



Tensing Integrated Work Management Suite

Improve Productivity and Efficiency with Tensing IWMS

www.tensing.com



Business Benefits

- **Improve productivity of Field Service engineers, Inspectors and Supervisors** by providing them with accurate information on site, empowering them to efficiently drive service and maintenance processes and make decisions from the field.
- **Lower cost of asset maintenance, improve asset uptime** through monitoring asset status and updating asset data from the field, running traces, routes and performing map-based inspections
- **Automate total process through a consolidated tool** including work and asset management, mobile GIS, route navigation, automated timekeeping, automated vehicle location information
- **Improve safety** by giving supervisors, field workers visibility of each others' work status and location on the map
- **Lifecycle work order and asset management** covering the full life cycle of work orders from planning to completion and for assets from installation to replacement

Tensing Integrated Work Management Suite

In today's world with continued deregulation, aging work forces and infrastructure, utility companies are faced with the task to provide field engineers with the right information at the right time and place to improve productivity and make decisions that help improve service levels and lower total operational cost.

Many have invested in Enterprise Asset Management systems, combined with mobile GIS functionality and Scheduling software to provide answers to these challenges. These tools deliver improvements, but without a full integration between them utilities rarely realize the full benefit and gains in productivity. While most utilities struggle for a surface integration of these various applications from different vendors, Tensing has integrated all our mobile components at the core level resulting in a powerful mobile solution for field work. This integration not only gets your work out to the field faster but feeds all your back office systems with the same information, eliminating the need to update multiple systems.



Tensing Integrated Work Management Suite (IWMS) is a fully consolidated product suite for comprehensive Field Asset Management, Mobile GIS, Route navigation, vehicle management and more. Tensing IWMS acts as an extension of your EAM (SAP, Infor, Maximo and others) and the corporate GIS (ESRI, GE Smallworld), to allow field workers using mobile devices to perform their work remotely, sending, receiving, and creating work order, GIS, asset and service data when and where needed out in the field.

The solution takes over from the moment the work order is generated to plan available resources. AVL functionality gives real time worker locations, miles driven, vehicle status and operational data. Once the work order reaches the mobile worker via wireless data networks, he/she can view it on the mobile device along with any associated GIS/mapping data, and be guided through the entire work order process while feeding information to the back office.

Realize the mobile integration with your EAM that you have always wanted. A completely looped in streamlined solution that incorporates all your mobile work processes. Extend the functionality of your EAM into the field to improve productivity and increase customer satisfaction. With Tensing IWMS you have the only solution that integrates Work Management, GIS, AVL, Navigation, Web Portal, and Reporting/Analysis.

Tensing IWMS includes:

- Tensing IWMS Dashboard
- Tensing IWMS Mobile GIS
- Tensing IWMS Mobile Workflow
- Tensing IWMS Time Keeper
- Tensing IWMS Navigator
- Tensing IWMS Fleet Tracker
- Tensing IWMS Reporter

Dashboard

The Dashboard integrates planning, scheduling, and dispatching with your back office systems. Outage, GIS, EAM all feed into the dashboard for one cohesive presentation of your operations. It controls and tracks your field operations while reconciling incoming data from the field.

Mobile Workflow

Mobile Workflow starts with an Inbox, much like Microsoft Outlook's Inbox to organize and distribute work orders. Field technicians can search, pick-up and start work orders from it. The Inbox is available in both tabular and calendar view for easy navigation through work orders and work requests. All work can be conveniently viewed on the map, printed and/or exported to excel.

When starting work, predefined workflows guide the field technician and/or his crew through specific process oriented screens while automatically keeping track of time spent. Work flow screens exist for utility-based processes such as maintenance, repair, planned- and unplanned asset inspections, asset- and GIS updates. More can be added easily as work flow screens are highly configurable.

Mobile GIS

Users want to work with maps. As a result of the revolutionary tight integration between work management and mobile GIS, users of Tensing IWMS now actually can. They can run their inspections, complete work orders, create work requests and update assets all directly on the map, making their life easier and improving productivity. The integrated Tensing Mobile GIS includes all features you can expect from a full blown mobile GIS solution such as tracing, redlining, searching and performing spatial queries.

Time Keeper

In a larger, union-regulated utility, many factors contribute to a complicated time keeping process and many mobile applications just aren't robust enough to accommodate these needs. Tensing IWMS includes automated time keeping functionality as well as business logic for handing shifts, break-in-service, upgrades and overtime, as well as direct and indirect hours, callouts, sick leave and lunch breaks.



This allows Tensing IWMS to follow your rules, your policies, and your schedules. After release of a time sheet by a worker, it is first validated on consistency and completeness and then sent to supervisors for approval before reconciliation into the back office.

Never has such an advanced time keeping function been available in the mobile environment. Cut down administrative costs and time associated with reconciliation of worker hours and pay.

Navigator

Tensing IWMS Route Navigator is not like your standard mobile navigation. It's fully integrated with Work Management to receive customer- and asset data, eliminating typing on the road. It can also navigate to consecutive assets when doing an inspection consisting of multiple assets.

- Complete GPS navigation system on your choice of mobile device
- Choice of guidance views include 2D, 3D and Driver Safety
- Enter up to 10 addresses in one trip
- Trip Optimization for the most efficient route
- Calculates multi-stop trips in seconds
- Automatically re-routes quickly if you miss a turn
- Instant detour feature if you encounter an unexpected delay
- Set and save route preferences
- Provides continuously updated information about the trip, including Estimated Time of Arrival (ETA) and distance to destination

Fleet Tracker

Tensing IWMS not only supports showing your own (GPS based) location on the map but also the location of your co-workers. This creates awareness and helps improve safety in the daily operation. Users can perform vehicle based searches and request information on operation- and work order status.

Reporter

With a sophisticated reporting function based on SQL Server Reporting Services, you can create almost any report you need. Analyze drive times, work order completion times, device connectivity or timesheet daily reports to further improve your service and forecast workloads.

Other Features

- Work Order Accept, Reject, Hand-over, Pause/Resume
- Comment logs
- Multiple Operations per Work Order
- Barcode/RFID check on service object
- Inspection Checklists
- Capture signatures & GPS location
- Simple & Hierarchical asset model
- Inventory Management
- History per user & per asset
- Work Order history per Asset
- Photo and File attachment
- Map control (zoom, pan, layers on/off)
- Show My Location
- Live updates from GIS system
- Capture data and send to GIS system
- Spatial & network queries
- Show Asset details/context on the map
- Automated Vehicle Location
- Time zone support
- Multi-language support
- Over-the-air deployment
- Single sign on (LDAP/AD support)
- Online and Offline functionality
- Data archiving, cleanup and retention
- Available on any network
- Web portal for administrative functions