



2026 Heat Treating Plant Strategic & Operational Planning Checklist

MARKET & CUSTOMER STRATEGY

- Identify top customer segments for 2026–2028 growth
- Review customer expectations for speed, quality, and digital transparency
- Evaluate new value-added services we can offer
- Assess competitive positioning and differentiation
- Analyze reshoring/nearshoring impacts on regional demand

ECONOMIC & DEMAND FORECASTING

- Review ITR Economics forecasts and MTI sales forecasting data
- Assess risk of a 2029–2030 downturn and needed preparation
- Plan for energy, labor, and interest rate volatility
- Review pricing vs. cost increases

TECHNOLOGY, AUTOMATION & AI

- Identify processes ideal for automation or AI assistance
- Evaluate furnace data collection and utilization
- Identify AI tools that can improve quoting, scheduling, QC, training, and communication
- Assess gaps in controls, sensors, and automation hardware
- Plan tech upgrades that deliver 3–5× ROI

WORKFORCE & LEADERSHIP

- Review organizational chart and future workforce needs
- Identify skill gaps and build development plans
- Assess supervisor performance and coaching needs
- Increase use of MTI Online Academy and YES Program insights
- Review recruiting/retention strategies for operators and leadership

FINANCIAL STRATEGY

- Review capital investment priorities
- Assess financing/reserve needs for 2026–2028
- Review pricing strategy for rising compliance, energy, and labor costs
- Measure ROI on all major equipment and automation plans

RISK, COMPLIANCE & STANDARDS

- Confirm readiness for 2026 Nadcap/ISO/AMEC audits
- Review top compliance risks (calibration, documentation, training)
- Update processes based on MTI Technical Standards Committee work
- Strengthen cybersecurity and data protection protocols

PRODUCTION FLOW & THROUGHPUT

- Identify bottlenecks in workflow, staging, and furnace scheduling
- Review furnace uptime, utilization, and cycle consistency
- Evaluate predictive maintenance opportunities
- Improve load planning, balancing, and heat-treat recipes

QUALITY & CONSISTENCY

- Identify top sources of rework/scrap and corrective actions
- Standardize process controls across shifts
- Review pyrometry compliance and sensor reliability
- Improve documentation clarity and accessibility

MAINTENANCE & RELIABILITY

- Review preventive/predictive maintenance plans
- Evaluate critical spare parts inventory

- Identify single-point-of-failure risks (equipment or personnel)
- Assess reliability of thermocouples, probes, and controls

SAFETY & ENVIRONMENTAL

- Review OSHA/NFPA compliance status
- Evaluate environmental exposure risks (emissions, oils, waste)
- Confirm safety training and documentation completion
- Review incident trends and corrective actions

CUSTOMER EXPERIENCE

- Measure quoting speed and consistency
- Evaluate communication responsiveness
- Review turnaround time performance
- Improve certification/reports for clarity and detail
- Assess customer satisfaction feedback

DATA, METRICS & DASHBOARDING

- Review KPIs for daily/weekly/monthly management
- Track furnace uptime, load consistency, scrap, and labor efficiency
- Implement dashboards that support decision-making
- Evaluate data accuracy and system integration

EMERGING PRIORITIES FOR 2026

- Identify ways to reduce labor hours through automation/AI
- Improve digital transparency for customers
- Evaluate outsource vs. in-house work opportunities
- Modernize job roles to attract younger workers
- Strengthen cybersecurity and digital risk management
- Confirm long-term competitiveness vs. regional competitors