

CASE STUDY



Wheels India

Business Overview

Wheels India is a comprehensive global source of steel wheels for commercial vehicles, passenger cars, utility vehicles, agricultural tractors and construction equipment. The company supplies two-thirds of the domestic market requirement. It has plants in Padi, Pune and Rampur with an annual capacity of 5.5 million wheels with a workforce of 1,400.

Challenges

AutoCad, Unigraphics and manual drawings of its tools and wheel assemblies are among Wheels India's most precious assets. These drawings are critical in the maintenance of its existing products, as well as the design and construction of new products. Yet, as the volume of these drawings continued to grow, managing and providing access to them became increasingly difficult.

No streamlined access

About 40,000 drawings were stored in file servers at different desktops in the tool-engineering department. Information regarding the drawings was stored in an Oracle 8i database. Designers could access the drawings through the network and could make changes without any kind of audit log. There were inconsistencies between the drawing and the information in the Oracle database since each had independent update mechanisms.

Approvals done on printed drawings sheets

Review and approval of drawings were done by printing the drawings on wide format printers and making markups on the drawing sheet. Besides being cumbersome to print and approve multiple drawings, a lot of paper was being used in printing multiple versions.

BUSINESS PROFILE

Wheels India
Leading manufacturer of steel wheels.
Industry
Manufacturing.
Geographies
Padi (Headquarters), Pune and Rampur.
Business Solution
Engineering Drawing Management system.
Karomi Products
<ul style="list-style-type: none"> karomiENTERPRISE Document Management karomiENTERPRISE Workflow Management
Deployment Summary
Manage, allow viewing & markup of 40,000 Engineering Drawings over a web-based system.
Benefits
<ul style="list-style-type: none"> Control over drawings and its safety. Increased efficiency through centralization.

The Karomi Solution

The Karomi team designed a Web-based engineering drawing management system that uses the karomiENTERPRISE Document Management System to store and manage the lifecycles of electronic drawings.

Control Over Drawings:

Access to drawings is possible only through the Web-based interface. Designers have to checkout the drawings before editing it. While a drawing is checked out, others can view it, but cannot make alterations. When the drawing is checked-in, the drawing is updated into the repository, the version history is updated and the Oracle database is updated with the drawing information. Consistency in drawing information is maintained by providing a single interface to update drawings. Audit logs in the system maintain all actions performed on the drawing.

Viewing and Markup:

Viewing of drawings by non-designers who need to review, approve or merely view the drawing can be done without having the native applications like AutoCAD or Unigraphics. A single Web-based viewer is integrated into the system, that allows users to view, markup and annotate the drawings without requiring the native application. Viewing the drawings and annotating them can be done from any desktop by merely connecting to the server.

Managing associated files:

Additional files associated with the drawing like excel files with calculations, etc. are managed in the same system and related to the drawing. CNC programs related to the drawing are also associated and stored in the same system. Users who write CNC programs can view drawings and manage the programs the same way the drawings are managed.

Search for Drawings:

The system allows users to search for drawings using drawing number, author, date, etc. The search result displays the drawing details along with a link to the drawing. Users can now click on the drawing link and view the drawing.

Managing Print requests:

Print requests can be submitted from the system for any drawing. These requests are queued for printing and status information published as the queue is serviced.

Review and Approval Workflow:

In-built workflow allows designers to submit drawings for review and approval. Reviewers markup the drawings with their comments and send them back to the designer for changes. Drawings pending review and status of reviews are all tracked and managed through the same system.

Drawing Registration:

Designers who wish to start new drawings can register through the online system and will automatically be allocated a unique drawing number.

Summary

With the Karomi solution, Wheels India will be centrally managing its engineering drawings. Employees will be able to easily and efficiently locate and smoothly update the right drawings. As a result, the company will be providing superior customer service while boosting its efficiency.