

MERLIN FOEE™

Using Financial OEE to uncover profits on the shop floor

Financial Overall Equipment Effectiveness (FOEE™) enables an organization to link its shop floor performance to actual profit dollars. Furthering Data-Driven Manufacturing initiatives and building on the foundation of OEE, FOEE compares and displays the financial percentage of profit value of products manufactured in a run relative to the world class product run performance.

Effectively links throughput accounting, theory of constraints and historical OEE. FOEE promotes LEAN manufacturing and operational excellence initiatives, while minimizing costs and maximizing value.

BENEFITS

- Hourly profit rate of individual products on individual machines
- Quickly determine the highest profit generating machine/product combination
- Discover the hidden factory
- Identify setup time losses
- Monitor performance progress on a specific machine and product
- Value information for Continuous Improvement teams
- Pro-active planning and scheduling strategies based on actual data
- Impactful visualization of the production process
- Empowers the organization to set SMART goals
- Enables higher revenue and lower cost providing a competitive edge
- Visually display production profits

MERLIN FOEE™

Further harnessing the power of MERLIN Tempus Enterprise Edition, MERLIN FOEE calculates the average profit throughput rate by utilizing the data, the number of units produced and the total scheduling time by machine and by products, which is already tracked and collected by MERLIN Tempus Enterprise Edition.

The derived average throughput rate along with data associated to sales units, unit material cost and hourly OPEX cost of the machine, is used by MERLIN FOEE to calculate the Contribution of Constraint hour (CCh). The module then compares the average CCh, previously calculated, with the best ever CCh and displays the FOEE for the organization.

Highlighted features of MERLIN FOEE™

- Comprehensive operations grid
- Matrix & Heat Map with values color coded from Highest (green) to Lowest (red), rates per hour, IFO, throughput
- Optimized Schedule 'Sandbox' Recommendations
- Machine/Product OEE Performance Curve(s)
- FOEE Result and Profit Contribution by Product and by Machine
- FOEE Performance Comparison across Products on a Machine
- FOEE Performance Comparison of a Product across capable Machines
- Additional Continuous Improvement Value Tools
- World Class Benchmarking option
- Product setup comparison, OPEX, COGS, ideal ranking
- Browser based display for any device



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

Machine: Vert Mill VM34 Product: P0006

ACCUMULATED SCHEDULE TIME 44.5 HOURS	180 DAY TIMELINE	IDEAL	PROFIT	FOR TIMELINE	CURRENT	PRODUCT RUN OEE
	PRODUCT RUN INFORMATION	RATE	CONTRIBUTION	SELECTED	FOEE	
	LATEST RUN FIRST	ACTUAL RATE PER HOUR	PER MACHINE HOUR	BEST EVER RATE PER HOUR	BASED ON BEST EVER	
	P006	1.94	\$25.40	2.44	45.9%	67.6%
	P006	1.67	\$9.39	2.44	17.0%	58.3%
	P006	1.29	-\$13.51	2.44	-24.4%	45.0%
	P006	1.50	-\$1.11	2.44	-2.0%	52.2%
	P006	2.32	\$48.14	2.44	87.0%	80.8%
	P006	2.44	\$55.36	2.44	100.0%	85.0%
	P006	1.50	-\$0.77	2.44	-1.4%	52.4%
	P006	1.83	\$18.80	2.44	34.0%	63.8%
	MAX	2.44	\$55.36		100.0%	MAX
	MIN	1.29	-\$13.51		-24.4%	MIN
	AVG.	1.82	\$18.20		32.9%	AVG.
	TOP SHOP "BEST EVER" PERFORMANCE COULD GIVE YOU				3.0	TIMES MORE PROFIT
	WORLD CLASS PERFORMANCE COULD GIVE YOU				3.5	TIMES MORE PROFIT

WORLD CLASS ChC = \$63.98

ASSUMES UNIT COGS IS BASED ON AVERAGE RATE = TOTAL GOOD VOL/TOTAL HOURS

Browser Based Percent FOEE per Product

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.



MEMEX
Measuring Manufacturing Excellence™

Toll Free: +1 (866) 573-3895
Head Office: +1 (905) 635-1540
info@MemexOEE.com
www.MemexOEE.com