

Design++

Design-to-Order Automation for Mass-Customization

Large Engineered Systems



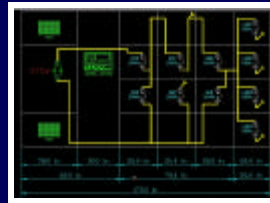
Design Power, Inc.

Design++™ :

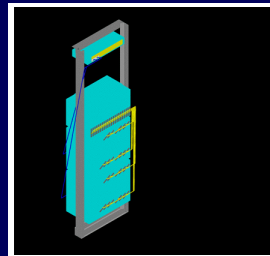
Optimize Your Design-to-Order Business

Increase Design Re-Use, Reduce Re-Work

Maximize Customer Satisfaction



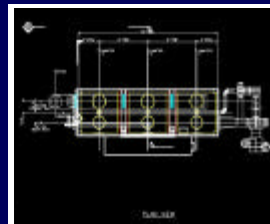
Auto-generated layout drawing and schematic for electrical equipment [Emerson Corp.-Liebert]



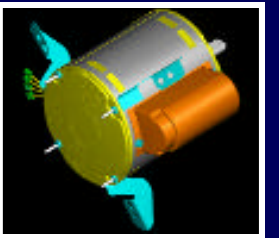
Auto-configured network equipment racks with drawings and instructions [Cisco Systems, Inc.]



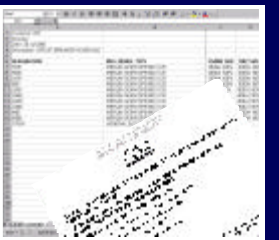
Heavy industrial equipment engineered-to-order automatically [Smith Engineering Co.]



Auto-generated general arrangement drawings for equipment proposals [Smith Engineering Co.]



Auto-Designed Custom electrical motors [Emerson Motor Co.]



Auto-generated proposal output with standard office software ensures accuracy and quality. [Emerson Corp.-Liebert]



Design++ automated the design of this church metal structure. [Robertson Ceco Corp.]



Design++ automates early design of engineered to order process plants. [Fluor, Inc.]

Meeting customers' needs increases customer satisfaction, sales volume, and profit potential. Realizing this potential requires a solution that enables rapid customization, minimizes errors, and allows customers to take part in the design process.

Design++ solutions let manufacturers instantly and correctly configure, engineer, design, and document complex design-to-order products; all at the point of sale while working with the customer. Competitive advantage goes to the organization that can exactly match a customer's needs and accelerate delivery through instant custom design for manufacturing.

Automating a Complex Process

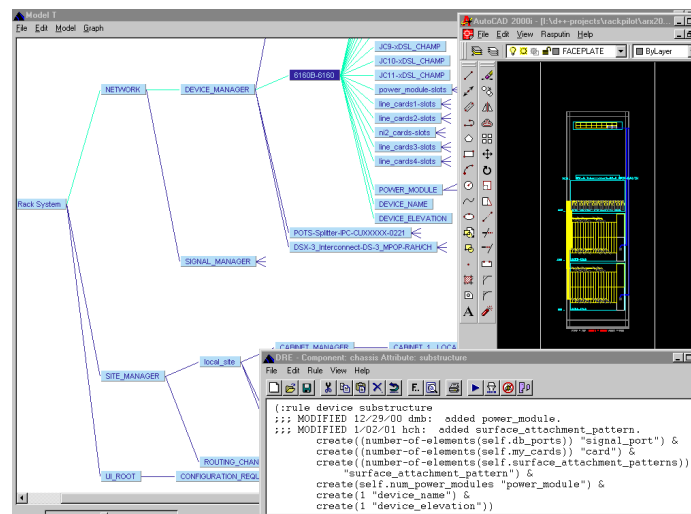
Product engineers first define the allowed variations of a product family into a structured "Super Model" by capturing rules for configuration, design, engineering, and selection of parts.

Design++ then derives the order in which these rules are fired to automatically engineer and design a product that meets requirements entered by a representative, a sales engineer, or the customer himself.

Providing Compelling Competitive Advantages, Today

Design++ solutions in use today configure and design products and systems as diverse as telecommunication networks, power systems, electrical motors, process equipment, even buildings and process plants. Increased sales, higher profit margins, faster delivery, and reduced rework attest to the compelling value proposition of automating the design-to-order business process.

Design++ is a platform for easy automation of your entire engineering and design process.



The entire engineering process for this rack assembly is captured into a "supermodel" with easy to write configuration, engineering, and layout rules.

Promoting Collaboration, Reducing Re-work

Suppliers and customers use Design++ solutions to jointly design, review, and validate products prior to order by implementing re-design requests instantly. This early "what if" collaborative product definition minimizes need for later rework.

Creating Satisfied Returning Customers

On demand, Design++ solutions provide instant, feasible, fully documented, and error-free designs that best meet customers' needs at the lowest cost. Finalizing the design jointly with the manufacturer prior to order minimizes miscommunication and reassures the customer that he will receive exactly the product he needs before making the final commitment.

Product-Structure Simple Super-Modeling

Using the *Design++ Visual Modeler* product, engineers define product options, product properties, and associated rules into a familiar Bill-of-Material looking "super-model". Like in a spreadsheet, the *Intelligent Change Manager* ensures that re-design requests are properly propagated by re-calculating only affected rules. *Dynamic Configurator*, bi-directional *CAD Integration Manager*, and *AutoDrafter* drawing creation modules significantly simplify the automation efforts. Complemented with *Report Writer*, *Geometry Objects*, *Smart Relations*, and numerous *APIs* and database links, Design++ provides a full set of tools to ensure a successful engineering and design automation project.

Real life projects and independent research indicate that Design++ reduces design automation effort up to 90%.

