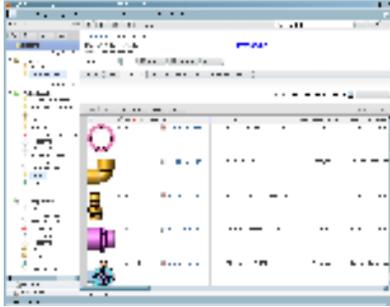


## AutoVue Enterprise Visualization Improves Visibility of Product Information throughout the Product Lifecycle



Navigate product structures & easily identify parts for reuse within PLM with AutoVue Enterprise Visualization.

### Analyst Perspective

“Technology complexity, operational complexity and business pressures demand that companies excel in decision making and innovation in all aspects of the product lifecycle.”

**Source: IDC Manufacturing Insights, Top 10 Manufacturing Predictions 2012**

*“It is estimated that 95% of companies have not adopted a part reuse strategy. Companies that have are reporting cost savings in the range of \$100 million to upwards of \$3 billion.”* **Source: AMR, How Leaders Reduce Complexity & Costs with Supply Management**

*“Manufacturing companies should ... encourage the use of visualization and analytic tools to enable faster and higher-fidelity product decision making.”*

**Source: IDC Manufacturing Insights, Product Value Chain in Manufacturing**

For manufacturing organizations, quickly delivering high quality products to market is top priority; however, increasingly complex design processes, extended global supply networks, and the issue of duplicate parts proliferation make it challenging for manufacturers to meet these goals. To achieve success, manufacturing companies require ways to effectively communicate and collaborate on product information throughout the product value chain during innovation, design & development, sourcing and manufacturing operations. AutoVue delivers secure access to in-context, visual product information to all stakeholders, enabling visual decision making, reducing errors and rework, and expediting time to market.

### Improve Product Launch Success and Product Quality from Concept to Market

The landscape for manufacturing organizations has changed due to increasing rates of globalization and outsourcing. These newly created technical and organizational complexities oblige companies to streamline their product development process from design development, to sourcing and manufacturing. In doing so, stakeholders throughout the product value chain are better able to collaborate on a global scale, and release higher quality and more cost effective products to market.

With access to the visual context of products during innovation, design review and change management processes, product teams can reduce lead times and optimize product related decisions. Throughout the product development process global stakeholders can accelerate the launch of new products by enabling participation and contribution of engineering, manufacturing, quality, as well as non-engineering teams in all facets of product-related decisions. With AutoVue, effective multi-disciplinary product collaboration amongst these various groups is enabled, including mechatronic design collaboration between mechanical and electronic teams. Easy collaboration with external parties is also possible, without any risk to an organization’s valuable intellectual property (IP). Increased communication between engineering, product development and manufacturing teams optimizes design for manufacturing, while effective cross functional collaboration helps explore options to reduce costs, improve parts quality, and increase re-use, allowing organizations to get it right the first time.

The proliferation of duplicate parts is a real challenge which costs manufacturers millions to maintain and manage. Adopting a parts reuse strategy which allows companies to leverage existing designs in new products is essential. In doing so, they mitigate the problem of duplicate parts proliferation, allowing them to save time, resources, and costs. Connected to enterprise search engines like Oracle Endeca, AutoVue’s text extraction web services make it possible to index and search for text within designs and product documents, enabling teams to easily identify and reuse existing parts and designs, playing a key role in an organization’s parts reuse strategy.

### Benefits

- Improve visibility of product information to all stakeholders
- Protect intellectual property
- Accelerate time to market
- Improve product-related decisions
- Optimize collaboration between internal resources and external supply chain partners
- Streamline product development, sourcing & manufacturing processes
- Enhance change management workflows
- Improve product quality; reduce errors and rework
- Simplify parts/design re-use

### Capabilities

- Digitally capture & keep track of feedback from all collaboration participants
- Enable Real-Time collaboration between stakeholders
- Share CAD models & engineering designs during development, sourcing, & manufacturing without risking IP
- Enable text searches during design reuse and product recalls
- Integration with Oracle Agile PLM
- Tie markups to ECRs/ECOs in PLM systems

Organizations that excel in effective change management can quickly meet changing market needs and address design flaws which can negatively impact market success. By leveraging a visualization and digital annotation solution, designers and engineers can capture, communicate, and track comments and proposed changes directly within the context of designs. Manufacturers can reap even greater benefits when AutoVue is integrated with a Product Lifecycle Management solution like Oracle Agile PLM, as digital annotations can be associated with ECRs (engineering change request) and ECOs (engineering change order), ensuring that changes are correctly communicated to all stakeholders.

Product quality has a significant impact on brand value, making quality management a key component to product success. When a product recall happens, the ability to rapidly identify the scope is critical to an organization's bottom line and reputation. With a text indexing solution in place, firms can quickly locate parts that have been recalled and identify the products that include them. This optimizes the recall process and mitigates any financial risk or extended consumer fallout.

### Enhance Supply Chain Collaboration During Sourcing & Procurement

Accelerating rates of globalization and outsourcing lead to extended, complex supply chain networks, making it challenging for organizations to communicate requirements during bidding or procurement. With AutoVue, designers can streamline collaboration with outsourced partners during the RFP (request for proposal)/RFI (request for information) process, enabling them to securely share designs and capture supplier comments via digital annotations directly on drawings. OEMs and supply chain partners can also collaborate in real-time during the part procurement process allowing for faster, more accurate responses. With access to in-context visual product information, supply chain agility and flexibility are improved, lead times are reduced, and the quality of sourced products remains high.

### Streamline Product Manufacturing and Accelerate Time to Market

Manufacturing engineers and shop floor personnel can leverage AutoVue on the manufacturing floor to view 3D models of designs and access the information they need to perform complex assemblies. While providing manufacturing teams with visual access to CAD models, but not the original design files, an OEM's designs and IP remain protected. With AutoVue, the shop floor is able to validate any missing information for faster manufacturing and assembly, and improve their productivity.

Avoiding errors and rework are key goals for manufacturing organizations, as production delays and quality errors impact output and time to market. Ensuring that the shop floor correctly understands engineering designs at time of hand off is paramount if products are to be made correctly. One way to ensure effective communication and accurate comprehension on the shop floor is through the use of operational method sheets (OMS), which provide step by step instructions to shop floor technicians. Accurate and detailed assembly instructions can help ensure that products are assembled correctly, and reduce the costs associated with errors or defects found late in the process. During the creation of these OMS, designers and manufacturers can leverage AutoVue to discuss changes or issues in real-time and ensure correct understanding. Any changes can be noted with digital annotations, shortening the number of design to manufacturing iterations and reducing lead times.

### About Oracle's AutoVue Enterprise Visualization Solutions

Oracle's AutoVue solutions deliver visualization, digital markup & real time collaboration on product information. With AutoVue, internal and external stakeholders throughout the product value chain gain better visibility and collaboration on product information. Dispersed teams and outsourced partners can collaborate and visually communicate on product documents without risking IP, improving time to market, reducing errors, and making more informed, multi-disciplinary product related decisions.

For more information about AutoVue Visualization solutions, call 1-514-905-8400 to speak to an AutoVue representative, or visit <http://www.oracle.com/us/products/applications/autovue/index.htm>



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