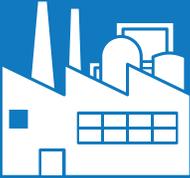




## CASE STUDY

# A Leading Rotating & Reciprocating Manufacturer Reduces Quote Time from 24 Hours to 30 Minutes with CPQ and CAD Automation



### CLIENT

A Leading Rotating & Reciprocating Equipment Manufacturer

### CHALLENGE

Streamlining slow, manual sales and engineering processes that cause high design leads times and significant delays in the sales process

### SOLUTION

CDS CPQ and CAD Automation solutions capture tribal product knowledge into a single platform that automates manual processes and increases sales

### RESULTS

Reduced quote and design lead time from 24 hours to 30 minutes

Increased Conversions 40%

### THE CUSTOMER

#### Leading Rotating & Reciprocating Equipment Manufacturer

A Leading Rotating and reciprocating Equipment Manufacturer delivers performance-critical solutions for rotating and reciprocating machinery across the oil and gas, power generation, marine, industrial, chemical, and general processing markets. Our portfolio includes hydrodynamic bearings, active magnetic bearings, system and bearing protection, reciprocating compressor valves, sealing technologies, pistons, rods, and more. Each solution is custom-configured and engineered to provide optimum efficiency, reliability, and productivity and is backed by comprehensive aftermarket services.

### THE CHALLENGE

#### Manual sales and engineering processes result in significant quote delays and deliveries

The leading manufacturer of rotating and reciprocating machinery for diverse industries, such as oil and gas, power generation, and marine, faced a bottleneck in its quoting design processes that caused friction between sales and engineering, ultimately leading to a poor customer experience.

Due to manual processes, generating quotes and creating a single 2D Inventor drawing for a valve product took a staggering 8-10 hours of engineering resources, resulting in a significant backlog and delayed project deliveries. With sales heavily reliant on engineering for configured products and corresponding CAD assets in the sales process, the customer experience was severely impacted by the delays.

Adding to the complexity, a key employee with extensive tribal product knowledge was nearing retirement, and the company urgently needed a standardized and efficient approach to its valve configuration business.

#### Workflow Problems:

- High quote and design lead times due to manual drafting of CAD assets (Quotes would take days plus 8-10 hours per CAD drawing).
- A backlog of design jobs is leading to quote and project delays.
- Loss of tribal knowledge with an employee retirement.
- Reliance on multiple Excel files and calculators for critical design needs.
- Use of legacy programs and manual processes.

“Our sales and engineering process for configured products had a lot of friction that was impacting our ability to meet customer expectations. With CDS, we automated manual processes within our configuration and design workflow, saving hours of time on generating quotes and CAD assets”

**Global Director of Engineering**  
Rotating & Reciprocating Equipment  
Manufacturer

## CDS Visual's CPQ & CAD Automation

- Streamlined Sales and Engineering Processes to Enable Fast, Accurate Quoting for custom products
- Automated 3D CAD Models and Drawings for Configure Products
- Streamlined and Automated Bill of Materials (BOM)
- Customer Data Capture for Models and Specific Configurations
- Searchable Configuration Library for Existing Configurations
- Part Number Management for Clear Identification within an Assembly



CDS Visual enables manufacturers to drive business value by unlocking their CAD assets. Its cloud-based visualization solutions, trusted by the world's biggest industrial suppliers, revolutionize their commerce, configure price quote (CPQ), and training initiatives. With an extensive offering of 3D visualization solutions, CDS uniquely re-purposes existing CAD assets to deliver impactful solutions for 3D configuration, aftermarket part search, 3D work instructions, and enhanced digital content.

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## THE SOLUTION

### CDS Visual CPQ and CAD Automation

The manufacturer partnered with CDS Visual, a leading provider of CPQ (Configure, Price, Quote) and CAD automation solutions. The solution leveraged CDS Visual's powerful CPQ and CAD automation Solutions:

- **Streamline Sales and Engineer Processes for Configured Products:** Accelerated sales process for configured products with fast and accurate quoting and CAD assets downloads with engineering requirements
- **Automated 3D CAD Models and Drawings:** The configurator automatically generates native Autodesk Inventor (.ipt) 3D models and (.idw) manufacturing drawings for each valve configuration.
- **Streamlined Bill of Materials (BOM):** BOMs are automatically generated and mapped within the 2D drawings, saving time and reducing errors.
- **Customer Data Capture:** The configurator captures key customer details like compressor manufacturer and model number, allowing for easy retrieval of specific configurations
- **Part Number Management:** The configurator allows for user-defined part/component numbers, ensuring clear identification within the valve assembly.

## THE RESULTS

### Reduced quote and design time 24 hours to 30 minutes

By partnering with CDS Visual, the manufacturer has successfully addressed its design challenges and achieved significant improvements in efficiency and accuracy. The automated solution has empowered the design team to meet customer demands with greater speed and confidence.

The implementation of CDS Visual's CPQ with CAD Automation solutions has transformed the manufacturer's valve design process:

- **Reduced Quote and Design Lead Time from 24 hours to 30 minutes:** Creating a new valve configuration takes a fraction of the time compared to manual methods, significantly reducing quote and design lead times while freeing engineering resources
- **Eliminated Backlog:** The streamlined process has cleared the design backlog, enabling faster project completion.
- **Captured Tribal Knowledge in a Single Platform:** The CPQ acts as a repository of product knowledge, ensuring critical information is readily available.
- **Improved Design Accuracy:** Automated calculations and BOM generation minimize errors and ensure design consistency for Inventor 3D Models
- **Increased Efficiency:** The user-friendly configurator gives users the ability to save, search, and reload configurations.