

COMPLIANCE

ENOVIA Materials Compliance Central



ENOVIA® Materials Compliance Central™ enables companies to track, analyze, and report a product's environmental compliance. Product compliance engineers can view the material content information in the context of the product bill of materials (BOMs), and are able to cross-reference this data against multiple regulations.

Key Benefits

- Manage material data to meet customer and region specific compliance mandates
- Analyze a product's compliance and recycled content throughout the product development process
- Maximize the reuse of compliant components
- Rapidly assess product and supplier impact when new restricted substances are identified
- Initiate supplier material declaration requests, monitor supplier progress and accept/reject declaration submissions
- Integrate the supply chain for successful collection of compliance certifications and material composition
- Securely protect IP in the reporting process, and enforce consistency
- Integrate and analyze external BOM structures
- Improve data quality by establishing a material declaration collection standard across the supply chain
- Report product compliance to customers

Product Overview

Meeting environmental compliance throughout the product development process is a must for companies that operate globally. This is especially true for High Tech and Automotive manufacturers who must meet the European Union's (EU) Restriction of the use of certain Hazardous Substances (RoHS), Waste Electrical and Electronic Equipment (WEEE), Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), Packaging, and/or End-of-Life Vehicle (ELV) regulatory directives and similar directives emerging in Asia and North America.

Companies that adopt proactive environmental compliance strategies by integrating "Eco-Design" (Design for the Environment) technology alongside best-in-class product development business processes can realize a competitive advantage.

Until recently, most companies have been reactive to environmental regulations by conducting compliance reporting and analysis late in the product development cycle. This approach requires significant resources and is not integrated into the overall product lifecycle. By implementing ENOVIA Materials Compliance Central as part of an overall Product Lifecycle Management (PLM) strategy, companies can verify and integrate compliance regulations at every phase of the development process. Product companies can avoid late-stage design changes and explore ways of improving product designs while still meeting compliance requirements. Companies can also reduce or eliminate the use of hazardous materials and substances in their products, avoiding problems such as launch delays, recalls, fines, poor customer satisfaction, and a damaged public image.

Reports can be generated that compare the compliance of manufacturing equivalents, list recyclable content, or evaluate best- and worst-case manufacturing location scenarios.

Suppliers can be incorporated into the material compliance evaluation process to ensure the component library contains the most current material compositions and compliance certifications for supplied parts. The net result is delivering innovative and environmentally compliant products that meet global market demands.

Product Highlights

Materials Data Management

Companies can manage and maintain material composition for make and buy components without disruption to design or production schedules. The management and collection of material composition helps companies assess their compliance against RoHS regulations in the European Union, China, California, and South Korea, Joint Industry Guide (JIG) Annex A and B declarable substances, ELV, Global Automotive Declarable Substance List (GADSL) Prohibited and Declared, Packaging for EU and US, and REACH initiatives and scale to meet other emerging global regulations.

Materials Compliance Analysis

Engineers can generate part-level reports easily to help determine compliance with customer or regional requirements. A few of the pre-packaged analytic reports include: Substance Threshold, Compliance Scorecard, Bill-of-Material Analysis, Recycled Content for Energy Using Products (EuP), and REACH SVHC Analysis, REACH Substance Registration, REACH Intentionally Used Substances, and RRR (Reusability, Recyclability and Recoverability). Engineers can also analyze a product's compliance using what-if scenarios such as Make vs. Buy (internal vs. supply chain) using the Best/Worst Case Compliance Report.

Security and Intellectual Property (IP) Protection

Critical IP is protected throughout the data collection and reporting process. All access to data, reports, and application functionality is role-based to provide organizations with the necessary security levels.

Assess Impact of New Compliance

Using compliance definitions, compliance engineers can represent industry, regional, or customer directives consisting of substance (or substance classification) thresholds and exemptions defined at the material or part level. These compliance definitions can be scoped by part application so that compliance is computed or displayed only for parts applicable to the directive. As directives change or new directives emerge, compliance definitions can be updated or added so that engineers can assess the impact of these changes on the compliance of their products. Advanced “where-used” capabilities allow engineers to identify non-compliant components quickly within products. Engineers can then leverage extensive search capabilities to identify compliant alternatives.

Manage Supplier Material Declarations

Compliance engineers can initiate and send material declaration requests (with due dates and reporting instructions) to suppliers of outsourced components. Compliance engineers can monitor a supplier’s progress in reporting compliance and review, validate, and accept or reject received material declarations. Supplier representatives are notified automatically when a material declaration is accepted or rejected (including the reason for rejection).

Integrate the Supply Chain

With the optional ENOVIA® Materials Compliance Supplier Portal application, suppliers can view their assigned material declaration requests, download requested parts in a format compatible with industry standard reporting formats such as IPC 175x, JAMP AIS, JAMA/JAPIA, and ENOVIA® Materials Compliance Connect. In addition, suppliers can review customer reporting deadlines, and upload completed material declarations in these industry reporting formats. This standalone web application, which can be deployed outside the firewall, communicates with ENOVIA Material Compliance Central through a web services interface that authenticates users as a licensed supplier representative before providing access to material declarations.

Supplier Data Collection

Compliance engineers can collect material composition and certifications from the supply chain using industry standard formats including ENOVIA Materials Compliance Connect, IPC-175x (Version 1.1 and 2.0), JAMP AIS, JAMA/JAPIA, JGPSSI, and International Material Data System (IMDS). These files can be imported directly into ENOVIA Materials Compliance Central to create reported parts under material declarations. Once these received material declarations have been accepted, the reported part is copied directly to the manufacturer equivalent part to make it effective.

Determine Engineering BOM Compliance

Compliance engineers can associate material composition and compliance data directly with ENOVIA® Engineering Central™ enterprise and manufacturer equivalent parts. ENOVIA Materials Compliance Central rolls up data automatically through the design BOMs to determine the compliance of product designs in ENOVIA Engineering Central. Design engineers can view compliance information in ENOVIA Engineering Central with a license to the optional ENOVIA® X-BOM Materials Compliance product.

Integrate and Analyze External BOM Structures

Rule-based import capabilities allow compliance engineers to load product BOM structures and Approved Manufacturer List (AML) data from external systems (e.g. Enterprise Resource Planning [ERP]) into ENOVIA Materials Compliance Central. Material composition data can then be associated with parts, analyzed for compliance, and reported to customers.

Export of Product Compliance to Customers

The comprehensive export function of ENOVIA Materials Compliance Central allows compliance engineers to report compliance of products to customers using industry standard formats such as the International Material Data System (IMDS), IPC 175x, JGPSSI, JAMP AIS, ENOVIA® Materials Compliance Connect, and the generic Material Composition report (HTML or XML). Proprietary product information is protected in exports through automatic suppression of supplier identifying information (supplier names and part numbers), automatic roll up of compliance data by BOM level or selected leaf parts, suppression of trade name and manufacturer in materials, and substance filtering. Customer data such as the customer part number can be included in exports for selected customer programs.

IMDS Integration

Automotive companies that must report part compliance to Original Equipment Manufacturers (OEMs) using the International Material Data System (IMDS) can utilize ENOVIA Materials Compliance Central in all facets of the reporting process. ENOVIA Materials Compliance Central is integrated completely with the IMDS Advanced Interface (AI). ENOVIA Materials Compliance Central can download and import all IMDS configuration data such as Material Categories, Substances, Substance Applications, and Company IDs, and will associate this data to its corresponding objects.

Material Declarations created in ENOVIA Materials Compliance Central will trigger the automatic creation of IMDS Requests in IMDS, and any changes made to the Material Declarations will immediately trigger updates to the corresponding IMDS Requests. The ENOVIA Materials Compliance Central importer will recognize and import reported parts from suppliers that are contained in the IMDS daily download files.

Finally, companies can use ENOVIA Materials Compliance Central to report compliance data to OEMs using its automatic BOM data upload capability to IMDS. It can even direct IMDS to send the data to the OEM. ENOVIA Materials Compliance Central will track the IDs of all objects created in IMDS so they can be referenced in future uploads.

BOMCheck Integration

High-tech manufacturers that require that their suppliers to report material declarations via the BOMcheck system can access a download action in ENOVIA Materials Compliance Central to download supplier submissions directly from BOMcheck for specific suppliers or date ranges. These files are downloaded in IPC 1752 2.0 format, which can then be imported into ENOVIA Materials Compliance Central to create material declarations for manufacturer equivalent parts.

Review Materials Compliancy Status with ENOVIA 3DLive

The ENOVIA® 3DLive™ client can be configured with a compass quadrant devoted to materials compliance. The user can select the value of compliance (compliance definition) to be displayed and the representation of the part in ENOVIA 3DLive will be colored to reflect the compliance value.

The hover capability of ENOVIA 3DLive can be used to view additional information regarding compliance, including the exemption information if the part is compliant with exemptions. This capability is only available to the ENOVIA 3DLive user if they are also a licensed user of ENOVIA Materials Compliance Central, ENOVIA® X-BOM for Materials Compliance, or ENOVIA® Materials Compliance Experience.

The Role Of ENOVIA V6 And PLM 2.0

ENOVIA Materials Compliance Central supports PLM 2.0, product lifecycle management online for everyone, and the ENOVIA V6 values: global collaboration innovation, single PLM platform for intellectual property (IP) management, online creation and collaboration, ready to use PLM business processes, and lower cost of ownership.



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Europe/Middle East/Africa

Dassault Systèmes
10, rue Marcel Dassault
CS 40501
78946 Vélizy-Villacoublay Cedex
France

Asia-Pacific

Dassault Systèmes
Pier City Shibaura Bldg 10F
3-18-1 Kaigan, Minato-Ku
Tokyo 108-002
Japan

Americas

Dassault Systèmes
175 Wyman Street
Waltham, Massachusetts
02451-1223
USA

Visit us at
3DS.COM/ENOVIA

