C3.ai

C3 Generative AI for Process Optimization

Unified Knowledge Source to Improve Process Efficiency

C3 Generative AI for Process Optimization enables process engineers, operators, and operations executives to rapidly access and act on enterprise and external data and insights through an intuitive search and chat interface.

Rapid Access
to relevant, critical, and high-value insights across disparate datastores, applications, and information systems

Process Focused
configuration to search across relevant data, including ERP, process performance, and design specs, among others

Enterprise Grade
data security, access controls and flexible deployment allow enterprises to meet strict security and privacy requirements

Future Proof
investments with a model-agnostic solution architecture that offers multi-LLM support and integrates with existing IT systems

Manufacturers with complex production processes must navigate continuously changing operating conditions while optimizing throughput, yield, and energy efficiency, among other key process KPIs. To access the insights they need, process engineering and operations professionals often turn to lengthy manuals or piece together disparate data sources.

C3 Generative AI for Process Optimization accelerates time to insight for process engineers and operators, allowing teams to efficiently respond to changing operating conditions and optimize processes in real time. Users can ask questions in natural language and receive accurate answers ranging across process setpoints, performance data, equipment manuals, maintenance records, incident management systems, and training materials.

C3 Generative AI for Process Optimization is an enterprise-ready solution with support across structured and unstructured data, an LLM-agnostic architecture, deterministic responses with source references, and granular access controls. C3 Generative AI for Process Optimization offers rapid configurability with domain models and pre-built connectors to common data sources such as ERPs, sensor measurements, historians, and other process datastores.

Use Cases

- **Quickly access insights** from enterprise and external data sources and systems, including plant historians, equipment manuals, and environmental data

- **Get real-time production visibility,** monitor process KPIs, and identify recommended actions using an intuitive natural language search interface

- **Identify optimal process setpoints** by searching across SOPs, equipment manuals, recipes, and training materials

- **Monitor product quality** with quick access to product specifications, lab tests, root cause analyses, and SOPs

- **Optimize equipment energy use** with queries of real-time energy consumption, usage trends, best practice benchmarks, and equipment manuals

- **Use interactive chat** to follow up with additional process engineering questions and clarify next steps for operators

- **Query relevant training material,** maintenance history, and troubleshooting guides to facilitate knowledge transfer for new operators
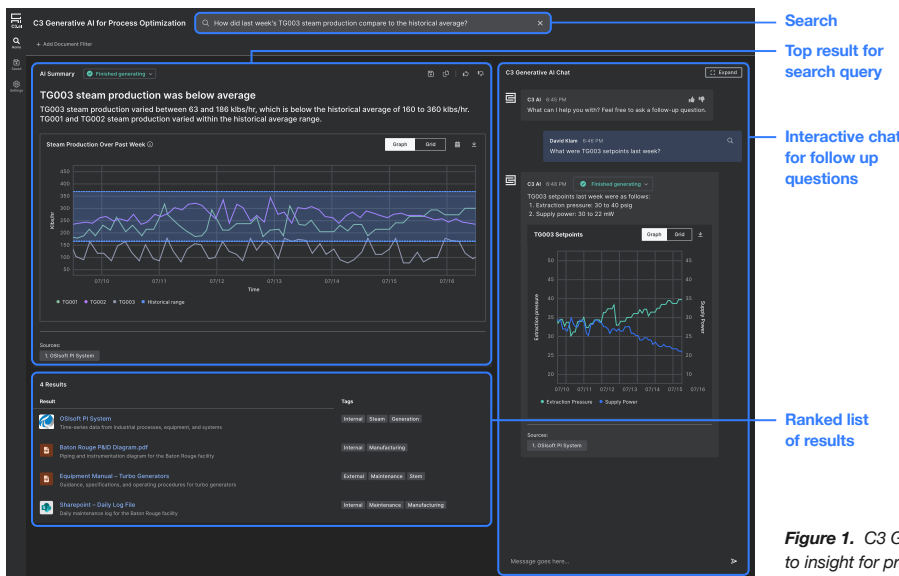

Figure 1. *C3 Generative AI for Process Optimization accelerates time to insight for process engineering and operations professionals.*

Ready to Deploy Today, Results in 12 Weeks or Less   Visit C3.ai/Generative-AI