# BidTracer Engineering Module vs. CtrlSketch

BidTracer Engineering Module vs. CtrlSketch: A Feature Comparison

Overview of BidTracer’s Engineering Module  
BidTracer is a cloud-based construction management suite tailored for subcontractors, with a dedicated Engineering module focused on building automation/control systems. This engineering portion extends BidTracer’s bid and project management capabilities into the realm of technical design and documentation. It enables users (often HVAC, electrical, or controls contractors) to create engineering drawings, manage equipment data, and coordinate with other teams – all within one platform. The Engineering module ties into BidTracer’s estimating, CRM, and project management, creating a seamless workflow from initial bid through project delivery. In short, BidTracer’s engineering tool lets contractors design control system diagrams, generate bills of materials, and produce submittals as part of the bidding/project process.

Tools and Features in BidTracer’s Engineering Module  
BidTracer’s engineering toolkit is quite comprehensive, providing diagramming tools, database-driven part management, and automatic document generation. Key features include:

Web-Based Drawing Tool: A full-function drag-and-drop drawing interface that runs in the cloud (no additional CAD software needed). Users can create wiring diagrams, flowcharts, network risers, and sequence-of-operation charts using built-in shapes/stencils. The tool supports error-checking – for example, it highlights any parts removed from an estimate so designers don’t accidentally omit components. It also auto-generates standard elements like title blocks on drawings. Notably, BidTracer allows importing Visio templates, helping teams leverage existing diagram standards.

Library of Stencils & Symbols: The engineering module comes with a library of standard control system symbols (stencils) and scratchpads, which users can customize or extend. This makes it easy to maintain consistent diagram notation. For instance, there are predefined controller icons, valves, dampers, sensors, etc., and users can build their own palettes for specific project needs.

Product and Equipment Database: BidTracer integrates a product library with live pricing and data. Engineers can drag-and-drop parts (controllers, valves, dampers, etc.) directly onto drawings or into estimates from a global or company-specific catalog. The system’s product taxonomy helps find items even if you don’t know the exact part number. When selecting a part, technical data sheets, catalog pages, and images are available. This means the engineering tool doubles as a parts/equipment data management system, pulling real-time pricing from manufacturers and allowing users to add custom parts as needed.

Estimating and BOM Generation: The engineering portion is tightly coupled with BidTracer’s estimating. As users build a system schematic, the software is simultaneously building a Bill of Materials (BOM) and costing the estimate. BOMs are automatically created on the fly. Standard assemblies or predefined system templates can be used. Editable cost codes, labor rates, and other cost factors are applied to the BOM, allowing accurate project estimates to be generated directly from the engineering design.

Ordering and Procurement Tools: Once an estimate/design is finalized, BidTracer streamlines procurement. Users can mark which parts of the BOM to order and then order selected items with one click. The system uses color-coding to track procurement status. BidTracer even supports EDI with certain suppliers so that orders can be placed electronically and status tracked.

Submittal Generation: A powerful time-saver in BidTracer’s engineering module is automatic submittal document creation. With one click, the system compiles all the needed documentation for project submittals. It generates a professional binder including a cover page, table of contents, datasheets for all products (fetched live from manufacturers), and any other required cut sheets or sequence narratives. These submittals are linked with BidTracer’s project management tool, which allows tracking their status through review and approval workflows.

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Conclusion  
BidTracer’s engineering portion stands out for its workflow integration and construction-specific capabilities, whereas CtrlSketch (by assumption of general features) would shine in ease of collaborative sketching and broad applicability. Both aim to improve accuracy and teamwork in engineering tasks – BidTracer by reducing data transfer errors between estimating and engineering, and CtrlSketch by getting everyone literally on the same page (or canvas) during design. Users should consider the scope of their needs: full project lifecycle management with engineering (BidTracer) versus focused collaborative drawing for engineering teams (CtrlSketch).