Plataine’s Smart Factory Solutions integrated with Google’s New Glass Enterprise Edition

YOUR PERSONAL WEARABLE DIGITAL ASSISTANT

OVERVIEW

Introduced at the Google Next’ 18 convention, Plataine and Google teamed to create the ideal wearable digital assistant solution for advanced manufacturing. Using the Glass and Plataine’s TPO (Total Production Optimization) solution shopfloor personnel can now get instructions, information, alerts and recommendations wherever they are and in both audible and visual forms.

Factory floor employees can now use the glass to effectively communicate with Plataine’s TPO digital assistants. Employees can talk to the glass and the glass will talk back as well as display valuable information at their request which greatly simplifies their daily routines. The glass is connected directly to TPO providing the user the complete set of benefits that the system offers: AI based insights, smart alerts, meaningful analytics and real time updates on status and progress.

Benefits

- Maximal production efficiency with minimal distractions
- All digital operation and logging
- Immediate reaction to any alert or issue
- Streamlines production and minimizes re-work & scrap
- Higher manufacturing yield
- Improved product quality
- Quick deployment

Key Features

- Handsfree control of operations and status updates
- Protection glasses become a mobile computing station
- Natural language communication with the system
- AI support in real time
- Visual projection of system’s screens
- Dedicated individual views - see only what you need when you need it
- Accurate real time reporting

TPO Suite

TPO (Total Production Optimization) is a set of digital assistants that deploy artificial intelligence to optimize production and processes.

Assets, Material and Tool Tracking, Shelf-life Management, Tool Maintenance Optimization, Quality Control, Audit readiness, Work Order Optimization and Supply Chain Management are part of the TPO suite of applications we offer.

Hand Free production
Talk to Glass, it listens and responds. Keep both hands where they bring most value.

Minimize distraction tasks
Update the system and get real time notifications and alerts wherever you are on the shopfloor.

On the spot optimized decision making
Insights to work order status and assets locations are available on the fly. AI algorithms help you make optimized decisions.

Quality issues prevention
Real time continuous logging of all operations enabling full traceability and audit readiness.
ABOUT PLATAINE:
Plataine is the leading provider of Industrial IoT and AI-based optimization solutions for advanced manufacturing. Plataine’s solutions provide intelligent, connected Digital Assistants for production floor management and staff, empowering manufacturers to make optimized decisions in real-time, every time. Plataine’s patent-protected technologies are used by leading manufacturers worldwide, including Airbus, Boeing, GE, Renault Sport Formula One™ Team, IAI, Triumph, General Atomics, TPI Composites, PCC, Steelcase and Argosy International. Plataine partners with Google Cloud, Siemens PLM, McKinsey & Company, the AMRC with Boeing, and CTC GmbH (an Airbus Company), to advance the ‘Factory of the Future’ worldwide.

INDUSTRIAL GRADE SOLUTION
Noisy environment? Use your fingers to control Glass. Slide to choose between menu items directly projected on the glass. Click to select. Glass will accommodate your protection gloves, no need to take them off.

THE BEST OF AI TECHNOLOGIES FROM PLATAINE AND GOOGLE CLOUD
Plataine’s TPO leverages Google cloud’s functionality to enhance its AI driven manufacturing digital assistants. Plataine’s sophisticated AI algorithms are augmented by Google Cloud’s Dialogflow functionality to provide the best real time insights and recommendations that help resolve many of today’s factory workers’ challenges.

PLATAINE REAL TIME AUTOMATION AND OPTIMIZATION HAS JUST BECOME MORE POWERFUL
Plataine award winning and market proven TPO suite is now more accessible with Glass.

Modern challenges of shopfloor employees relate to the huge amount of data coming from various sources. Plataine TPO is your digital assistant collecting, analyzing and processing this huge amount of data in order to provide actionable insights that can save operational costs and increase employee’s efficiency.

Plataine TPO assists you with the tracking of your assets, managing material shelf-life, tracking status and progress on work orders, tracking tool maintenance and service requirements, controlling quality of final parts and being ready for audits at all times.

In order for the system to be the most beneficial the data from the shopfloor needs to be accurate and up to date. Glass ensures an immediate and accurate delivery of data which results in the most valuable insights and recommendations possible.

Key Features
By using Glass Enterprise Edition, Plataine enhances employees’ efficiency, allowing for complete handsfree digital communication with the system. It is like having your personal assistant closely following you on the shopfloor, logging your requests and instructions and providing you with insights and information in real time. All this performed in natural language and in visual projection without the need for manual control or computer access.

OUTMOST MOBILITY
Most employees wear protective glasses during their shifts. Glass Enterprise addition allows them to turn their protection gear into a mobile computing unit.

Constant connectivity to the TPO system ensures that you are always updated to any status changes on the shopfloor. Alerts and warnings are pushed to Glass as they occur and allow immediate reaction. AI algorithms help you make the best decisions based on real time data avoiding costly quality issues and saving valuable time.

NLP FOR NATURAL LANGUAGE RECOGNITION
The glass uses Google’s Dialogflow NLP technology to understand commands and requests in an unformatted spoken language, supporting over 100 languages. The entire interaction is projected as a text on the glass visually and appropriate actions are offered to the user. The glass then generates verbal responses and visual choice selection menus. The user can either touch the glass or respond vocally to instruct the system on what to do next. Similar to Google Home but targeting the factory floor and with the addition of a screen.

"This Industrial IoT innovation combines cutting-edge AI-based technologies with machine learning and substantial manufacturing expertise. The solution enables manufacturers to quickly transform existing production facilities into efficient smart factories”

Jennifer Bennett, Technical Director, Office of the CTO

Google Cloud