

PlantMCP

THE PROBLEM

Query AutoCAD Plant 3D Elements. Answers in Seconds, Not Hours

Plant engineers and the project team spend hours querying drawing data, cross-referencing specifications and generating reports from AutoCAD Plant 3D, P&ID and Spec Editor. These tasks require deep software knowledge but produce no creative value. Time is lost navigating the tool rather than solving engineering problems. Care must also be taken not to edit any graphics or objects, to preserve the current revision status of the design.

HOW IT WORKS

PlantMCP bridges AutoCAD Plant 3D directly to Claude AI using Anthropic's Model Context Protocol. An MCP server exposes Plant's drawing intelligence as tools Claude can call — line lists, equipment queries, spec lookups, P&ID validation and more. Engineers ask questions in plain language and receive instant, accurate answers. No AutoCAD navigation or experience is required. No graphical objects are edited, only read, ensuring design integrity.

INDUSTRIES & USE CASES

Oil & Gas

Petrochemical

Chemical Processing

AEC / Building Construction

Process Industries

EPC Contracting

TECHNOLOGY STACK

AutoCAD Plant

MCP

Claude AI

Python

VB .NET

KEY BENEFITS

- 30-minute manual queries answered in a 30-second conversation
- Integrity of the model and drawing data preserved as read-only
- No deep AutoCAD expertise required to interrogate drawing data
- Natural language access to line lists, equipment data, and spec lookups
- Extensible — new query types added without modifying existing workflows

