

# Routing & Dispatching



Defines the process and rework flows as well as it provides step and resource level dispatch rules

## Overview

In any manufacturing environment, it's necessary to define in a controlled manner the different process flows that can be assigned to products and materials. These process flows can also include rework flows to recover material from certain problems.

Dispatching provides a mechanism to define flexible material sorting rules for a step or for a resource so that the operator

knows what is the next material to be processed, or the next resource for a material. Dispatching works based on services. Resources provide services and materials require services at certain processing contexts (Step, Flow, Product, etc.). When there is a match between the service required by the material and the service provided by the resource, the material can be dispatched and processed in that resource.

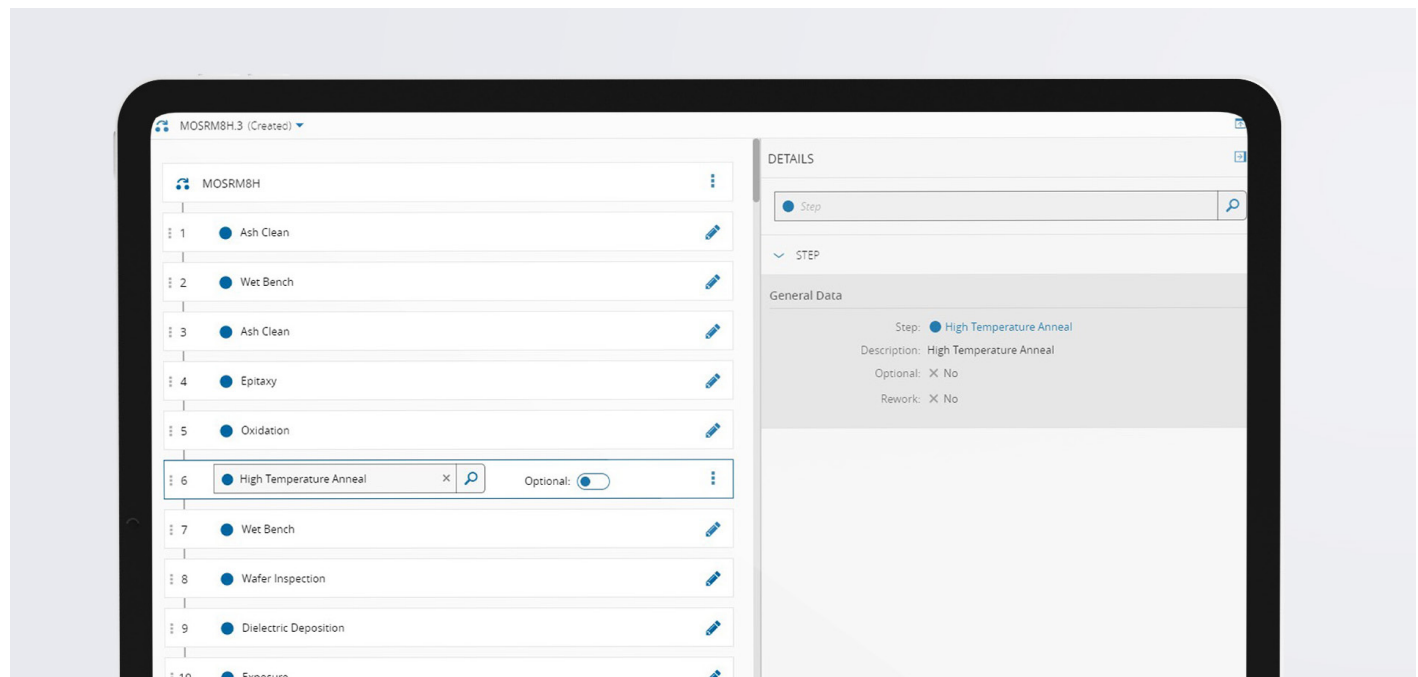


Figure 1 Flow definition

## Key Features

- Support for flow version management with access and change control.
- Support for hierarchical flows that contain other flows in order to promote flow re-usability.
- Support for alternate flows, alternate steps, and optional steps.
- Support for non-sequential flows which means that the steps of the flow can be performed in any sequence.
- Support for multiple rework paths at every flow-step combination. A rework path defines a go-to and return point.
- Support for flexible dispatch sorting rules, using predefined or user created rules.
- Support for push (what's next for material?) and pull (what's next for resource?) dispatch rules.

## Benefits

- Increased process control
- Increased process automation
- Reduction in the opportunity for errors

The screenshot displays the 'Main Production Flow' interface. The left sidebar shows a hierarchical flow structure with steps: 1. Mixing, 2. Moulding, 3. Baking, 4. Cooling (selected), 5. Baking-2, 6. Cooling-2, and 7. Packing. The central panel shows 'Flow Details' for 'Main Production Flow' and 'Step Details' for 'Cooling'. The right panel shows 'Context View' with fields for Product, Product Group, Material, Material Type, Resource, and Resource Type, each with a search icon. A 'Clear All' button is at the bottom of the Context View panel.

Figure 2 Flow Structure View