



“**Compass** changes the game ... no longer do I hunt for P&IDs. The tool’s functionality speeds up tag search and validation and are key in making AF creation and maintenance a snap”

Process Engineer, Mid-Continental Oil and Gas Refinery

## What is **COMPASS**?

**Compass** is an industrial document application that makes engineering knowledge searchable, accessible, and usable. Plants operate with thousands of technical documents including P&IDs, manuals, procedures, and engineering drawings. These documents contain critical operational knowledge, but they are often stored in disconnected repositories and difficult to search. By transforming engineering documentation into a searchable knowledge layer, Compass helps teams reduce troubleshooting time, accelerate maintenance work, and preserve institutional knowledge.

## Features

### AI-Powered Semantic Search

Search across engineering documents including P&IDs, manuals, procedures, and technical reports.

### Natural Language Questions

Ask questions about plant equipment, processes, or procedures and receive answers grounded in engineering documentation.

### Context Linking

Connect documents with operational data such as PI tags and asset models.

### Version Control

Track revisions to engineering documents and understand what changed, when, and by whom.

### Secure Document Access

Operate within the customer environment with role-based access to sensitive engineering data.

## How COMPASS Works:

*Powerful features speed up tag search accelerating time to value*



### Document Ingestion

Compass ingests engineering documents from existing repositories such as file shares and document management systems.



### AI Processing

Documents are parsed using AI models to extract equipment names, tags, relationships, and technical context.



### Semantic Indexing

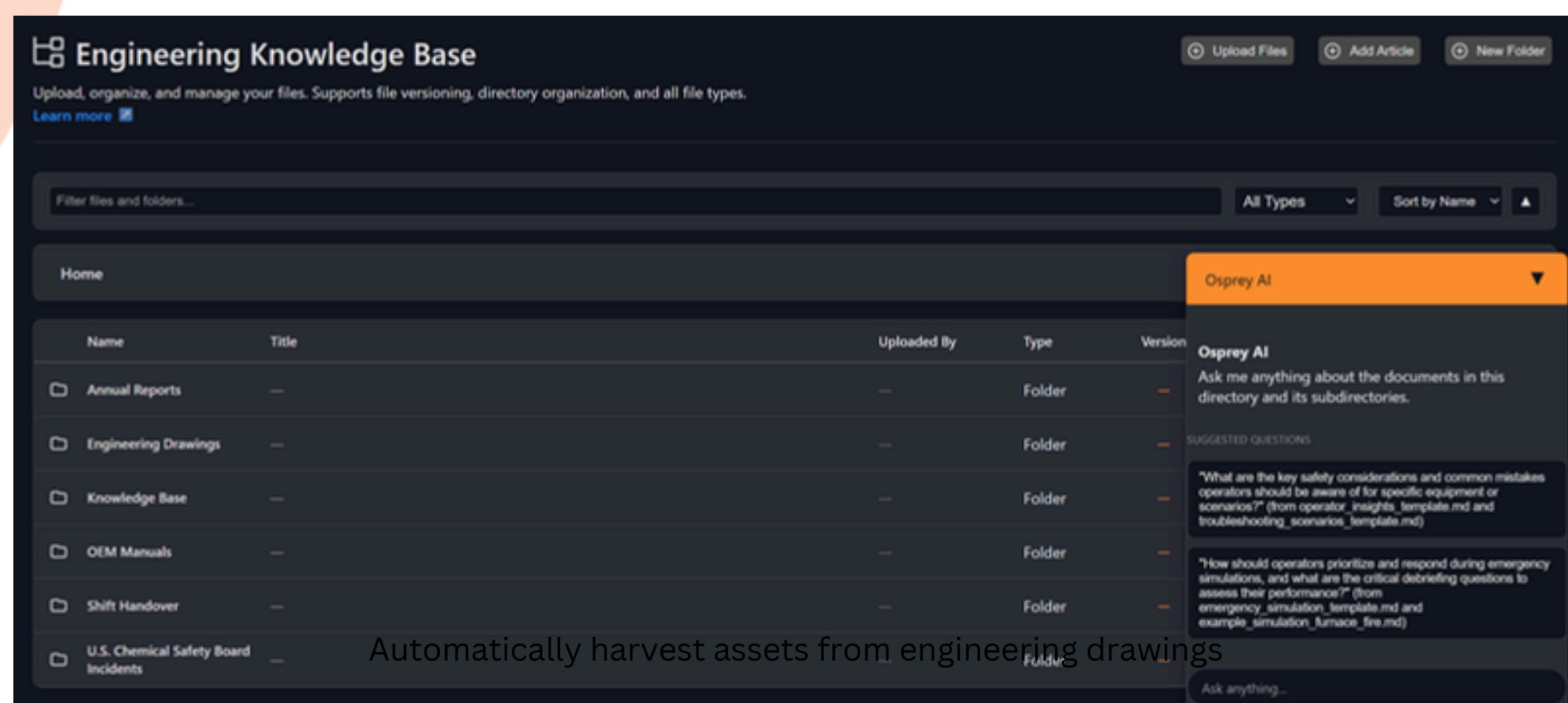
Compass builds a searchable knowledge index that understands engineering language and terminology.



### Discovery and Interpretation

Users can search documents or ask questions using natural language.

Figure 1: **Semantic Search** for fast document discovery and retrieval



Instantly find documents and get answers backed by referenceable sources

# Advanced Technology

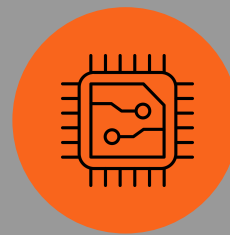
## Related Products

- Forge
- Osprey
- Asset Framework Accelerator

## About Tycho Data

Tycho Data is a next-generation industrial data management company helping organizations derive value, trust and use their operational data. Industrial teams spend significant time preparing, validating, and troubleshooting OT data before it can be used for operations, analytics, or AI.

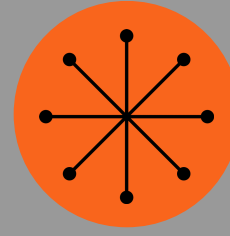
To learn more visit [www.tychodata.com](http://www.tychodata.com)



Retrieval-Augmented Generation (RAG) Architecture



Large language models optimized for technical content



Engineering document parsing and OCR

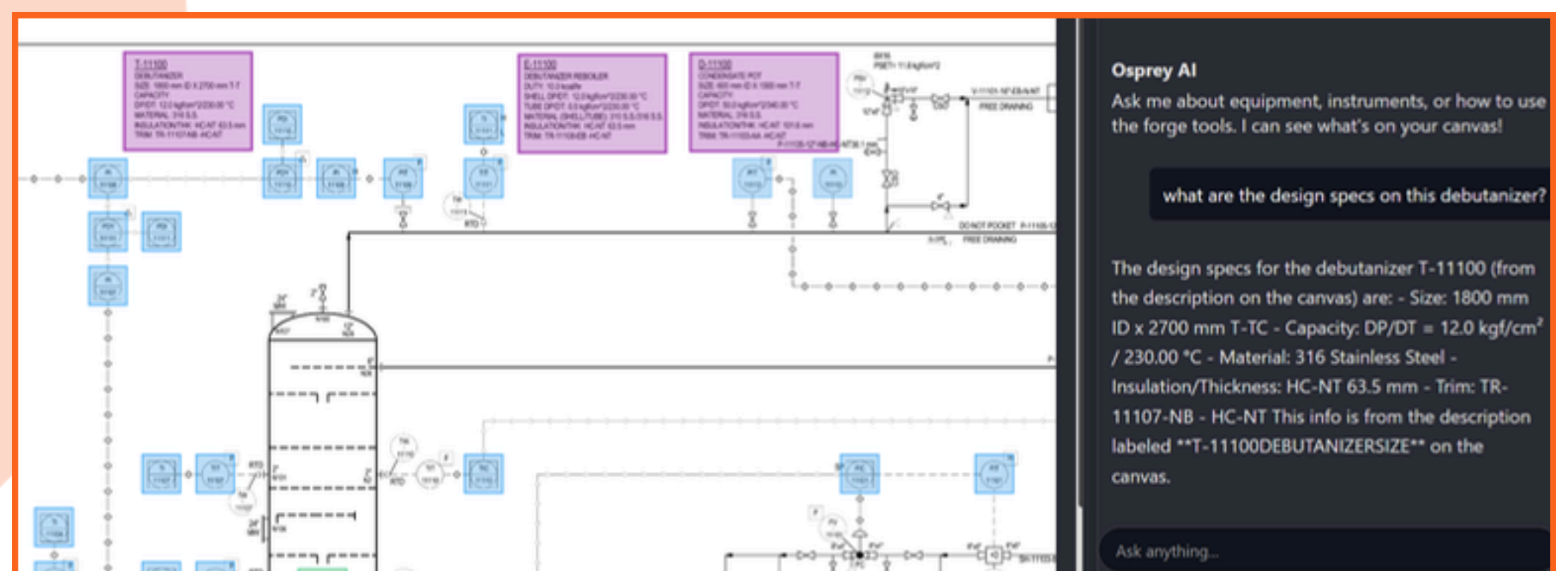


Semantic vector search across large document collections



Secure deployment within customer infrastructure

Figure 2: AI-assistant accelerates synthesis and interpretation of documents and drawings



Get instance answers to questions backed by referenceable sources

90%

Faster Discovery

60%

Faster Work Package Preparation

35%

Troubleshoot Processes Reduction

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