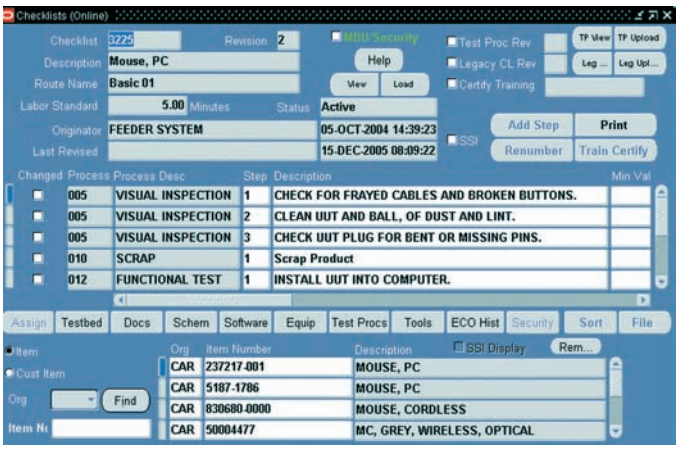

Figure 2: Online checklist example

Checklists can be as high-level or as detailed as individual user needs require. DEX Engineer provides this up-to-date documentation to technicians at the test and repair stations, ensuring that the quality of the processes is consistent and repeatable.

Additionally, the online checklists offer an option to include test procedures, indicate if the use of specific test beds is required. DEX Engineer also monitors the calibration intervals for these test beds, and makes sure they are calibrated according to specified schedules to guarantee they are functioning correctly. Moreover, the online checklists will also display any applicable documentation, schematics, software, equipment, and tools that should be referred to or used in the test and repair procedures. Users can also designate certain checklists as "secure", meaning technicians must have specific training or certifications to execute those checklists.

Quality Audits

DEX Engineer includes the ability to impose an automatic or random quality audit at any point in the reverse logistics cycle. DEX Engineer allows for the creation of unique quality check and handling rules for each individual user or client. For example, many companies choose to immediately dispose of items that have been returned for repair a third time, often referred to as the "three strikes and you're out" rule. DEX Engineer enables the creation of an automatic quality check that will single out these items by serial number for disposition according to each client's unique requirements.

DEX Engineer will also generate random quality audits automatically, or they can be generated manually. Quality audit allows users to pull items from any point in the reverse logistics process for a thorough check into the quality of every step, including receiving, test, recertification, repair, packing, and shipping.

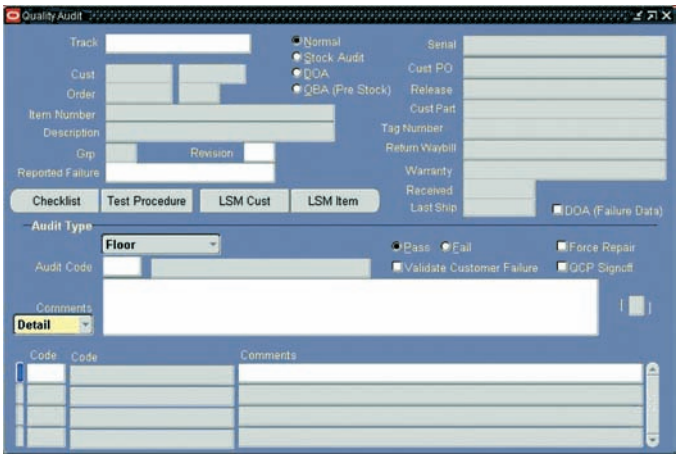

Figure 3: Quality audit

Like DEX Recertification and Repair, the quality audit provides a specific checklist of items to be inspected in the quality audit, and it includes the Technician Station screen for data collection.

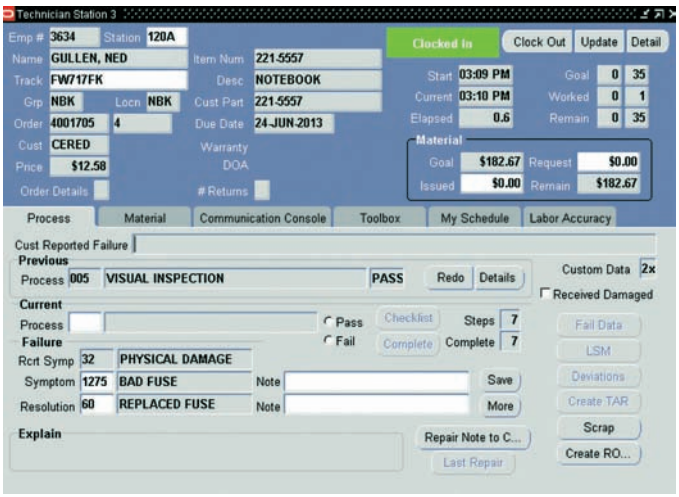

Figure 4: Technician station example

Automated Checklist Development and Update Planning

As new clients come on line with new products to be tested, recertified, and repaired, new test and repair procedures and new checklists to support those efforts must be developed. The engineers in the labs who develop and verify these procedures and checklists need to know which of these checklists are the most important, which will be used most frequently, what parts will be worked on most often, etc. DEX Engineer provides an automated tool that analyzes the actual flow of this material through the test and repair facility. It then presents a statistical analysis of this data to engineering management so they can plan and schedule their checklist development and update activities accordingly.

DEX Engineer ensures that the technicians always have the latest, most up-to-date, and most relevant checklists available to facilitate the their test, recertification, and repair efforts.

Consistent Quality

The DEX Engineer module ensures that technicians follow a prescribed and consistent process at each step in the test, recertification, and repair flow. It provides for a thorough quality control inspection of any product at any point in the reverse logistics cycle. And it supports automated planning and scheduling for the development and update of test and repair checklists, to ensure that the most up-to-date and useful checklists are always available for technicians' use.

Consistency is a hallmark of good process controls. With the DEX Engineer solution, processes are repeatable every time—enabling a uniform business process, and consistent customer satisfaction.

DEX Systems – Your Complete Solution

DEX Systems, the IT division of DEX, was created to respond to real world problems in reverse logistics business processes. To address those issues, DEX Systems developed application solutions that specifically address areas not handled by Oracle applications. As a result, DEX Systems is able to provide a complete aftermarket solution that has been developed, tested, and used in support of hundreds of clients worldwide. Our clients have the ability to select one or multiple modules based on their unique needs, enjoying a "best in class" reverse logistics solution for all of their business requirements.

DEX Systems
DEX US Headquarters
3600 Via Pescador
Camarillo, California 93012, US
T 805.388.1711
F 805.389-1726

DEX European Headquarters
IDA Business & Technology Park
Clonshaugh, Dublin 17, Ireland
T +343-1-848655
F +353-1-8486559

DEX Asia Headquarters
726 Yan An Xi Lu, #7-E
Shanghai 200050, China
T +343-1-848655
F +353-1-8486559