

# TME® EAM

**Enterprise Asset Management** 

Inventory & Asset Tracking
Real-time Visibility
Asset Reliability, Availability, Maintenance (RAM)
Dashboard & Report Customization
Maintenance & Inspection
Equipment Utilization



# How We Solve Your Organization's Greatest Challenges



## **Superior Asset Control**

TME° is a purpose-built software that provides you impactful insight to control what's really happening in your plant, enabling you to adapt to changes quickly, capitalize on evolving market trends, and outpace your competition.

## Real-time Visibility

Optimize your operation with a comprehensive unified view. Maintain your assets at peak performance, quickly address quality concerns, and efficiently manage manufacturing processes, equipment, and workforce.

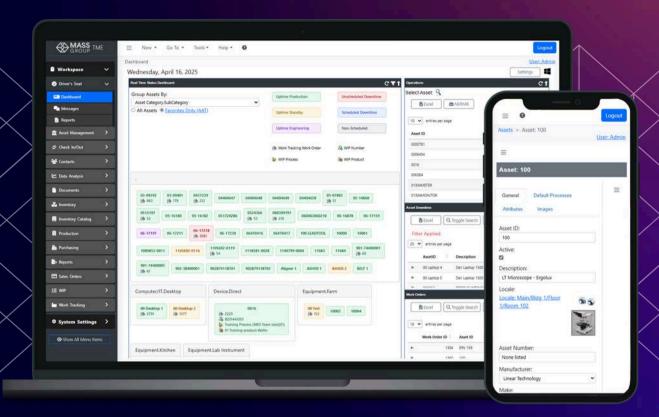
# Seamless Scalability

Whether you are looking to move out of R&D, or you are already in full production, TME® is a no-code, modular manufacturing execution solution that is easy to implement and highly configurable to fit your organization's unique workflows.





# Traceability Made Easy® Maintenance Management Simplified



## Overview

Gain the control and visibility to increase revenue, reduce replacement costs, and enhance customer service with TME®.

Utilize TME CMMS to maintain and increase the uptime of production equipment; track inventory, assets, and spare parts; electronically manage work orders; schedule preventive maintenance routines and repairs.

## **Benefits**

- Proactive Maintenance
- Improved Equipment Utilization
- Real-time Insights
- Enhanced Operational Control
- Reduced Downtime
- Work Order Management
- Informed Decision-Making
- Activity Tracking
- Equipment Calibration Management





# Gain the Control You Need



## **Data Collection**

Receive accurate data and reporting in real-time to ensure optimized item utilization and make better informed business decisions.



## **Asset & Maintenance Tracking**

Leverage key data for meaningful maintenance planning and optimized asset performance and reliability all driven by SEMI-E10 standards.



## **Flexibility**

Define custom fields and create customized dashboards to track and measure any variables and attributes unique to your business.



## **Inventory Optimization**

Complete inventory cycle counts in 70% less time, maintain GAAP and IRS compliance, and achieve precise stockroom reconciliation.



# Performance Analysis & Reporting

Gain real-time data and insightful reports to execute faster, make better business decisions, and optimize workflow efficiency.



## Real-time Production Control

Optimize asset and equipment functionality with conditional logic to meet high production demands with minimal delays or downtimes.





# Easy Set-up. Fast Deployment. All-in-One Platform.

## **Unified Solution**

TME° is a comprehensive all-in-one software solution that delivers a single source of truth to manage, track, and communicate enterprise activities that provide a clear view into critical business processes.

Preventative Maintenance

Asset Performance Management

Data Analytics

Inventory & Asset Tracking

Maintenance & Inspection Scheduling

Work Order Management



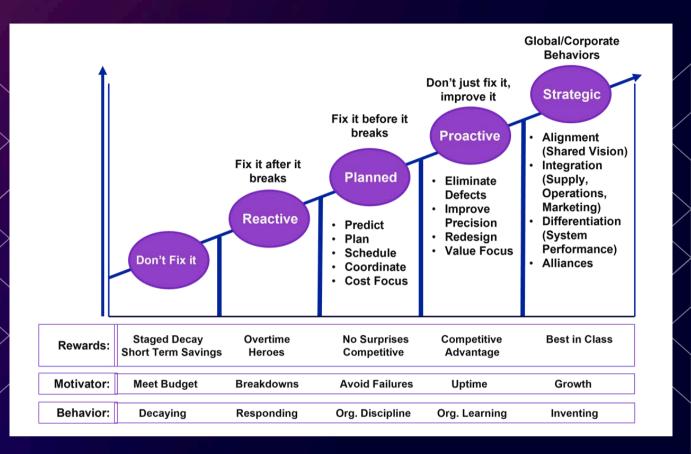
# Seamless Integration

Easily integrate TME® with your existing business systems to improve equipment utilization and streamline processes for greater ROI from your operation. TME® can be easily installed at half the cost and time of competitive offerings.





# Predictive Maintenance for Peak Performance



## Schedule PM's

Build data-driven preventative maintenance schedules that allow you to manage workflows and not lose a minute of uptime.

Define and maintain a consistent, preventive maintenance schedule. Equipment is simply entered into the system at setup and then regular maintenance intervals are scheduled for easy on-screen monitoring.

## **PM Features**

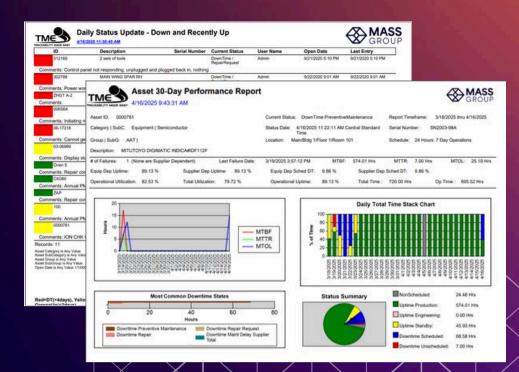
- Track all scheduled activities
- Decrease in asset maintenance time
- Decrease in equipment failure
- Define overhaul schedule
- Detailed maintenance record on each asset
- Schedule reminders and notifications
- Customizable dashboards that show realtime equipment performance

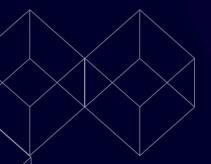




# Reporting

- 350+ standard reports
- Customizable reports
- Extensive filtering capabilities
- Quickly pull, organize, and format any type of data
- Report scheduler
- Assign reports to personnel
- Email to who and when
- Output reports in multiple formats: .xls, .pdf, .html, etc.







- Manage WIP (Work in Progress) with an electronic traveler
- Obtain clear visibility on WIP data, status, and material genealogy
- Track work orders in real-time
- 60+ MES specific reports that are out of the box and fully customizable
- Set up alerts/notifications
- Production Tracking
- Production Planning

TME	WIP Cycle Times  A1500825 11-86-35 AM  GRO							
Product Name	WO Number	Operation Name	Start Qty	Start Time	End Qty	End Time	Cycle Minutes	Cycle Hours
Product 2 -AC8								
	201535-T092							
		WO Start Vapor	15	825/2015 6:28 AM	15	8/25/2015 6:28 AM	0.00	0.00
							0.00	
	201421-T042							
		Cure	15	6/9/2014 12:42 PM	15	6/9/2014 12:42 PM	0.00	0.00
		WO Start Vapor	15	5/22/2014 12:52 PM	15	5/22/2014 12:52 PM	0.00	0.00
		Die Attach	15	5/22/2014 12:52 PM	15	5/22/2014 12:52 PM	0.00	0.00
							0.00	
	202435-T377							
		WO Start DPC/Blackgrind	5	B/2B/2024 3:52 PM	5	8/28/2024 3:54 PM	2.00	0.03
							2.00	
	201402-T030							
		WO Start Vapor	15	1/9/2014 2:57 PM	1	1/13/2014 11:52 AM	5,575.00	92,92
		WO Start Vapor	15	1/9/2014 2:57 PM	11	1/13/2014 11:52 AM	5,575.00	92.92
		Die Attach	1	1/13/2014 11:52 AM	1	1/13/2014 11:53 AM	1.00	0.02
		Die Attach	1	1/13/2014 11:52 AM	11	1/13/2014 11:53 AM	1.00	0.02
		Die Attach	11	1/13/2014 11:52 AM	1	1/13/2014 11:53 AM	1.00	0.02
		Die Attach	11	1/13/2014 11:52 AM	11	1/13/2014 11:53 AM	1.00	0.02
		Die Attach	1	1/13/2014 1:08 PM	1	1/13/2014 1:16 PM	8.00	0.13
		Die Attach	1	1/13/2014 1:08 PM	35	1/13/2014 1:16 PM	8.00	0.13
	34	Die Attach	11	1/13/2014 1:08 PM	1	1/13/2014 1:16 PM	8.00	0.13





## Agile Implementation

When rolling out a new system, MASS Group employs a well-defined and documented phased approach that provides clarity of purpose, anticipates potential challenges, and guarantees the successful execution of all required tasks to achieve success.

Utilizing an efficient Agile methodology, MASS Group will ensure that your team is highly engaged during the implementation process. Our unique tactic provides superior value with a hands-on approach to guide clients to self-sufficiency quickly and thoroughly without excessive cost and time.

### **Improvements**

Motivating factors - save money, accurate data collection, healthy stock levels, improved equipment performance

### **Impact Analysis**

Sustained high performance personnel, equipment, processes, bottom line, ROI

#### Verification

Reporting and scrutinization, what's going well and what needs improvement; data substantiation



### **Planning**

Dedicated champion(s) and local facilitators, data import, technology stack, objectives, personnel buy-in

#### Execution

System configuration, operation and process flow set up/testing, key personnel training, pilot(s)

### **Change Management**

Strong personal commitment effective leadership and motivation throughout the process

# Fast, Easy, and Effective

- Comprehensive training methodology
- Quality process flow control
- Simple flows to start and progressively add more complexity until completion
- Ready to install out-of-the-box
- Built-in configuration tools
- No programming
- No scripting







# TME<sup>®</sup> Software Solution for Peak Performance

From real-time item and asset location tracking to computerized maintenance management, TME® delivers an all-encompassing 100% cloud-based software solution to manage, track, and communicate all the activities of an operation.

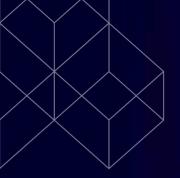
# Range of Services & Solutions

- Preventive Maintenance (PM) and Calibration Scheduling & Tracking
- Manage Supply Levels, Consumption, and Reorder Parts Lists
- Track Supply Costs associated with Equipment
- Barcode, Scan and Track Inventory (Label, DPM, RFID)
- Check-In / Check-Out of Inventory and Assets
- Asset Reliability, Availability, Maintenance (RAM)
- Warehouse Management/Cycle Counting
- Cross-reference Inventory Parts to Assets
- Purchase Orders and Requisitions
- Asset Performance Management (APM)
- Work Order Management
- Statistical Process Control (SPC)
- Overall Equipment Effectiveness (OEE)
- Return Material Authorization (RMA)
- Spare Parts Inventory
- Complete Product Genealogy & Traceability
- Serialization, Lot IDs, Batch Numbers
- Workflow Management
- Database of Suppliers
- Bill of Materials (BOM)
- Scrap and Disposal Management
- Shipping/Bill of Lading
- Receiving and Putaway
- KPI & Dynamic Reporting













# Corporate Capabilities

MASS Group, Inc., designs and develops commercial-off-the-shelf (COTS) Enterprise Asset Management (EAM) software to manage and collect data on inventory, assets, equipment, production, and processes. We configure and adapt our application for each unique customer requirements ranging from managing airport assets to tracking inventory of PPE and medical equipment. With a proven 25-year history, MASS Group delivers solutions on-budget, on-spec, and on-time.

The core of MASS Group technology is the Traceability Made Easy® (TME®) software suite, a robust set of configurable data collection, data processing and data reporting programs. TME® leverages technologies such as RFID, barcode, and Bluetooth for data collection and process execution. MASS Group software is cost-effective, easy to implement, and simple to use without any coding or scripting. Our software is installed on-site or as Cloud solution. MASS Group, Inc., provides full implementation, training and commissioning with time efficient methodology enabling our clients to realize project returns on investment (ROI).

With TME® your organization will be able to:

- Increase efficiencies
- Decrease costs
- Reduce labor
- Comply with government mandates
- Provide robust reporting capabilities

- Reduce and controlling inventory levels
- Increase utilization of assets
- Access real-time data
- Compile genealogy & traceability data
- Integrate with existing systems

