



MAINTENANCE, REPAIR & OVERHAUL OVERVIEW

iBASEt **MRO** SOLUTIONS

iBASEt's software solution for Maintenance, Repair and Overhaul (MRO) operations enables new levels of visibility, productivity and reliability for complex, discrete manufacturers and MRO shops.

Managing the maintenance of complex assemblies is a daunting task. iBASEt's MRO solution expedites, streamlines and simplifies intricate, often error-prone MRO processes while lowering maintenance costs.

iBASEt MRO provides a platform for planning work, and executing and tracking processes online — creating a paperless environment that allows for quick visibility into many issues that arise on the shop floor. The solution is supported by a real-time problem resolution system that extends into supplier networks.



MRO BENEFITS

- Saves time and money for MRO operations and customers
- Enhances quality control and inspection accuracy
- Reduces grounded/out-of-service time
- Automates compliance documentation
- Optimizes parts inventory management
- Enables predictive maintenance
- Supports MRO innovations like robotics, AR, IIoT, 3D printing of parts
- Completes Digital Thread through integration with MES, PLM, and ERP

VISIBILITY

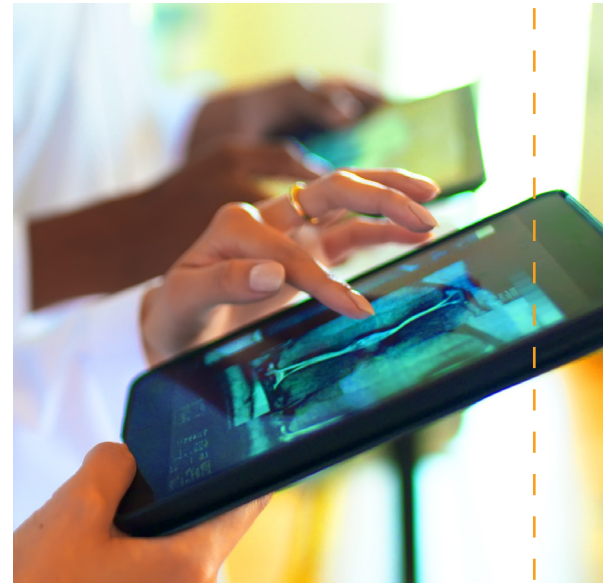
Manufacturing operations managers need high-quality information and real-time visibility of historical performance, resource availability and work order status on the shop floor. iBAsEt MRO enables managers to benchmark and gauge the effectiveness of process improvements. Reports and charts enhance access to real-time metrics for tracking technician and equipment performance, exceptions, and trends. The system monitors constraints that are holding up work and sends alerts.



VELOCITY

Paperless processes result in significant productivity gains and cost reductions. Shops that have used paper-based processes for years are finding that competitive and regulatory pressures demand more efficient and agile systems. iBAsEt's MRO solution is designed to eliminate many wasteful clerical and manual verification steps, while providing quicker turnaround for non-routine work approval and issue resolution.

iBAsEt MRO adapts as organizations undertake changes to business and engineering processes, even when changes to units-in-progress are required. The solution integrates the product life cycle from design to production to maintenance, ensuring that mechanics have ready access to the correct and latest drawings and supporting document revisions.



CONTROL

Customers appreciate the consistency and reliability enabled by the MRO solution's integrated process controls. The software ensures that all work is completed in the right order and properly signed off. Critical steps are never missed; the work is performed exactly to the planned standard-work steps and instructions. Once non-routine work steps are approved, they can be easily converted to standard processes for reusability. The software ensures that only certified mechanics perform specified work steps and that only calibrated gauges are used.

The iBAsEt MRO solution's systematic business processes and controls provide an efficient way to secure compliance and impress auditors. All data collection and approvals are automatically logged into history, including records required per industry standards (e.g., ISO9001, AS9100). Work scope changes can be routed to customers for approval, so charges to customers are fully documented.



MRO FEATURE HIGHLIGHTS

WORK ORDERS & COMPONENT TRACKING — Detailed tracking streamlines dis-assembly and re-assembly of complex products with multiple major components and rotables. Work orders are complete online information kits that include illustrated instructions, 3D model animations, specifications, tooling and parts lists, inspection requirements, and links to manual sections. Technicians can easily jump between sub-work orders and original work orders, drawings, and manuals.

PROJECT PLANNING & CHANGE MANAGEMENT — A complete history of “who, what, and when” is recorded for each changed object in every work plan revision and work order alteration. More tasks become planned over time as the experience in each unit is captured and used to improve work instructions for future units. Reusable work instruction segments are managed in the Standard Text and Standard Operation library.

INSPECTION SUPPORT & QUALITY REVIEW — Each service unit, and any removed subassembly, major component or skin is carefully tracked and monitored to determine if the unit is ready for reassembly. The integrated system enforces inspection requirements during process execution, so no service task ever falls through the cracks. Technicians and inspectors “stamp” work completion and approvals online as electronic signatures, which are stored as part of the device/unit history. Corrective Actions can be used to manage investigation, root-cause analysis and resolution of quality and compliance issues, including standard integration interfaces.

iBASEt's **DIGITAL MANUFACTURING SUITE**

The Digital Manufacturing Suite is designed for complex, highly regulated discrete manufacturers who seek to digitally transform their operations. The new solution suite enables a "digital thread," connecting operations and sustainment management in a seamless flow of data across the value chain and product lifecycle. The Suite integrates engineering and business systems with manufacturing execution system (MES), supplier quality management (SQM), and product sustainment services such as maintenance, repair and overhaul (MRO).

The combination of integrated PLM, ERP and iBASEt's Digital Manufacturing Suite is central to a digital manufacturing strategy. iBASEt's solution creates the technology infrastructure manufacturers need to harness advances in model-based functionality like augmented reality guidance for the workforce, IIoT connectivity for equipment, new levels of intelligence for decision making, and higher levels of customer and supply chain collaboration.

iBASEt's MRO Solution can be implemented as a point solution or as part of the Digital Manufacturing Suite. Many customers that start with the enticing options provided with the MRO solution will mature their operations and value chain to the point that implementation of the Digital Manufacturing Suite will be critical to growth, transformation, and success.