

**Tuning Assistant**® is a proprietary, interactive optimization module within FHinfinity®'s *FH-Xtra* workspace, designed to help operators and engineers fine-tune key operational parameters for optimal furnace performance. Unlike static manuals or generic advice, this tool employs a dynamic, goal-driven workflow that adapts in real-time based on user responses, guiding personnel through logical adjustments to achieve specific targets such as improved efficiency, reduced emissions.

### Key Technical Features

**Curated Optimization Goals:** Pre-loaded with critical performance variables commonly targeted in field operations.

#### Dynamic Q&A Engine:

- Presents targeted, context-aware questions based on previous answers and selected optimization goals.
- Automatically narrows down adjustment paths by eliminating irrelevant parameters.
- Allows users to click "Back" to revisit decisions or "Start Over" to reset the tuning.

**Actionable Tuning Recommendations:** Once the optimal path is identified, the assistant provides clear, step-by-step instructions for adjusting dampers, registers, fuel pressure, or air-fuel ratios to achieve the desired outcome.

**Comprehensive Reporting:** Generates a detailed report summarizing the entire tuning journey, including selected optimization goal, user responses and system logic, final recommended settings and expected performance improvements, exportable to PDF, Word, or HTML for documentation, team review, or compliance records.

### Operational Workflow

- **Select Optimization Goal:** Choose the target parameter to optimize.
- **Answer Guided Questions:** Respond to yes/no or multiple-choice questions about current operating conditions (e.g., "Is draft within range?", "Is O<sub>2</sub> above upper limit?").
- **Follow Dynamic Path:** The assistant advances to the next relevant question based on your input, dynamically refining the search for the optimal tuning strategy.
- **Receive Tuning Instructions:** Upon completion, the tool displays specific, actionable steps to adjust hardware settings (dampers, registers, etc.) for peak performance.

