

# Aspen Manufacturing Master Data Model<sup>®</sup>

## Contextualize Operational Data Across the Entire Enterprise

Aspen Manufacturing Master Data Model (Aspen mMDM) is a master data management application that delivers structure and a repository for organizing information about manufacturing operations—including hierarchical relationships among physical assets, asset categories, product families, groups and Stock Keeping Units (SKUs). It enables users, applications and systems to easily interact with data from various sources. Aspen mMDM is included with Aspen InfoPlus.21<sup>®</sup> (Aspen IP.21) with no additional licenses required, providing contextual structure to Aspen IP.21 tag data out of the box.

## Key Benefits

### Accelerated Data Discovery and Visualization

Integrates with aspenONE<sup>®</sup> Process Explorer<sup>™</sup> (a1PE), AspenTech's standard visualization tool, for easy data discovery and intuitive navigation through the a1PE web-based environment. Enables users and systems to easily interact with the data and accelerates the creation of graphics using graphical templates.

### Contextual Structure

Searches for Aspen IP.21 and third-party historians tag data and collects information about assets from upper levels down to specific equipment types. Provides an organizational structure that defines parent-child relationships between various components across the enterprise.

### Central Place to Store Information

Provides a web service interface that allows for easy configuration of objects, and imports and stores data related to assets, equipment, their properties and hierarchies into a central place. Helps users see the changes to any configuration and manage data queries and requests.

### Data Modeling Platform

Works as a data schema for mapping data in and out of the Aspen IP.21, resolving different naming conventions, aggregations and hierarchies. Provides a consistent data access pattern to help various business applications exchange information.

## Key Capabilities

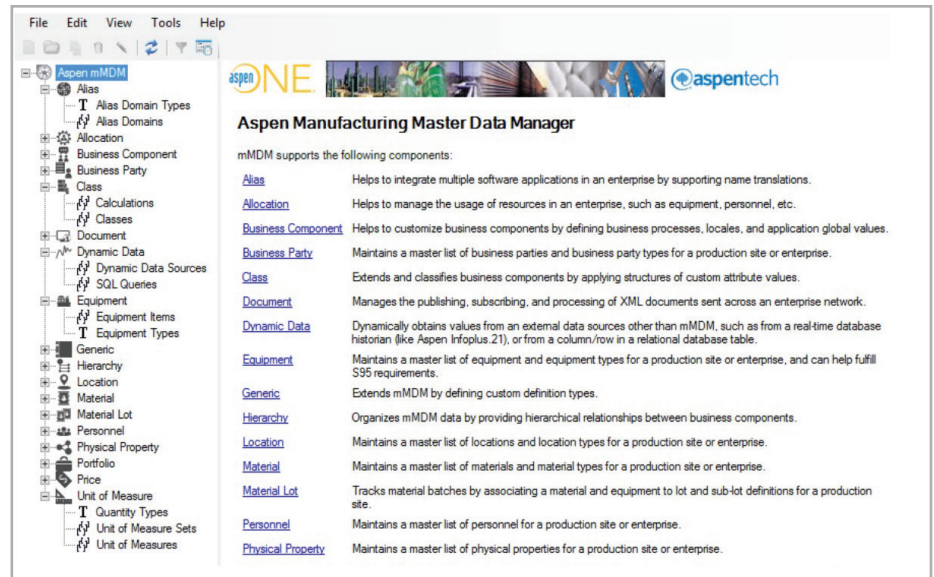
- Integrates with the following AspenTech products:
  - aspenONE Process Explorer
  - Aspen InfoPlus.21
  - Aspen Calc<sup>™</sup>
  - Aspen Petroleum Supply Chain<sup>™</sup>
  - Aspen PIMS<sup>™</sup>
  - Aspen Operations Reconciliation and Accounting<sup>™</sup>
  - Aspen Tag Browser<sup>™</sup>
  - Aspen Production Execution Manager<sup>™</sup>
- Collects wide variety of information about assets such as engineer specifications, operating limits, references to process data, materials and material lots, physical properties, locations, personnel, Units of Measure (UoM), pricing and aliases
- Searches for any KPI, SPC and OEE tag data, and through indices for all charts, trends and graphics where those tags are referenced and associates these with assets
- Easily creates a set of graphs that can be templated to represent various pieces of equipment
- Supports versioning, effective dates, data distribution and external master synchronization

## Use Case

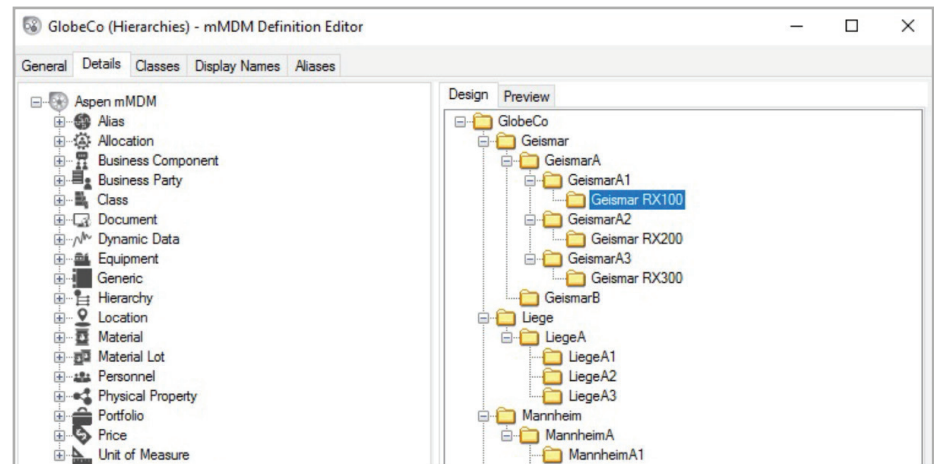
**CHALLENGE:** A global chemical company owns hundreds of distinct manufacturing assets with several process variables associated with each, as well as multiple derived or calculated process metrics of interest to various roles within the enterprise. The company is challenged with integrating disparate software systems, with each maintaining its own silos of data. Often, these systems have proprietary naming conventions and data access mechanisms to support timely business decision-making. A lack of a truly integrated solution has resulted in delayed and over budget deployment, higher operations and maintenance costs, and lost business opportunities.

**SOLUTION:** Aspen mMDM provides the company's management a complete and consistent enterprise master dataset in one secure place. It integrates versioning, audit trail and history logging, and role-based security support with easy configurability and extensibility. Aspen mMDM eliminates the need for data mapping/aliases because all of the company's data is clearly defined and accessible in the correct format to be used easily across roles, applications and systems.

**RESULT:** With the help of Aspen mMDM, the company can now aggregate different enterprise applications, integrate tag data for multiple assets, eliminate inconsistent or duplicated data, and reduce the cost of product data errors, resulting in lower operating and maintenance costs, and faster business decision-making.



The Aspen mMDM Editor provides a wide variety of objects and definitions that can be used to create asset hierarchies.



The Asset Navigation feature enables mapping of content (graphics, plots, trends, etc.) and makes all assets accessible in a hierarchy.

AspenTech DataWorks is the global leader in industrial data management from the plant floor to the board room.  
Our mission is to accelerate data-driven value creation in the asset- intensive industries we serve.

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