![FLUKE Reliability]

A Guide to Work Order Management

Stay organized, prioritize effectively, and get work done efficiently

db PRÜFTECHNIK **Eemaint** **FLUKE CONNECT**

Table of Contents

What Is a Work Order?

A work order is a document that contains all of the information and steps needed to complete a maintenance task. Work orders may also include details such as who authorized the job, who is assigned to complete the work, the scope of work, and the expectations for completion.

Work orders are a fundamental part of your maintenance operations, and when done well, they help you and your team stay organized, prioritize effectively, and get work done smoothly and efficiently.

Work orders are an authorization of maintenance, repair, or operations work to be completed. Work orders can be manually generated through a work request submitted by a staff member, client, or tenant, or automatically generated using work order management software. Work orders can also be generated via follow-ups to inspections or audits. eMaint CMMS helps simplify the work order process for maintenance operations.
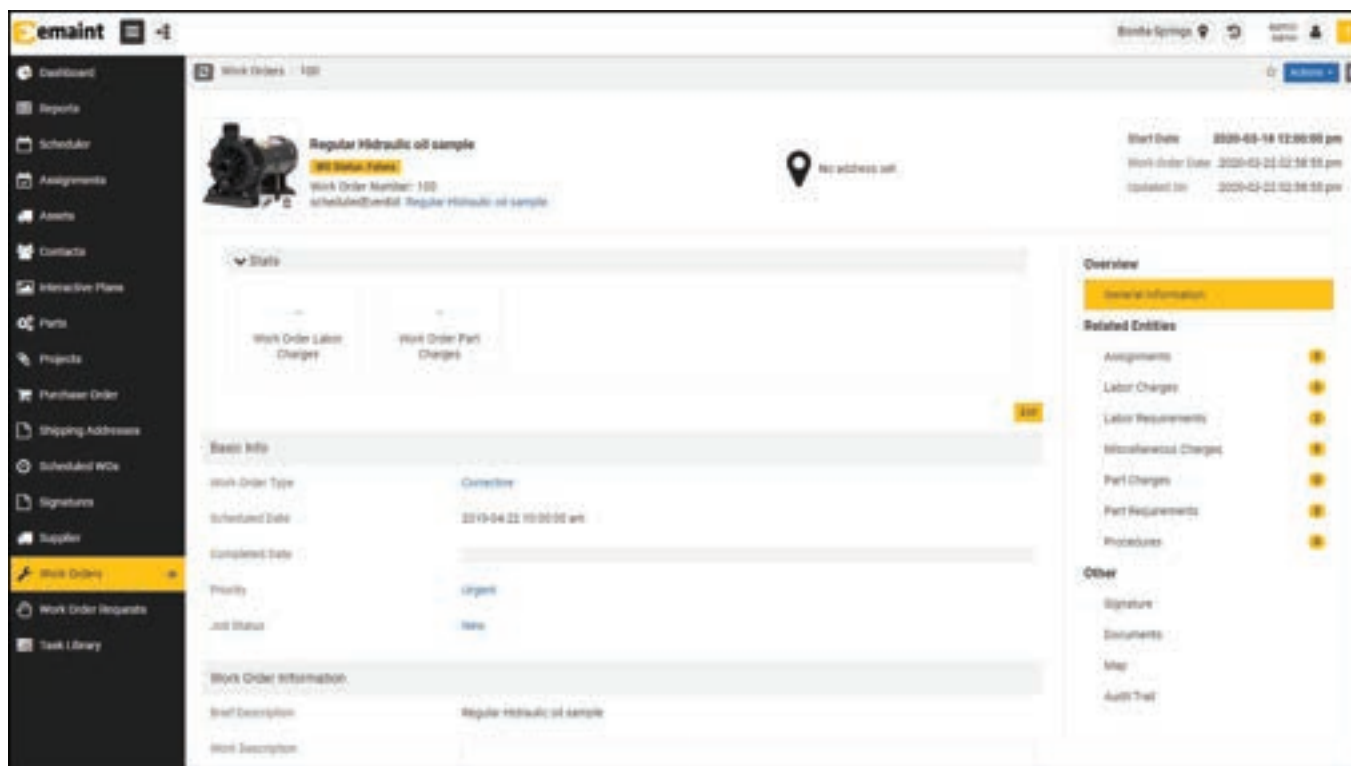
Digitalize Work Orders to Improve Efficiency

Manually created work orders have long been part of the maintenance world. Though paper-based work orders are simple in some ways, they aren't as effective as a long-term or large-scale solution. Paper-based work orders can also result in communication delays, extra costs (in both time and money) for data entry, and more. In today's fast-paced maintenance world, paper-based work orders are inefficient — not to mention environmentally unfriendly.

Computerized maintenance management systems such as eMaint CMMS help organizations embrace the power of cloud-based, online work order software, putting an end to repeated phone calls, sticky notes, and missing paperwork. Centralizing and streamlining the work order process improves clarity and gets more work done on time.

What Does a Work Order Do?

- Offer an explanation of the problem, repair, or installation
- Schedule resources and tools needed for maintenance
- Provide technicians with detailed instructions on the work to be performed
- Document the labor, materials, and resources used to complete the work
- Track all maintenance and repair work that has been performed on each asset

What is Included in a Work Order?

- Who is requesting the work order
- Who is authorizing the work order
- Who will perform the labor
- What the task is
- When the work order needs to be completed
- Where the work order needs to be performed
- How to complete the task, including necessary parts and other notes

Work Orders and Audits

Many organizations contend with several layers of regulations. OSHA, EPA, GMP, ISO, FDA, and others can all impact software needs and decisions. An effective work order management software solution can help organizations comply with strict quality, environmental, energy, safety, and other regulatory standards.
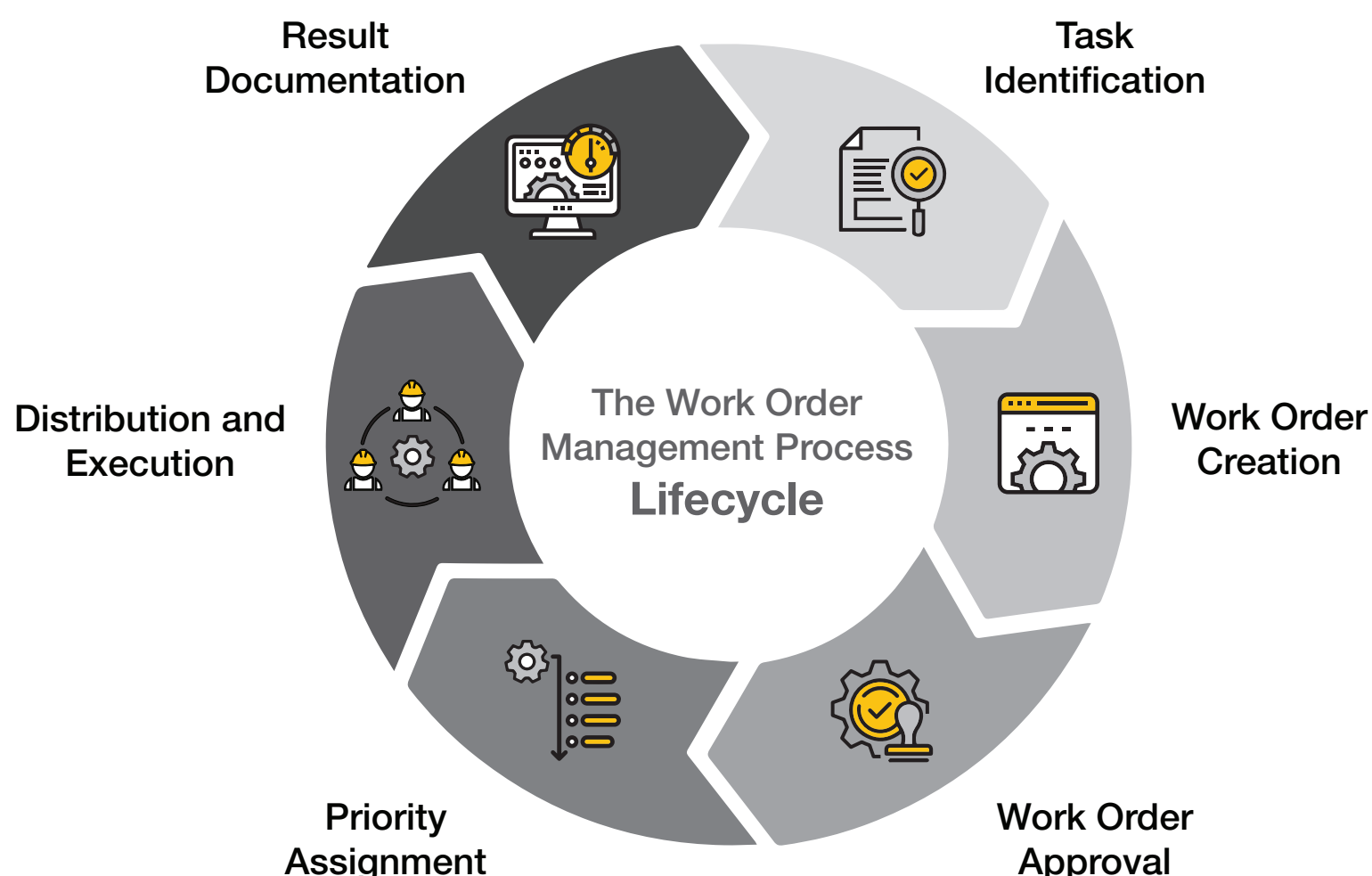
How to Use a CMMS for Work Order Management

Work orders are the heart of a maintenance program. The tools within a CMMS can help organizations stay updated on labor, projects, and resources. A CMMS can help organizations take control of both their work backlog and upcoming work, boost productivity, and manage compliance.

Work order management refers to the process of prioritizing, completing, and documenting maintenance work orders in a timely manner. While this might sound simple, the process is time-consuming and prone to error when done by hand. For example, work orders filled out on paper and filed away in cabinets are easy to misplace or damage. Leveraging a work order management software, such as a CMMS, accelerates and streamlines the process and ensures accurate, up-to-date documentation. This approach can be affordable and scalable, enabling maintenance teams to better manage their time and attention and save costs.

Work Order Management Process

The work order management process typically starts with a maintenance manager accepting a work order and passing the request along to a technician to fulfill. The work order form communicates maintenance through a lifecycle of six steps.

The Work Order Management Process **Lifecycle**

- Result Documentation
- Task Identification
- Work Order Creation
- Work Order Approval
- Priority Assignment
- Distribution and Execution

Task Identification:
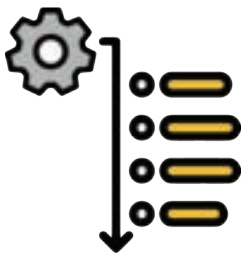Identify what needs to be done to resolve a maintenance issue

Work Order Creation:
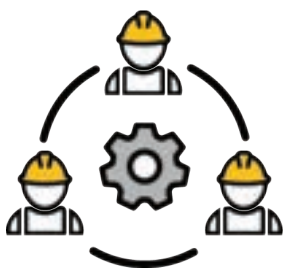Complete a work order request form to authorize maintenance tasks

Work Order Approval:
Maintenance management Maintenance decides if there is a legitimate need

Priority Assignment:
Work orders are assessed by considering the urgency, existing backlog, and team availability

Distribution and Execution:
Approved and prioritized work orders are printed and given to technicians for them to perform the activity

Result Documentation:
Workers document what occurred in an accurate and timely manner

The work order can be closed once all services were rendered and the job is complete.

Mobile Work Orders

Mobile work order apps, such as the Fluke Mobile CMMS app from eMaint, give you the power to create, view, and complete work orders from the palm of your hand.

Mobile work orders streamline maintenance activities in the field, saving you hundreds of hours of labor. Talk to your team, track and document your work, and update work orders in real time – all without running back to a computer.

You can simply scan a QR code on a motor to create a work request, send it to your supervisor to create a work order, and a maintenance tech in the field will receive a push notification: "Motor #123 is overheating." Maintenance personnel working on jobs can then check off tasks on the procedures list, entering measurements and uploading photos or documents as they go.
Maintenance teams who choose eMaint can work offline, too, with their changes synching automatically to the cloud once a network connection is established.

Access work orders easily and see important information at a glance

Large, easy-to-navigate onscreen buttons

Multi-Asset Work Orders

Multi-asset work orders give you the ability to attach multiple assets. You can include numerous assets in an inspection route or even complex parent-child asset hierarchies.
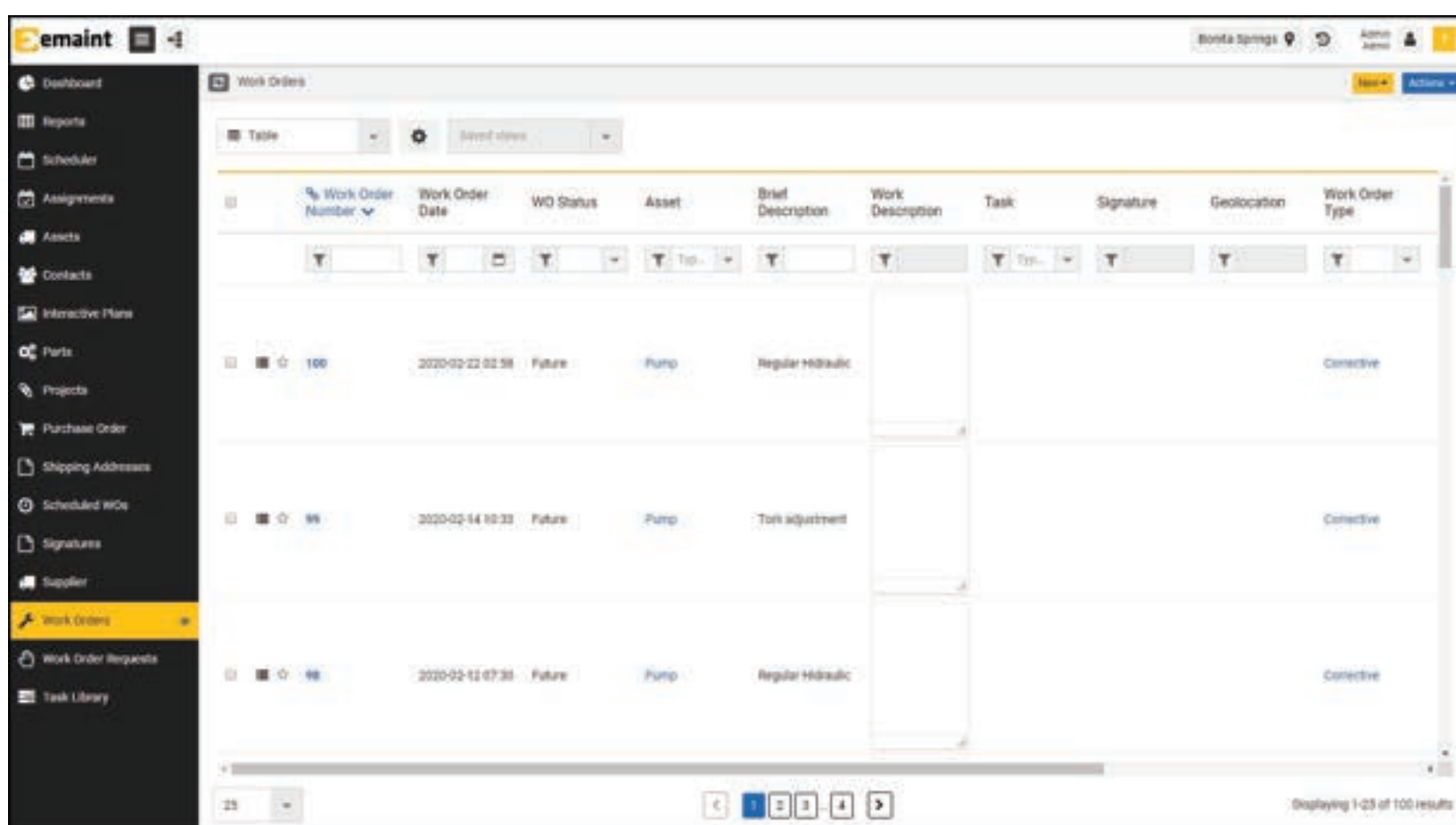
Once you add your assets to the work order, you can attach them to steps in your Work Order Procedures. Here you can choose what assets are inspected or repaired and when – empowering you to customize the task list to your equipment's specific needs.

eMaint also gives you the freedom to add child assets to your work orders. For example, a motor can be added as an asset and an inspection can be included in the procedures for cooling fans, belts, or bearings, with each component appearing as a child asset.

You decide whether to let eMaint auto-populate child assets into the work order or pick and choose them manually.

To perform a batch of inspections on a family of assets, such as a building and its fire extinguishers, you can schedule an Inspection Round, designed to simplify the tracking of numerous inspections. Use routine Inspection Rounds on assets that require regular assessments.

eMaint also gives you the flexibility to create Lubrication Rounds, which include procedures for lubricating assets and specify the type of lubricant needed, and Condition Monitoring Rounds, for using meter readings to track asset condition during a multi-asset work order.

What are the Four Main Different Types of Work Orders?

1 Inspection Work Orders

Inspection work orders arrange for a technician to come and inspect a particular asset. If a problem is detected during an inspection work order, the maintenance technician would then create a new work order to resolve the issue.

What triggers an inspection order will depend on your maintenance strategy. For example, if you are using a preventive maintenance strategy, your plant may require workers to inspect all of your equipment at regular, time- or usage-based intervals. If you are using a condition-based predictive maintenance strategy, your CMMS may issue an inspection work order in response to an unexpected change in your machine's real-time condition, such as a sudden increase in vibration.

2 Preventive Maintenance Work Orders

Preventative maintenance work orders are used to schedule routine servicing for all of your equipment and assets. You can leverage a CMMS software to automatically schedule routine cleaning, lubrication, and other preventive maintenance tasks at a time that's convenient for your production schedule and for your maintenance team.

3 Emergency Work Orders

Emergency work orders are created in response to an unexpected breakdown. These work orders require an immediate response to avoid costly downtime. When responding to emergency work orders, technicians should record why the asset failed, what was done to restore its normal operating condition, and recommendations for preventing this type of failure from occurring again.

Tracking your emergency work orders in a CMMS system can help you determine where your maintenance strategy has room for improvement: Do the same machines keep breaking down? How quickly is your maintenance crew addressing these problems? How much time is passing between breakdowns? Tracking and analyzing this information over time can help you optimize your maintenance approach, reduce unplanned downtime, and save on maintenance costs.

4 Corrective Maintenance Work Orders

Corrective maintenance work orders are issued to fix new faults before they become serious. Technicians might discover the fault while performing routine inspections on your equipment. Or, if you're using a predictive maintenance approach, your AI tools might diagnose a new fault in your equipment. A corrective maintenance work order can include repairing or replacing worn or damaged parts on your equipment. In addition, corrective work orders can be scheduled, unlike an emergency work order.

Examples of Maintenance Work Orders

An effective work order should be clear, specific, and detailed. It must also be precisely worded to avoid confusion or misinterpretation and to provide a clear document trail of the asset's maintenance history.

Work orders should describe the problem at hand and should answer the following questions:

- Which asset needs to be repaired? Where is the asset located?

- Which parts, if any, need to be replaced?

- Which tools will the maintenance crew need to bring with them?

- How many workers are needed to perform this job? What kinds of skills do they need? Will you need to call in outside workers?

- What's the timeline for performing this job? Is this a preventive maintenance project that must be done on a fixed date? Is this an urgent repair on a key asset that needs to be handled immediately?

- What costs are involved in this job?

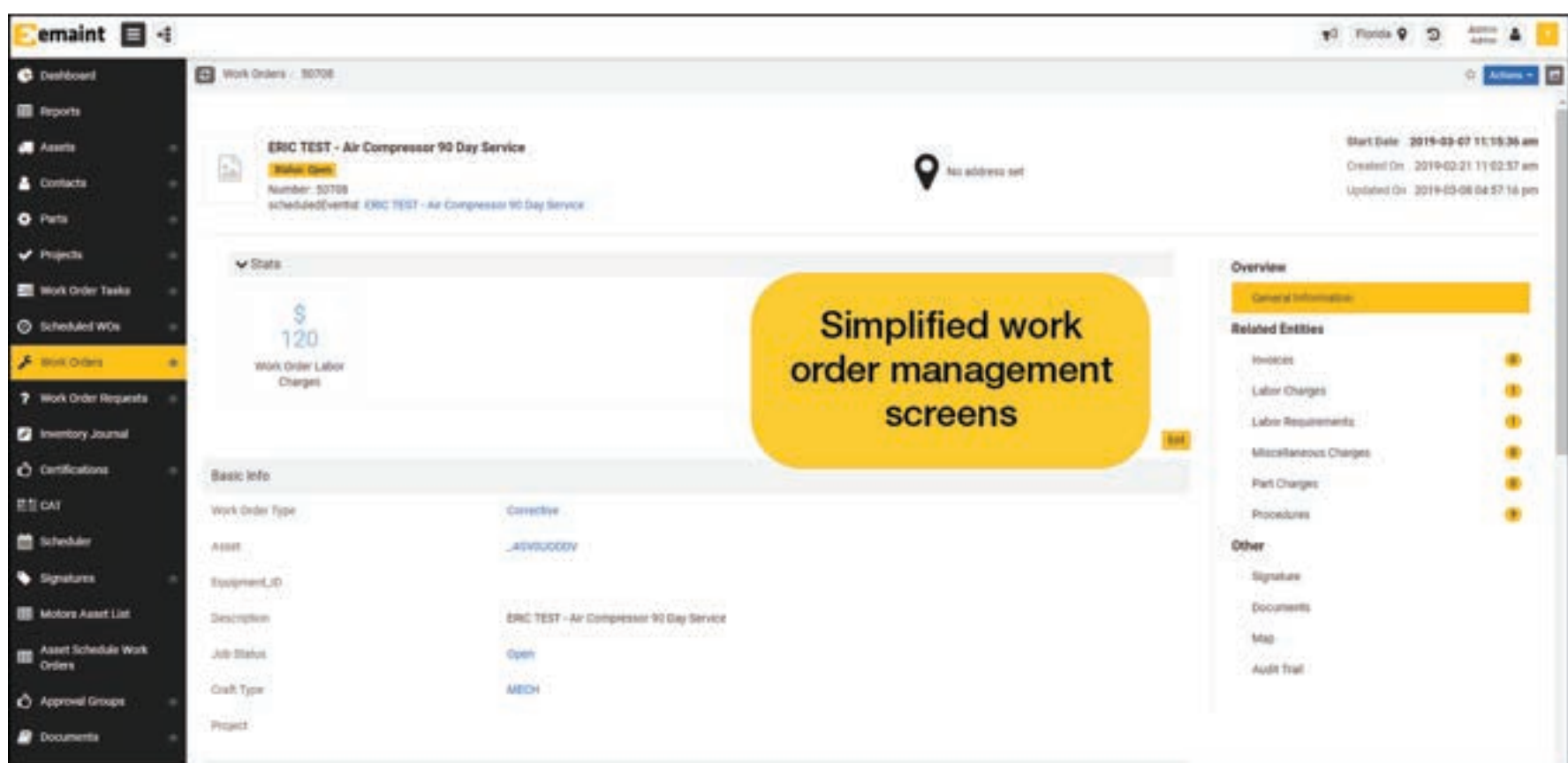- Who is requesting the job? Who authorized the work?

Work orders also fill a record-keeping function. Plant managers can look back over past work orders to track how often assets need repairs, or to assess the success of their maintenance strategy.

What are the Different Work Order Management Approaches?

The two primary approaches to work order management are manual (using pen and paper, spreadsheets, and/or whiteboards) and automated (leveraging a work order management software to automate work order creation and documentation workflows).

Manual work order methods were once the norm and can still be effective for smaller organizations that handle a low volume of work orders. However, a CMMS stands above as the most reliable system that makes it easy to prioritize work orders, automatically distribute them to available technicians, and instantly update maintenance records with the most up-to-date information.

Enterprises should adhere to the best practices of work order management to have more control over their work orders. That means employing a model suitable for managing large volumes of requests instead of just relying on a CMMS to get the job done.

Simplified work order management screens

Managing Work Order Requests

Not all work can be planned ahead of time. For corrective work or customer needs, there is a request system. Maintenance managers can tailor workflow processes for request submission, approval, rejection, and completion to the specific needs of their organization. Identifying a workflow process ensures:

- Standard Operating Procedures (SOPs) are adhered to by all users

- Work goes through an approval process

- Areas of responsibility and expectations are clear for users

- Periodic process auditing is performed

- Valid data is being entered into a CMMS

- Efficient communication flow

Work orders also fill a record-keeping function. Plant managers can look back over past work orders to track how often assets need repairs, or to assess the success of their maintenance strategy.

With eMaint, organizations can choose from three work order request submission options:

1. Work requestors are given an eMaint user login that allows them to submit requests and view the history and status of their requests

2. Work requestors send an email to a designated email address that gets converted into an eMaint work request

3. Work requestors submit requests to eMaint through a customized web form embedded on a company's website or intranet

The work request tools in a CMMS reduce communication errors. Organizations can send requestors automated email alerts when a work request is approved or rejected, followed by an automated email alert with a satisfaction survey once work has been completed.

With modern mobile CMMS solutions, requestors can submit work order requests whenever and wherever using their mobile device. Requestors can attach pictures, such as pictures of equipment needing repair.
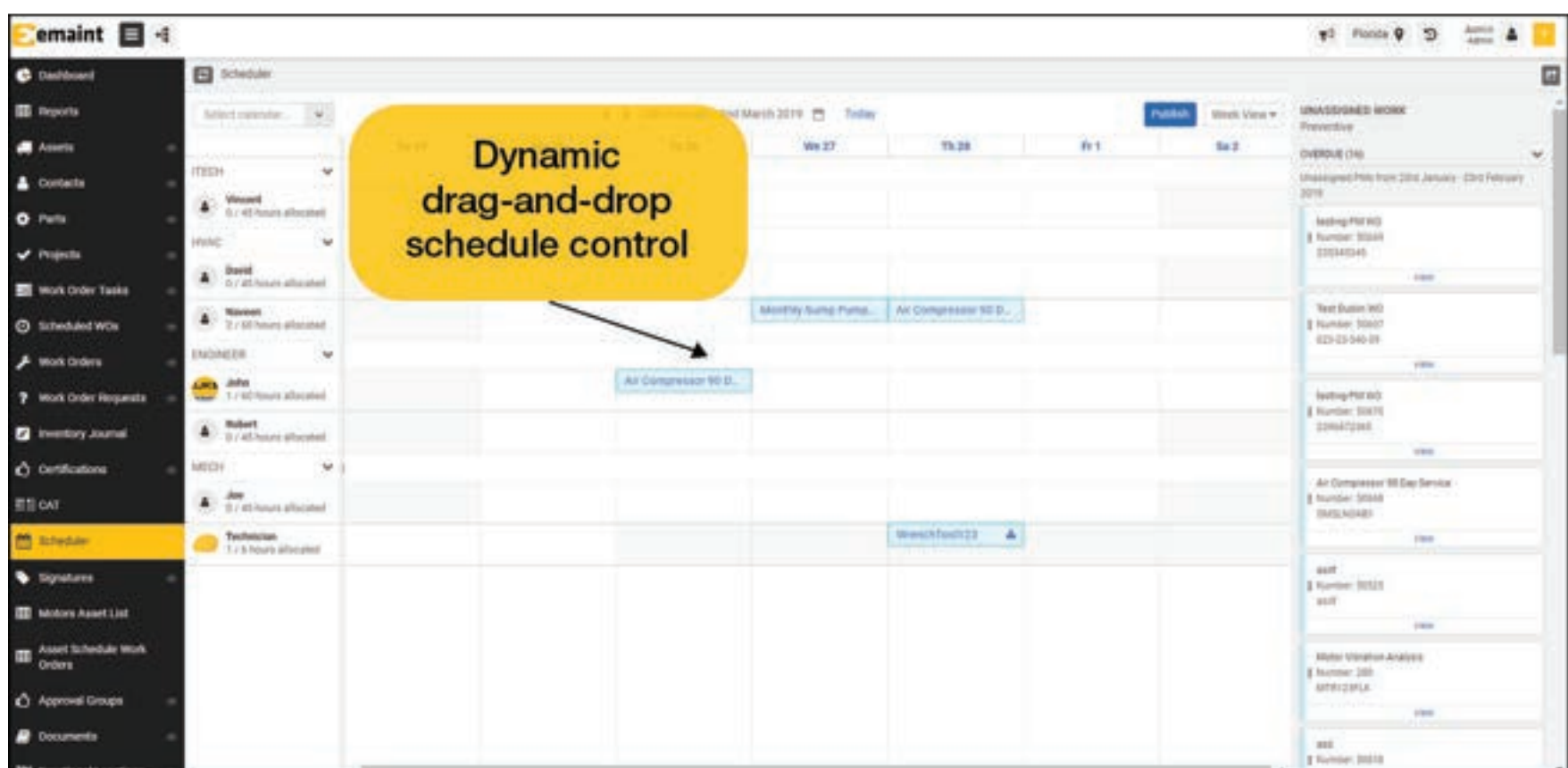
What is Work Order Software?

Work order software provides a management system for organizing the tasks a company needs to complete for its facilities or customers. Work order software acts as both a blueprint and a reference point for companies. It stores and presents all work orders for maintenance in one centralized interface.

CMMS software makes it easy for organizations to manage their work orders and increase on-time work completion, improve workflow efficiency, keep track of project due dates, and more.

Work order software improves the user experience

Outside of managing work orders, work order software lets teams better communicate and complete tasks. Companies that use work order software see time and cost savings and efficiency improvements.

Work order software is useful to technicians as they plan their day-to-day schedules. It offers clear instructions and execution timelines. Key stakeholders can be sure work is completed on time and within budget through features that let them plan, schedule, and communicate across all levels of production. The centralized interface improves transparency and communication, making for accurate targeting and projections.
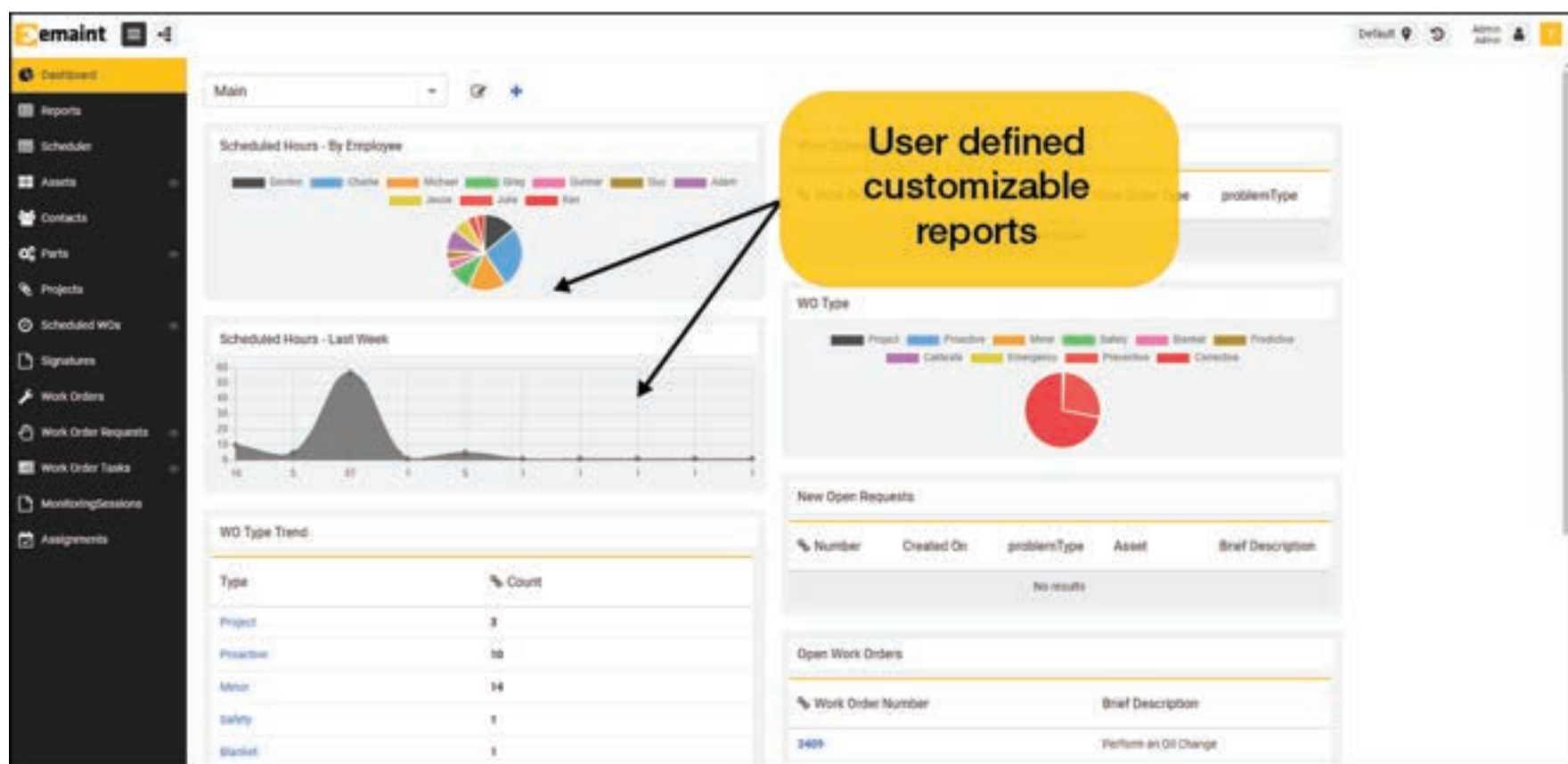
Work Order Assignment

Maintenance planners and schedulers can use features such as eMaint's maintenance scheduling tools to directly assign work orders to staff, contractors, or vendors for specific days, times, and locations. Assigned and unassigned work orders can also be viewed on a calendar display, and work can easily be reassigned when necessary.

Scheduling Calendar

View a calendar by day, week, or month with all labor resources and open work orders, or adjust calendar views and filter work by employee, work order type, and more. The PM Projection feature helps teams plan upcoming work and ensure the right parts, labor, and tools are available.

Reports & Dashboards

Leverage reports & dashboards to stay up to date. Categorize work orders by type, technician, department, or any other user-defined field.
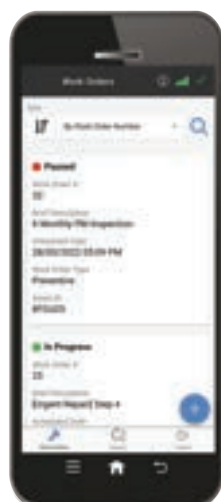
Mobile Maintenance

Using mobile solutions such as Fluke Mobile, organizations can access real-time data and perform functions throughout their facilities and on the road, including submitting and approving work requests, signing and closing out work orders, and more.

With Fluke Mobile, users can create, view, and update work orders from the palm of their hand. The power to work offline and syncing changes to eMaint once reconnect to a network means your teams can truly work from anywhere.

For example, a production line supervisor scheduling preventive maintenance can send a work order to an engineer in the field. That engineer can then access it with Fluke Mobile, update it when complete, and send results to their maintenance & reliability teams by email.

Going beyond work orders, Fluke Mobile also gives you the power to:

- Set up push notifications

- Manage assets & equipment

- Scan QR codes on assets for reference or to submit work requests

- Log work hours

- Get real-time data from Fluke multimeters

- Track changes in the eMaint Audit Trail

Three benefits of going paperless

The average office worker uses 10,000 sheets of paper per year, according to industry analysis firm Keypoint Intelligence. Any organization can benefit in many ways from cutting down on paper use.

Digitalization can help:

Save time

Going paperless saves time. "Employees in paper-intensive businesses spend up to 40% of their time looking for documents, and 7% of documents are lost or misfiled," according to Iron Mountain. Centralized digital records are accessible and available instantly. Time spent hunting for or handing off documents is reduced or eliminated when people can access the records they need wherever they are.

Save money

Reducing—or eliminating—paper means spending less on not only paper, but on printers, copiers, fax machines, toner, ink, and filing cabinets. Paper may be simple to use for creating documentation but managing and distributing paper documents requires work.

Simplify compliance

Some regulatory deadlines can be as short as 48 hours. That's not much time to sort through, find, and organize the necessary paper records. Digitized recordkeeping dramatically simplifies and streamlines the compliance process.

Tracking Projects

Major overhaul and renovation projects can be a headache, but the management process doesn't need to be. With eMaint's project management tools, organizations can easily create projects and assign and track work orders from project inception to completion. With Gantt Charts, users can get a clear visual understanding of work order completion rates compared to a project's end date.

Work order software is vital for teams that need OEM manuals, schematics, and other key documentation attached to a work order. Work order software makes it simple to plan, schedule, prioritize, and track critical work on equipment—all in one place. Assets, inventories, and any actions that impact operational goals can all be handled from one platform.