Shift Planning

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Shift Planning

Estimated time to read: 4 minutes

Overview

Production staffing needs to match both the work scheduled for a shift and the qualifications of the available employees. Shift Planning in Critical Manufacturing MES connects the production calendar, team assignments, and personnel requirements so planners can identify gaps and adjust coverage.

Start with Shift Planning Configuration to prepare the **Calendar**, **Teams**, **Employees**, qualifications, and staffing requirements. Then learn to navigate the **Shift Plan** calendar and interpret its different day types before applying that knowledge to employee absence coverage.

Info

Shift Plans are part of Labor Management, an optional module of Critical Manufacturing MES.

Learn with the configuration or use the prepared model

A master-data file with the tutorial model is available in Shift Planning Configuration. To better understand how the Calendar, Teams, Certifications, and Shift Plan work together, follow the configuration steps. Use the prepared model if you want to focus on the scenarios.

Target Audience

Production planners and Labor Management administrators who configure shift rotations and manage employee staffing and qualifications.

Prerequisites

- Access to Critical Manufacturing MES with the Labor Management module.
- An administrator account to prepare the model and planner access as described in Shift Planning Configuration.
- Complete Shift Planning Configuration or use its prepared master data before starting the scenarios.

Learning Path

Stage	What you will learn
Shift Planning Configuration	Configure the production context, **Calendar**, **Teams**, **Employees**, **Certifications**, **Workgroups**, and **Shift Plan**.
Calendar Day Types	Learn to navigate the **Shift Plan** calendar, recognize its day types, and understand the changes represented by each state.
Cover Employee Absence	Record an absence, temporarily assign a qualified replacement, and verify coverage.

Table: Shift Planning learning path

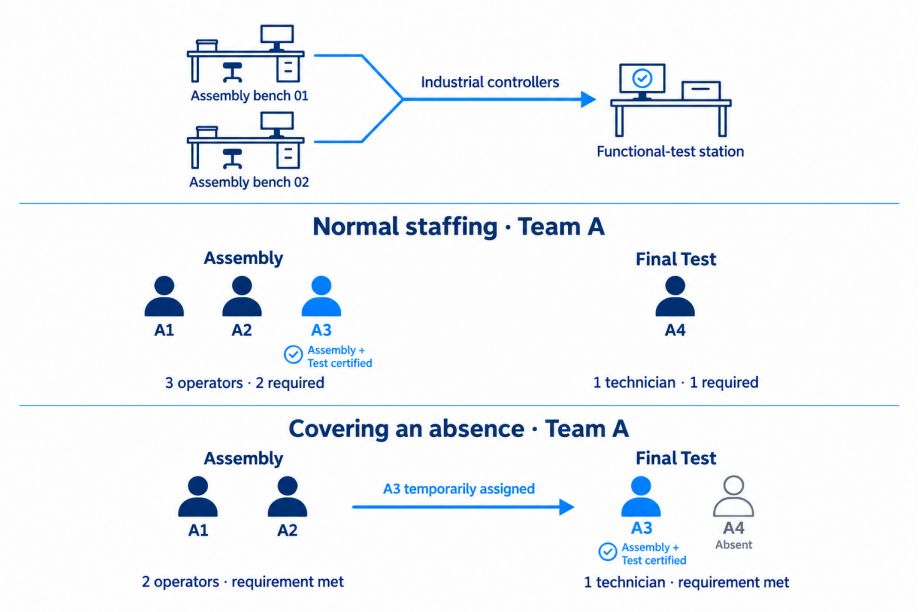
The production **Flow**, **Steps**, and **Resources** provide context, but no **Product**, **Material**, or production transactions are required.

Advanced Planning and Scheduling, trainee authorization, custom working-time rules, and shift logbooks are outside the scope.

Use Case

At Northstar Electronics, two assembly benches feed a functional-test station for industrial controllers. Production runs continuously, with each shift requiring two Assembly Operators and one Test Technician.

Each **Team** has three Assembly Operators and one Test Technician. One Assembly Operator also holds the Test Technician **Certification**. When the regular Test Technician is absent, that **Employee** can cover Final Test while two operators remain in Assembly.



Four **Teams** rotate across the three shifts, leaving one **Team** off each day. This provides continuous coverage and scheduled days off within a repeating eight-day cycle.

Operating assumption	Selected model
Production week	Seven days per week, with all three shifts operating each day.
Shifts	Midnight-8:00 AM, 8:00 AM-4:00 PM, and 4:00 PM-midnight.
Teams and **Employees**	`TeamA` through `TeamD`, each with four **Employees**: `A1`-`A4`, `B1`-`B4`, `C1`-`C4`, and `D1`-`D4`; plus a Controller Planner.
Required staffing per shift	`ControllerAssembly`: two Assembly Operators; `ControllerFinalTest`: one Test Technician.
Normal staffing per **Team**	**Employees** 1, 2, and 3 work in Assembly; **Employee** 4 works in Final Test. **Employee** 3 holds both Assembly Operator and Test Technician **Certifications**.
Rotation cycle	Cycle of eight days; each **Team** works two shifts of each number and then has two days off.

Table: Operating assumptions

Teams determine which **Employees** follow each shift rotation. **Workgroups** define where staffing is needed. Each **Workgroup** requires positions associated with **Certifications**, which determine which **Employees** are qualified to fill them.

Next Steps

1. Shift Planning Configuration - prepare the model or use the supplied master data.
2. Calendar Day Types - inspect the calendar day types.
3. Cover Employee Absence - cover an absence with a qualified temporary assignment and verify staffing.

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