

# Recipe Exchange

Parameter	HIGH MATERIA	HIGH MATERIA	HIGH MATERIA	STANDARD
AGITATE_TIME	<10>	<10>	<10>	<10>
MAT1_AMOUNT	144.000000	50.000000	144.000000	50.000000
MAT2_AMOUNT	20.000000	100.000000	100.000000	50.000000
MAT3_AMOUNT	20.000000	14.000000	18.000000	-20.000000
OPER_PROMPTS	<0>	<0>	<0>	<0>
TK1_LEVEL	<700.000000>	450.000000	<700.000000>	250.000000
TK2_LEVEL	450.000000	<700.000000>	<700.000000>	-250.000000
TK3_LEVEL	450.000000	450.000000	450.000000	250.000000

Procedure

↓

Unit Procedure

↓

Operation

↓

Phase

Recipe Exchange provides an open interface for the import/export of DeltaV recipes.

- Open interface for import/export of DeltaV recipes using XML schema
- Supports all recipe levels
- Formula data may be imported independently or with recipes
- Service-Oriented Architecture Web Service enables easy integration to assign recipes and initiate downloads

## Introduction

Recipe Exchange provides an open, programmatic interface to the DeltaV recipe management system. The Recipe Exchange interface is based on an XML schema that provides the ability to programmatically import and export DeltaV recipes.

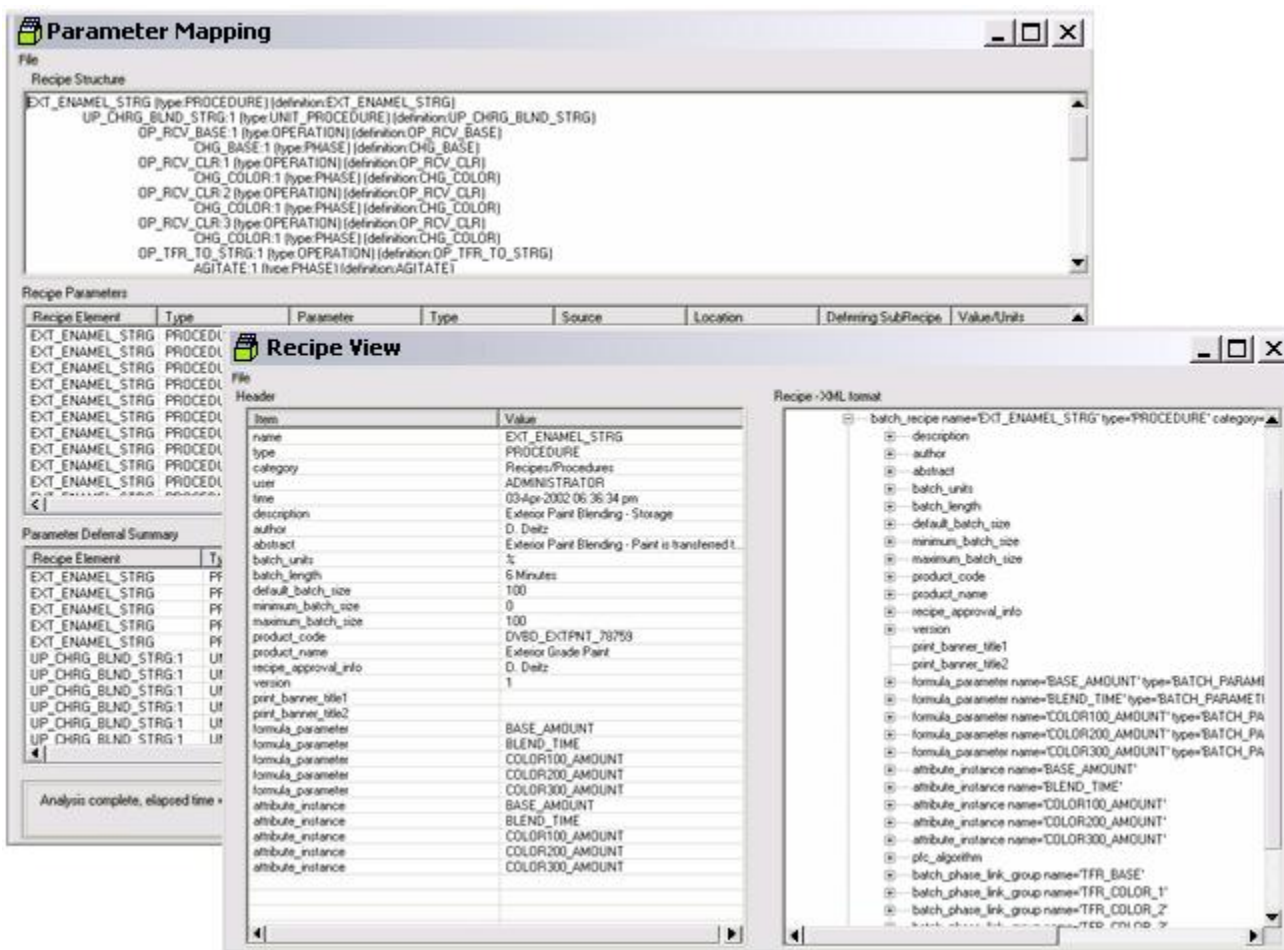
### Benefits

**Open interface for import/export of DeltaV recipes using XML schema.** The recipe exchange XML schema gives you the freedom to create and maintain flexible recipe management tools for the import/export of DeltaV recipes.

**Supports all recipe levels.** Recipes, including procedures, unit procedures, operations, and formulas are supported.

**Formula data may be imported independently or with recipes.** The recipe exchange XML schema allows formula data to be imported independently or with recipes. For example, large and complex formulas can be created or edited with other applications and then imported into DeltaV.

**Service-Oriented Architecture Web Service enables easy integration to assign recipes and initiate downloads.** The Recipe Exchange SOA Web Service provides the ability to programmatically assign recipes and initiate the download to one or more Batch Executives.



Example application developed using provided XML schema.

### Product Description

Recipe Exchange provides you with everything you need to build your own recipe development and management tools. Development time is reduced with the provided XML schema and SOA Web Service.

This allows you to use other productivity enhancing or custom application tools for creating DeltaV recipes (procedures, unit procedures, operations, & formulas). For example, by creating your own recipe management tool, you can import recipes created by a batch process modeling package directly into DeltaV.

Some customers prefer to develop general recipes that are equipment independent for use at different manufacturing sites. Using your recipe management tools, the general recipes could be imported at specific sites and customized to meet their needs, reducing the overall recipe development effort. Recipes could also be shared among different sites.

Recipe Exchange provides an SOA Web Service to programmatically assign recipes and initiate the download to one or more Batch Executives. For example, an MES or ERP system could be programmed to assign and download recipes based on production requirements.

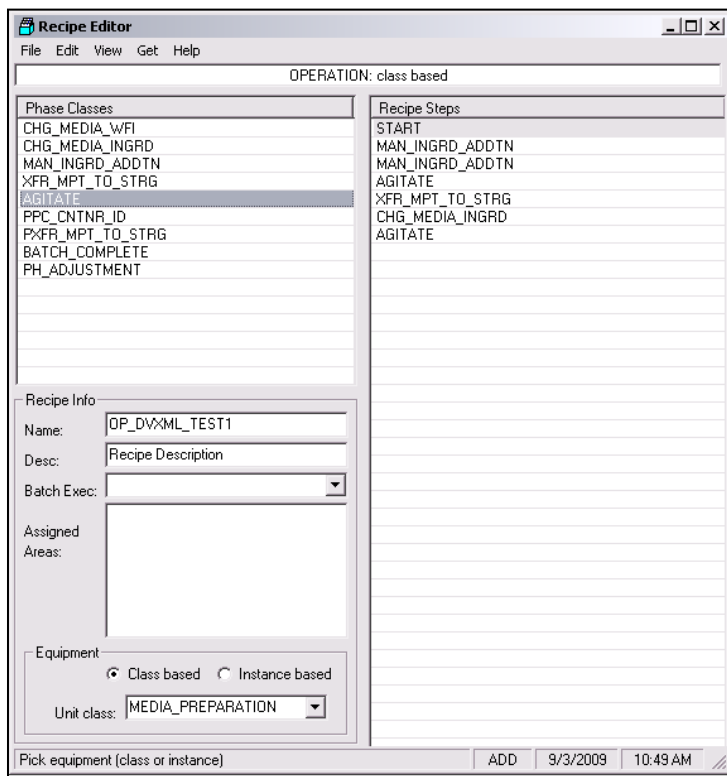
### Programming Considerations

Remember that any external recipe management application that you construct will ultimately need to supply the same data as the vendor's does. This may impact the scope and effort required to develop your recipe management application. The ability of your organization to undertake a software development project should be considered.

Moving recipes between different systems and manufacturing sites may create a variety of new validation issues that should be evaluated.

### System Compatibility

The Recipe Exchange Service-Oriented Architecture Web Service is compatible with DeltaV v10.3 and later.



Allows users to develop tools for importing recipes created by other systems.

## Ordering Information

Recipe Exchange is included in the following DeltaV Batch software suite:

Description	Model Number	
	pre-v9.3	v9.3 and later
DeltaV Professional Batch*	VE2236Sxxxxx	VE2240Sxxxxx

Where xxxxx is equal to the total number of batch DSTs in the system. xxxxx is available from 250 to 30,000 DSTs in 250-DST increments.

\*For additional information on the DeltaV Batch software suites, refer to the DeltaV Basic Batch, DeltaV Advanced Batch, and DeltaV Professional Batch product data sheets.

## Related Products

- **Batch Executive.** The batch engine which coordinates all batch processing activity, creates detailed batch history records and schedules recipes and resources.
- **Batch Historian.** Automatically collects and stores batch recipe execution data from the DeltaV Batch Executive and process alarm and event data from the DeltaV Event Chronicle.
- **Batch Redundancy.** Enables redundant DeltaV Batch capabilities for the Batch Executive and Campaign Manager, including automatic switchover to protect your batch operations from disruptions.
- **Campaign Manager.** Creates and manages a campaign by specifying the recipe, formula, equipment, and number of batches that are to be run within the campaign. A Service-Oriented Architecture Web Service is available to enable production-scheduling packages to initiate the creation of campaigns in the DeltaV system.
- **Configuration Audit Trail.** A powerful tool that tracks changes and manages revision information for any item in the DeltaV configuration database, including Safety Instrumented System (SIS) items.
- **Recipe Studio.** Powerful yet simple to use application for graphically configuring recipes (with formulas) for successful batch production.
- **Syncade™ Smart Operations Management Suite.** A new class of real-time production management software, provides an easy, flexible, integrated solution that increases plant performance by efficiently managing plant materials and equipment, coordinating production operations, improving quality operations and integrating plant information.

## Prerequisites

- A DeltaV ProfessionalPLUS Station on a system licensed at the Professional Batch level.

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