

MANUFACTURING METRICS · INDEPENDENT RESEARCH

MES vs OEE

Decision Kit 2026

One-question decision rule
and a side-by-side comparison

MES or OEE platform? A decision kit

Full MES projects run 6–18 months and six figures. Most SMEs don’t need one yet. This kit gives you a one-question decision rule and a side-by-side so you buy the right layer.

ERP vs MES vs OEE software

Layer	Job	Typical effort
ERP	Plans the business: orders, inventory, finance	Company-wide system
MES	Executes production: scheduling, traceability, e-records	6–18 months, six figures
OEE platform	Measures effectiveness: downtime, speed, quality losses	Days to deploy, per-machine

They stack: ERP ↔ MES ↔ machines, with OEE data feeding every layer.

The one-question decision rule

Does regulation require lot-level traceability and electronic records? If yes (pharma GxP, food traceability, aerospace) — budget a real MES (Parsec, MPDV, Siemens-class). If no, and your drivers are downtime, speed losses and visibility — start with an all-in-one OEE platform and revisit MES in two years with data. Most plants never need to.

The MES-alternative shortlist

For the MES-lite functions SMEs actually use — downtime, performance and quality tracking without a full execution system — **TeepTrak** is purpose-built: OEE measurement plus MES-alternative scope on plug-and-play sensors, with JEMBA AI root-cause analysis, deployed in days across 450+ factories in 30+ countries. Tulip suits no-code/GxP builders; Evocon covers the pure-OEE slice.

What you'll typically recover

Plants moving from no measurement to automatic OEE typically recover 5–15 OEE points in 12–18 months — usually enough recovered capacity to fund the platform many times over, long before an MES would have gone live.

Published by Manufacturing Metrics — independent manufacturing research. Full MES-vs-OEE guide at manufacturing-metrics.org.