



## Universal Data Models Repository For Manufacturing

*Save tremendous amounts of time and cost while increasing the quality of your data model and data warehouse design efforts.*

Universal Data Models offers a comprehensive best-practice data model repository for the manufacturing industry, providing best practice models and saving modelers and designers thousands of hours.

The models covered within manufacturing are:

- Manufacturing party roles and relationships.
- Parts and products
- Part specifications and documentation.
- Part specifications roles and status.
- Engineering changes
- Bill of materials
- Part Substitutions
- Inventory item configurations
- Manufacturing orders
- Product deployment and usage
- Process plan
- Production runs
- Product run star schema

Additionally, the generic Universal Data Models that apply to the manufacturing industry are included and customized for manufacturing in this repository. These include models for:

- People, organizations, parties, roles, relationships and contact management
- Products, goods, services, inventory control, pricing, costing
- Orders, agreements, requirements, quotes, and RFPs,
- Shipments, receipts, inventory issuances, routing, shipping documents, and logistics
- Work requirements, work efforts, project management, time and expense tracking
- Invoicing, accounts receivable, accounts payable, banking
- Accounting, budgeting, asset management
- Human resources, position fulfillment and tracking, compensation, benefits, payroll, skills tracking, performance and termination
- Star schemas for sales analysis, human resources, financial analysis, work effort analysis, logistics analysis, purchase order analysis and inventory analysis

These models have full documentation not only in the repository but also in the best selling "The Data Model Resource Book, Volumes 1 and 2" (Wiley, 2001), enabling people using this repository to understand the data model design choices, alternatives and example data that could be used to populate the models. In a very short period of time, over 15,000 of these books

have been sold worldwide and the industry model book is being translated into Chinese. The models in the repository are very similar to the models in the best selling book, except that they have been enhanced and improved over time as Universal Data Models continues to implement these models.

This repository has proven data model and data warehouse constructs which Len Silverston, lead author of the best-selling 'The Data Model Resource Book', has personally developed together with some of the leading data model experts in the industry.

Universal Data Models, LLC has successfully implemented these models in a great variety of small, medium and large organizations, helping them to build solid data architectures and saving tremendous amounts of money in the process.

Data objects stored in the repository include entities, entity definitions, attributes, attribute definitions, attribute characteristics (size, types, constraints, etc.), unique identifiers, relationships, domains, tables, table definitions, columns, column definitions, column characteristics (size, type, constraints), primary keys, indexes, and database constraints.

The Universal Data Model Repository has all the required elements to generate SQL immediately for the models included in the repository. Alternatively, one can make modifications to the data objects contained in the repository and generate new SQL, customized for your own organization.

The repository has 107 common, comprehensive, re-usable entity-relationship diagrams, 530 entities, 2021 attributes, with corresponding tables and columns for these entities and columns with definitions as well as domains and database constraints defining these data objects.

The current repository is maintained in Erwin software so that it can easily be maintained and/or transferred to other case tool formats.

For additional information, please contact:

Len Silverston  
Universal Data Models, LLC  
303.688.1412  
Fax 303.688.1413  
[www.univdata.com](http://www.univdata.com)  
email: info@univdata.com

*The information in this document is proprietary and copyrighted information of Universal Data Models and is not to be distributed to unintended recipients and should only to be used to evaluate licensing the UDM Repository.*