MEMEX
Measuring Manufacturing Excellence™

MERLIN increases OEE 11%
in just three months

ACATEC S.L. PROFILE

Headquartered in Spain, Acatec S.L. is a leading manufacturer of precision aeronautical components. The company's innovative production process has propelled it into the vanguard of the European aeronautical manufacturing industry.

As a quality focused enterprise, Acatec, is a high demand, low cost provider to renowned aerospace companies such as Airbus, EADS Casa, and Composite International SA.

BUSINESS SITUATION

Striving to reduce cost and out-perform client expectations by embracing new technologies, Acatec choose to overhaul its complete process from the purchase of raw material to the final delivery of product.

Following the prevalent trend in the European manufacturing sector, Acatec had historically left all macro engineering and IT/Technology projects to outside professional service companies. This practice resulted in Acatec having insufficient in-house engineering and technology personnel to drive the productivity improvement initiatives.

TECHNICAL SITUATION

To improve productivity throughout its operations, Acatec decided to implement time saving, resource-light systems. These systems were aimed at assisting forward planning of work, gauging capacities, and managing demanding delivery schedules. The initiative included implementation of management systems for warehouses and computerized control productions.

Acatec spent considerable time researching local technology companies, which could effectively provide automated data collection products. The company soon recognized that the first step for increased productivity improvements and efficiency is measuring the actual events.

AVAILABILITY   **QUALITY**   **PERFORMANCE**

Acatec has undertaken many initiatives to make OEE data highly visible, including running MERLIN dashboard reports on large screens displayed throughout the plant.

MERLIN

MERLIN is an IIoT Shop-Floor-To-Top-Floor communications platform that provides manufacturing analytics in Real-Time.

SOLUTION

The lean team at Acatec fully understood the value of consistent, reliable data in the form of metrics, such as OEE (Overall Equipment Effectiveness). The team assessd that Acatec needed a technology vendor that would provide a turnkey system and installation of the equipment, along with interpretation of the data, therefore making adoption relatively simple in regards to Continuous Improvement.

Acatec, after a thorough needs assessment and selection process, decided on deploying the MERLIN communications platform utilizing the MERLIN Ax9150 Universal Machine Interface MTConnect® adapter for automated data collection and Handheld HMI for downtime recording. The company started a pilot project at its Madrid plant with two machines in May of 2011 with a plan to validate the system over a 60-day period. The results of the pilot were so compelling that management determined it as a success within a mere four weeks and proceeded to roll out a full plant wide installation throughout the Madrid facility. Additionally, Acatec now considered MEMEX as their go-to supplier for OEE.

Acatec installed the MERLIN software and hardware adapters in August 2011 and then gathered benchmark data in September 2011. The manufacturing team then made procedural changes to their processes through October to December 2011, and found that within the first three months, they were able to improve efficiencies 11% across their complete plant. Acatec since then has undertaken many initiatives to make the OEE data highly visible, including running MERLIN dashboard reports on large screens displayed throughout the plant.
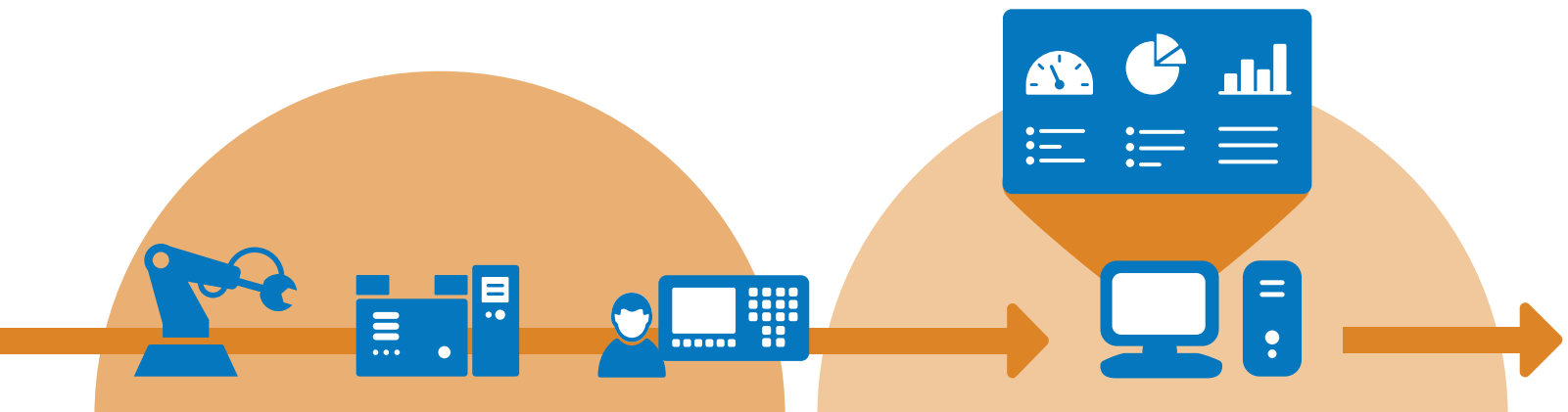
*Increased gross revenue
and bottom line profit,
beyond their initial projections.*

From start to finish, Acatec had rapidly engaged and deployed the MERLIN system within 90 days of selection. The lean team assessed the value of the MERLIN real-time data and applied it to:

- Integrated ERP connectivity providing automated loading of schedules critical to job prioritization
- Ability to load work orders, operator lists, product standards, streamlining job validation
- Began creating a value stream process to enhance efficiency
- Timely movement of inventory through the plant preventing lack of material for machines
- Visibility of production metrics for general awareness, reaction and efficiency from all staff
- Advanced reporting with text and email alerts to key management

**MEMEX is an IIoT leader
that offers MERLIN,
an Industrial Internet of Things
software communications platform
that provides
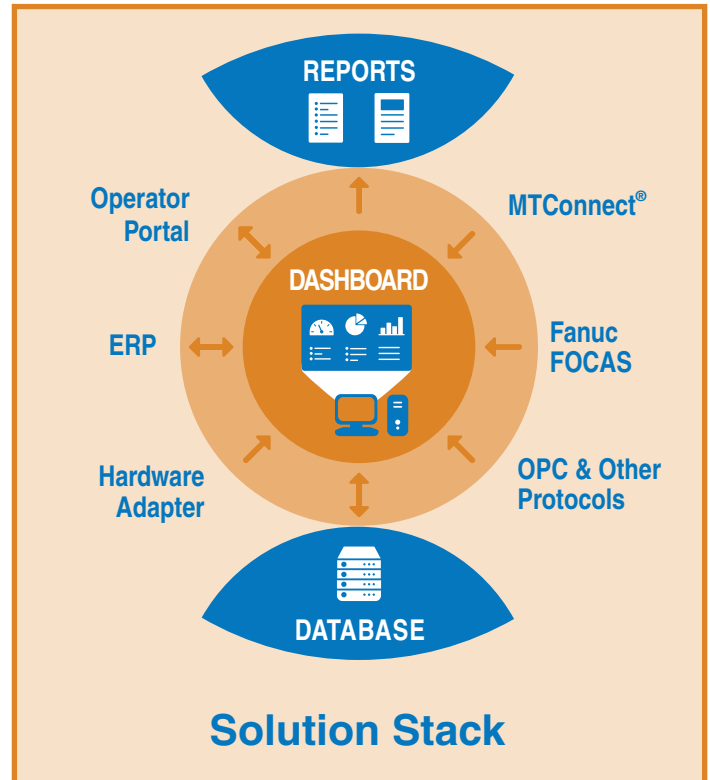manufacturing analytics
in Real-Time.**

Data-Driven IIoT Manufacturing

MEMEX
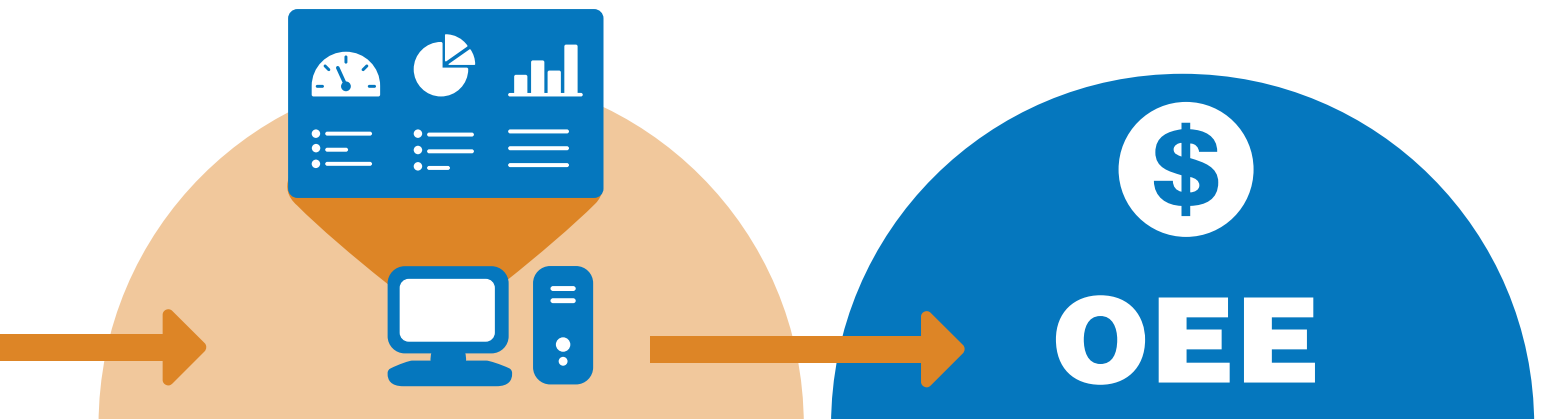Measuring Manufacturing Excellence

BENEFITS

This effective deployment of Real-Time OEE data collection has resulted in the following benefits:

- Increase in OEE of over 11% in just 3 months
- Identified bottlenecks in the production process
- Planning is easier with graphical tools and Real-Time visibility of production
- Alerts for machine related events both automatically from machine and operator gave faster response
- Eliminated the requirement for overtime associated with critical machines
- Reporting visibility by machine, operator, work order, part and many other variables
- Full traceability of all machine events for aerospace industry compliance
- Revenue is higher and costs are down giving Acatec a competitive edge in line with their mission statement
- Increased gross revenue and bottom line profit, beyond their initial projections
- Ability to complete a higher volume of work utilizing the same set of resources both equipment and personnel

Planning is easier with graphical tools and Real-Time visibility on production. MERLIN enabled higher revenue and lower cost giving Acatec a competitive edge.

From Shop-Floor-To-Top-Floor

ABOUT MEMEX™

The Industrial Internet of Things (IIoT) powered by machine to machine (M2M) connectivity coupled with software capable of collecting, analyzing, and intelligently presenting streams of manufacturing data represents no less than the next Industrial Revolution. MEMEX with its visionary attitude has been on the leading-edge of the convergence of the industry trends in Computing Power, Connectivity of Machines, Industry Standards, Advanced Software Technology, and Manufacturing Domain Expertise. Leading this transformation is MEMEX Inc., the developer of MERLIN, an award winning IIoT technology platform that delivers tangible increases in manufacturing productivity in Real-Time.

MEMEX, with its comprehensive understanding of the manufacturing industry, is the global leader in machine to machine connectivity solutions.

Committed to its mission of "Successfully transforming factories of today into factories of the future" and encouraged by the rapid adoption and success of MERLIN, MEMEX is relentlessly pursuing the development of increasingly innovative solutions suitable in the IIoT era. MEMEX envisions converting every machine into a node on the corporate network, thereby, creating visibility from shop-floor- to-top-floor.

MEMEX, with its deep commitment towards machine connectivity, offers solutions that are focused on finding hidden capacity by measuring and managing Real-Time data. This empowers MEMEX's customers to effectively quantify and manage OEE, reduce costs and incorporate strategies for continuous lean improvement.

PRODUCTIVITY
10%-50% average productivity increase

PROFITS
20% + profit improvement based on just a 10% increase in OEE

PAYBACK
payback in less than four months with an Internal Rate of Return (IRR) greater than 300%

CONNECTIVITY
connects to any machine, old or new

Contact MEMEX to implement IIoT data-driven manufacturing now.

MERLIN

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