



## KEY FEATURES

## Client Benefits

- » Consistent, repeatable repair processes
- » Maximized technician efficiency and throughput
- » "Not-to-exceed" cost driven repair
- » Complete visibility of repair flow
- » Pre-booking enables advance planning and scheduling
- » Real-time, color coded queue management dashboard for performance monitoring
- » Location sensitive messaging (LSM) automatically alerts users to special handling requirements
- » Automatic routing and scheduling of repair items
- » Automated compulsory step-by-step process routing
- » Compulsory, multi-step pass/fail process routing system
- » Online version-controlled checklists, procedures, schematics, test processes, and product information system
- » User-defined, "secure" checklists, requiring repair work be performed by technicians with specific skills or certifications
- » Client-controlled product routing for escalation level processing
- » Warranty tracking
- » Failure data collection
- » Common failure data
- » Automated common symptom, resolution, upgrade and revision control notification system
- » Defect analysis
- » Fault driven diagnostics
- » Technician station repair process
- » Material usage reporting
- » Labor tracking
- » Shortage reporting
- » Material ordering
- » Electronic material request and management system
- » Cycle count Work-in-Progress (WIP) inventory
- » Quality control check points
- » User-configured quality process coding system for use in checklist and procedure creation
- » Documentation tracking and

## DEX REPAIR APPLICATION

*DEX Repair Management is an information-driven solution for planning, scheduling, and routing parts and products through an in-house depot repair process. The solution enables swift and efficient repair execution, facilitates the installation of upgrades and engineering changes, automates repair data collection and reporting, and optimizes efficiencies.*

## DEX Repair Overview

DEX Repair is a module of the reverse logistics solution suite developed by DEX Systems, the IT solutions division of DEX. DEX Repair is a robust, streamlined, and very easy to use front-end extension to the Oracle® E-Business Suite, specifically designed for managing product repair and refurbishment processes.

Designed to tackle real world issues in repair processes, DEX Repair provides visibility, control, and predictability throughout the entire repair cycle. All repair activities performed on a product are monitored and tracked, from receipt, to workstation assignment, through diagnostic tests and repair activities, to QC inspection and final disposition. Sophisticated checklists lead the technician through the tests and repairs to be performed on each item. DEX Repair also supports scheduling, cost management, and materials planning capabilities.

The DEX Repair module enforces a uniform business practice to ensure consistent quality throughout the entire repair process.

## Improved Management Visibility

DEX Repair includes a customizable, color-coded process flow management dashboard that instantly alerts managers and staff to impending problems in the reverse logistics and repair flow, allowing them to be proactive in resolving issues before a critical customer situation develops. Detailed information is available behind each field on the dashboard, so management can easily drill down – to a specific part and serial number level if needed – to get more specific information.



Figure 1: Process flow dashboard

## DEX Repair

The core of the DEX Repair solution is in the up-to-date documentation provided to the technician at the repair station. Customized instructions guide the technician through each stage of the repair process, from

- reporting
- » Test equipment calibration and preventative maintenance
- » Pareto based repair knowledge base
- » Paperless environment

**Metrics**

- » Technician performance and productivity measurement reporting
- » In process queue
- » Real-time inquiries into the complete order record at every step

start to finish. This documentation, which is created and managed by the DEX Engineering module, ensures the quality of the repair process is consistent and repeatable.

Every repair work station is supported by DEX’s uniquely designed technician station screens, which contain detailed work instructions, testing parameters, a knowledge base of likely failures for each component, and final output quality metrics. Users can record specific steps for each repair process that must be followed in online checklists. These checklists can also be designed to require the input of yes or no responses, other unique values, or when a specific upgrade or part number has been added.

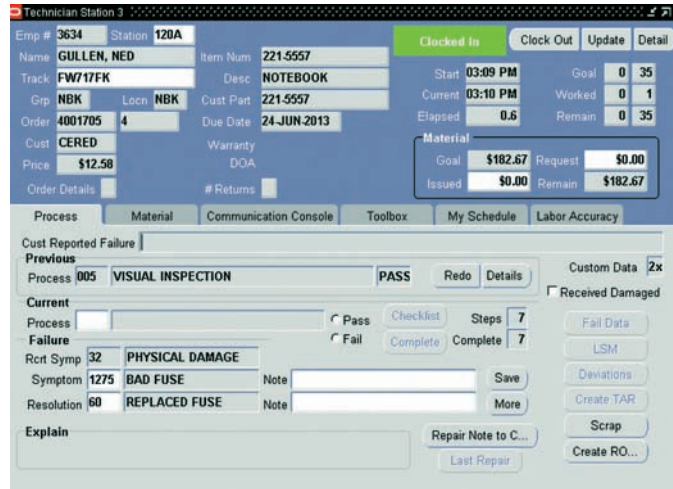


Figure 2: Techstation

Online checklists also offer the option to include required test procedures, and prescribe the use of specific test beds. Moreover, the online checklists will also display any applicable documentation, schematics, software, equipment, and tools that should be referred to or used in the repair procedure. Users can also designate certain checklists as “secure,” meaning technicians must have specific training or certifications to execute those checklists.

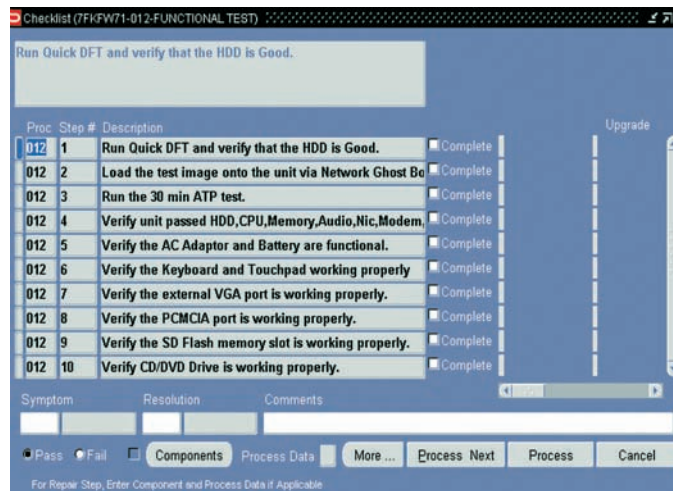


Figure 3: Online checklist

The warranty status for each serial number is proactively communicated to the technician. Technicians also have the option to create notes, which can be passed on to end-users or shared internally.

“Not-to-exceed” repair cost targets can be established by item or by customer. Actual labor and material

costs are then tracked, compared against those targets, and displayed on the screen in real-time. This “as-it-happens” information empowers both technicians and managers to make informed decisions about repair priorities, and it allows them to maximize the output and efficiency of every technician in the repair the process

### Consistent Quality

The quality process of the DEX Repair module ensures quality inspection of repair production work. It allows product to be inspected individually or in bulk. It offers scrap and warranty validation, the option to reject material back to repair, or have it routed out to external vendors. The quality process also follows online checklists, ensuring that the correct quality inspection checks are performed every time, and it offers the same data collection capabilities as the technician station screens.

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

### Improved Financials

The DEX Repair module allows for detailed financial monitoring of all operational costs by tracking labor and material used throughout the entire repair process. This provides management with a tool for controlling daily operational costs, which is extremely important in a repair environment. Cost controls can be easily established for each product based on customer authorized activities. The result is financial stability and the ability to quickly adapt to changing conditions. Controlling production costs, material costs, and overhead during the process, rather than at the end of a fiscal period improves the overall financial picture.

Repair costs can be analyzed from many perspectives, by customer, component, product, order, or workstation. And they can be viewed as actual dollar costs or percentages. Reports detailing material or labor costs at a specific part number and serial number level are also available.

### DEX Systems – Your Complete Solution

DEX Systems, the IT solutions 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  
Clonsaugh, 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

Copyright © 2008 DEX (Data Exchange Corporation). All Rights Reserved.

This document is provided for information purposes only, and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor is it subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document, and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

DEX is a registered trademark of Data Exchange Corporation. Oracle is a registered trademark of Oracle Corporation. Other names may be trademarks of their respective owners.

