



Production management



Syntheticis

Production management challenges





Real-time production control

- **Create a production plan**
 - From the line load
- **Adjust scheduling**
 - Based on the real situation at the plant
- **Synchronise workshops**
 - Plan in order to have semi-finished products available on time
 - Plan preparations accordingly
 - Continuously manage the saturation level of intermediate storage
- **Manage the schedule**
 - Nights, planned shutdowns, maintenance etc.

Monitor the operation of the equipment

- **Precisely measure “losses”**
 - Free stops
 - Micro stops
 - Slow-downs, sub-speed working, no-load working etc.
 - Ejected products, discarded products etc.
- **Make the user’s life easier**
 - Manual adjustment
 - Automatic adjustment etc.
- **Dashboards available**
- **Perform loss analyses**
 - In Pareto and in performance curves
 - Per workshop, line, machine etc.
 - Per product family, format etc.

Ensure quality Control production Record traceability

- Perform paperless self-checks
- Record paperless traceability information
- Simplify quality measurement
- Integrate complete control of components
- Manage critical control points





Manage flows

- Guide logistics to ensure continuous just-in-time supply
- Automatically anticipate material supply
- Manage SGVs (self-guided vehicles)

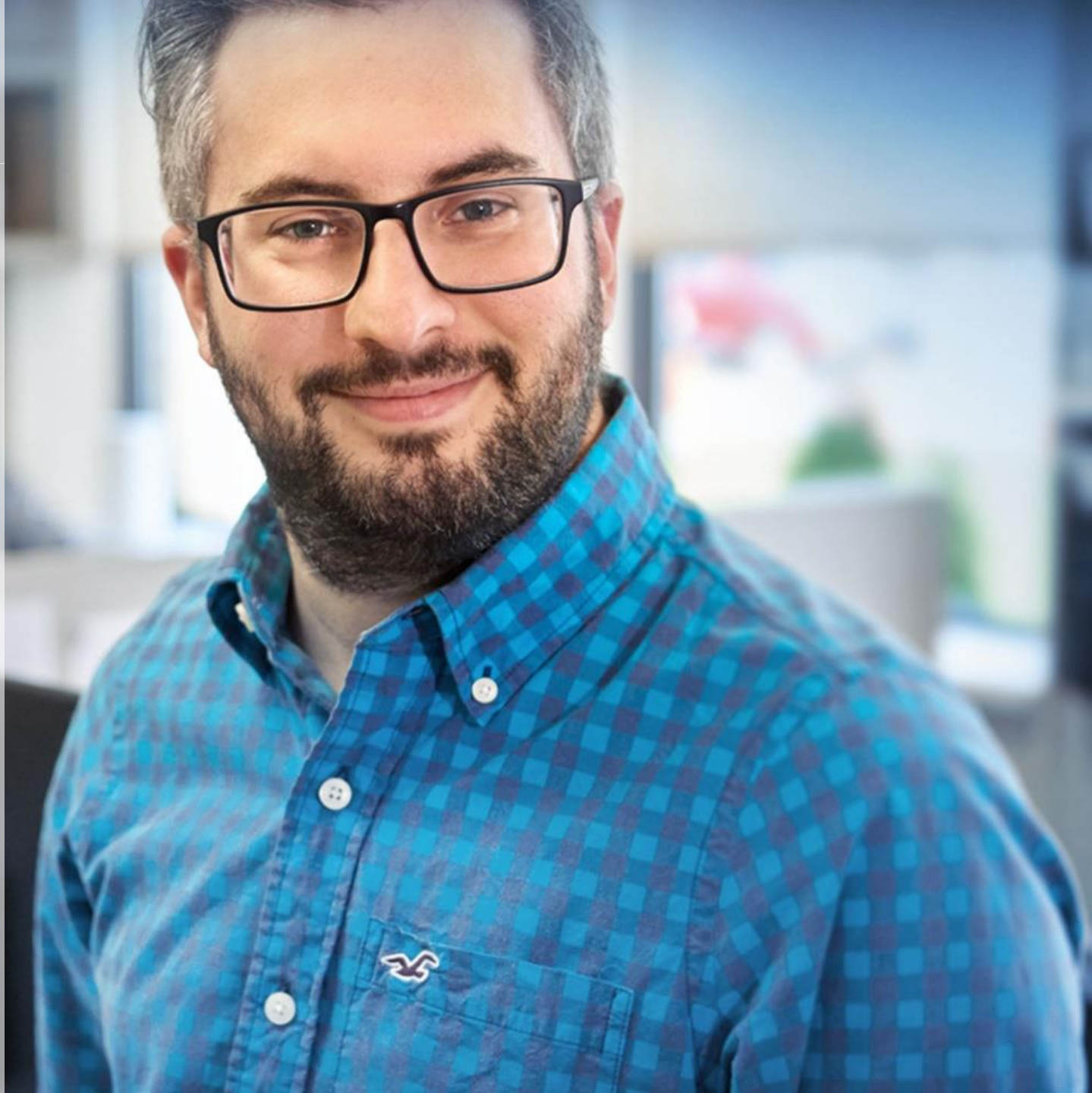


Control the process

- **Send recipe settings to the automation**
- **Synchronise manual actions with recipe progress**
- **Model the process to optimise the formulation**

Procedure management

- **Have up-to-date instructions in real time**
 - Recipes...
 - Self-maintenance...
 - Adjustment instructions...
- **Aim for a paperless workstation**



Action plan & log book

- **Keep a record of the flow of information between teams**
- **Formalise action plans over time**





Modular software offer

- **Cockpit Scheduling** – Real-time production control
- **Cockpit Performance** – Monitoring equipment operation
- **Cockpit Control** – Quality, production, traceability
- **Cockpit Logistics** – Flow management
- **Cockpit Execution** – Process control
- **Cockpit Document** – Procedure management
- **Cockpit Plan** – Action plan & logbook

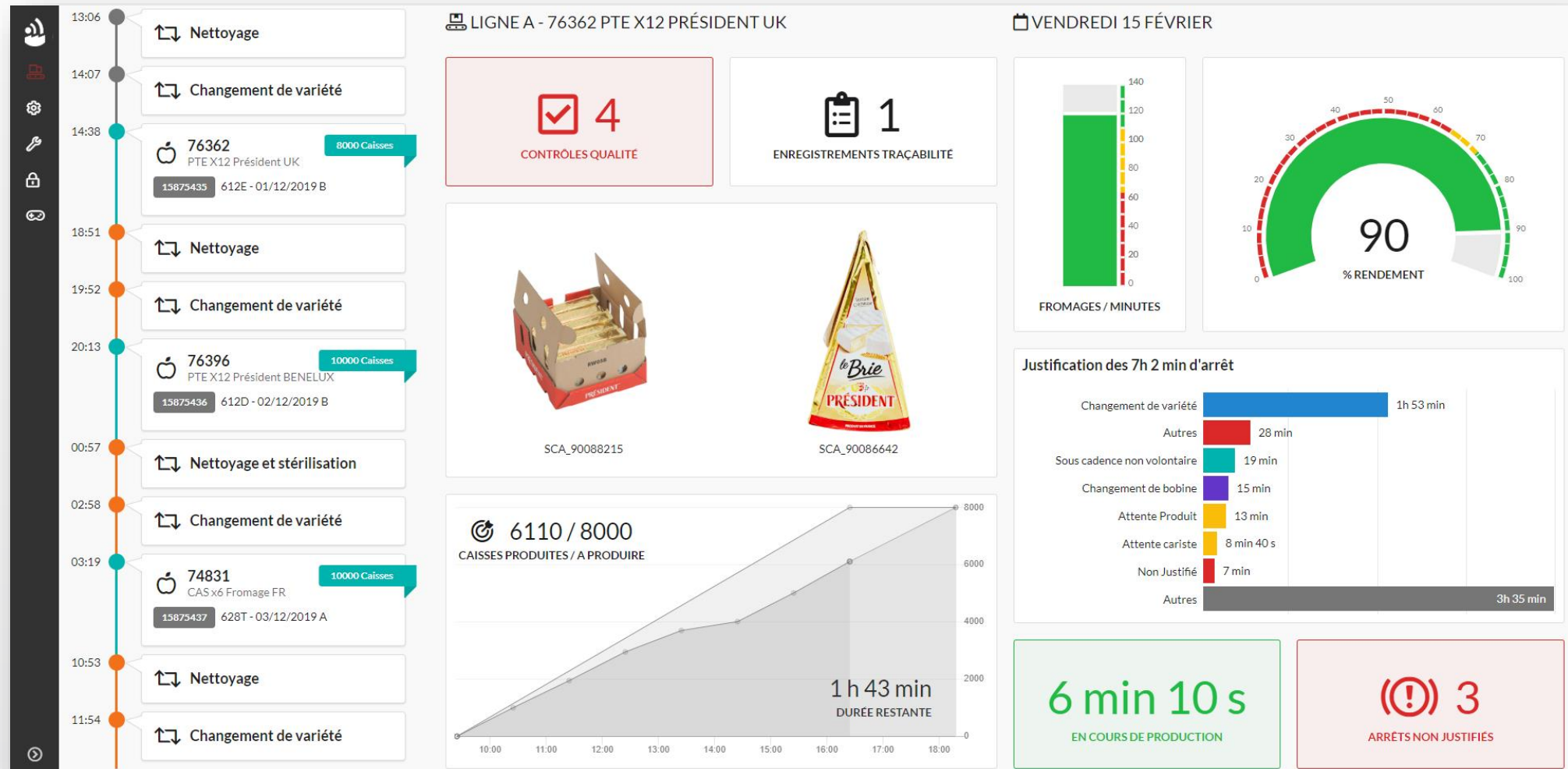
Cockpit fits your situation

- **Configurable display for**
 - Touch panel
 - Large display
 - Website etc.
- **An increasing number of mobile terminals in workshops!**

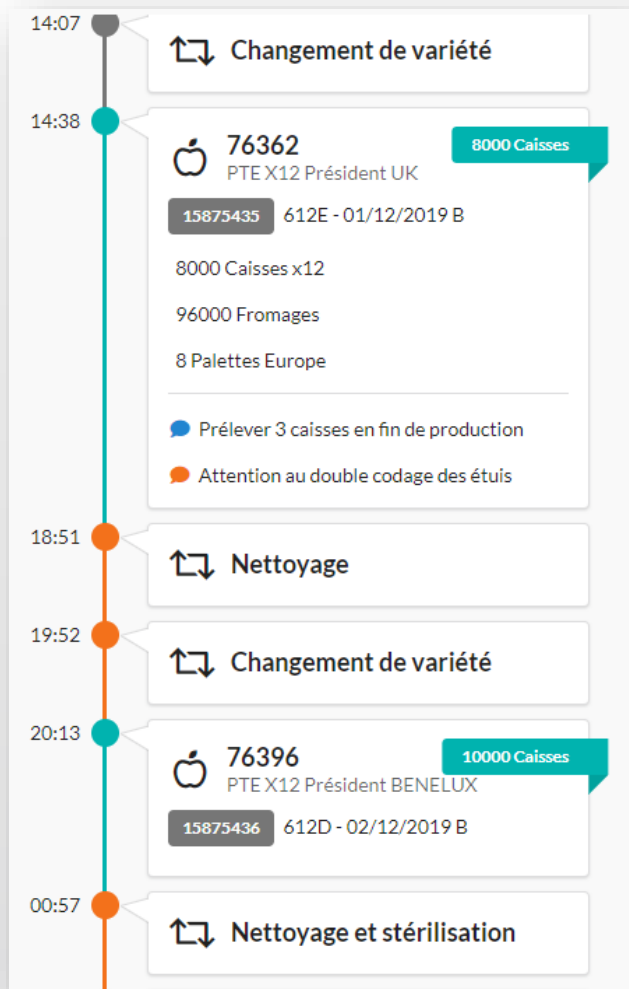
Synthetic approach

- **Product offer**
- **Software can be extended to integration**
 - To adapt to your particular context
- **Configuration by the key user**
 - Business approach with IT support and not the other way around!
- **Long-term stability**
 - Software support
 - Application maintenance
- **Assistance in project management**

Operator Dashboards

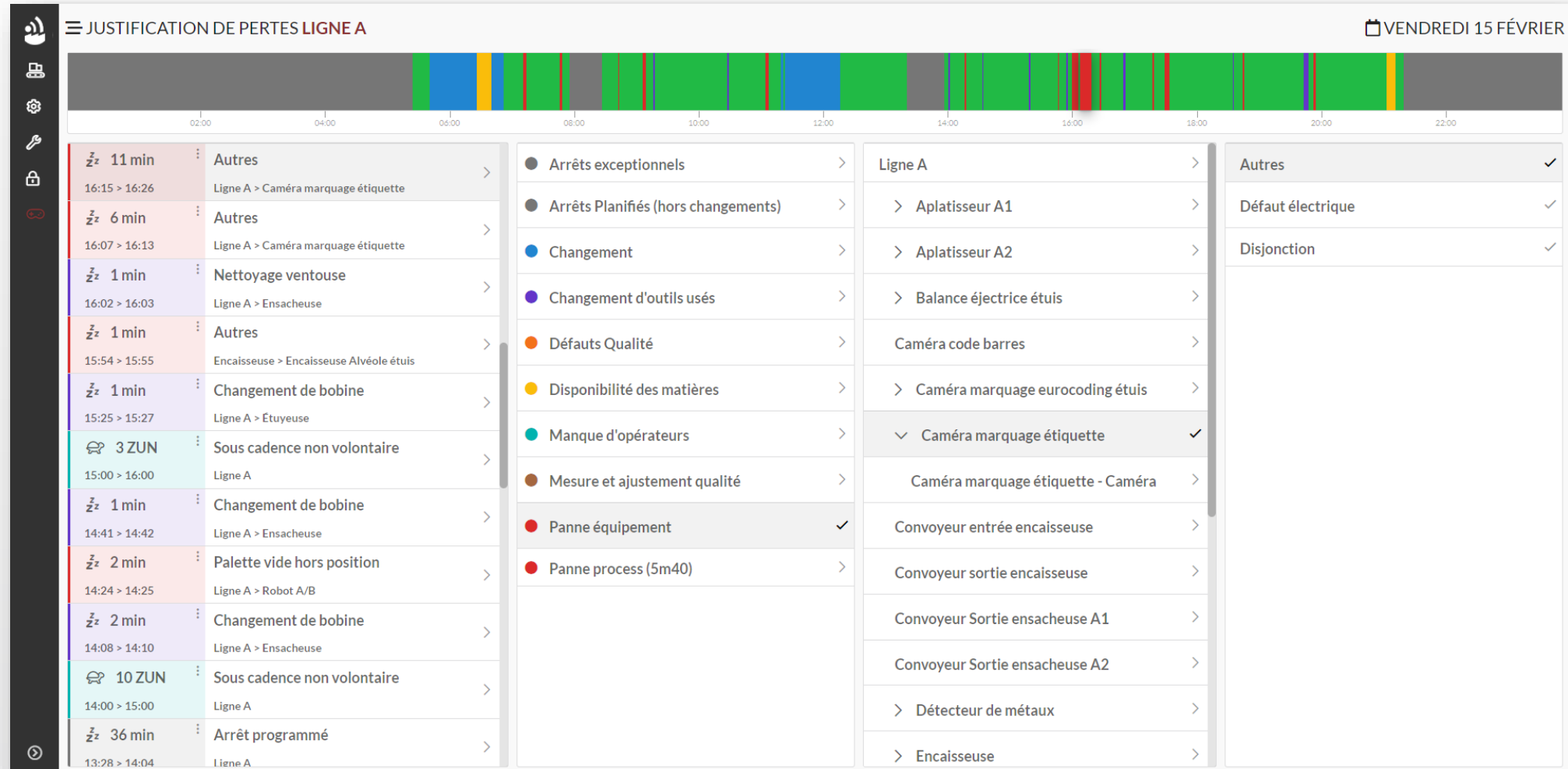


Operator Dashboards– typical example

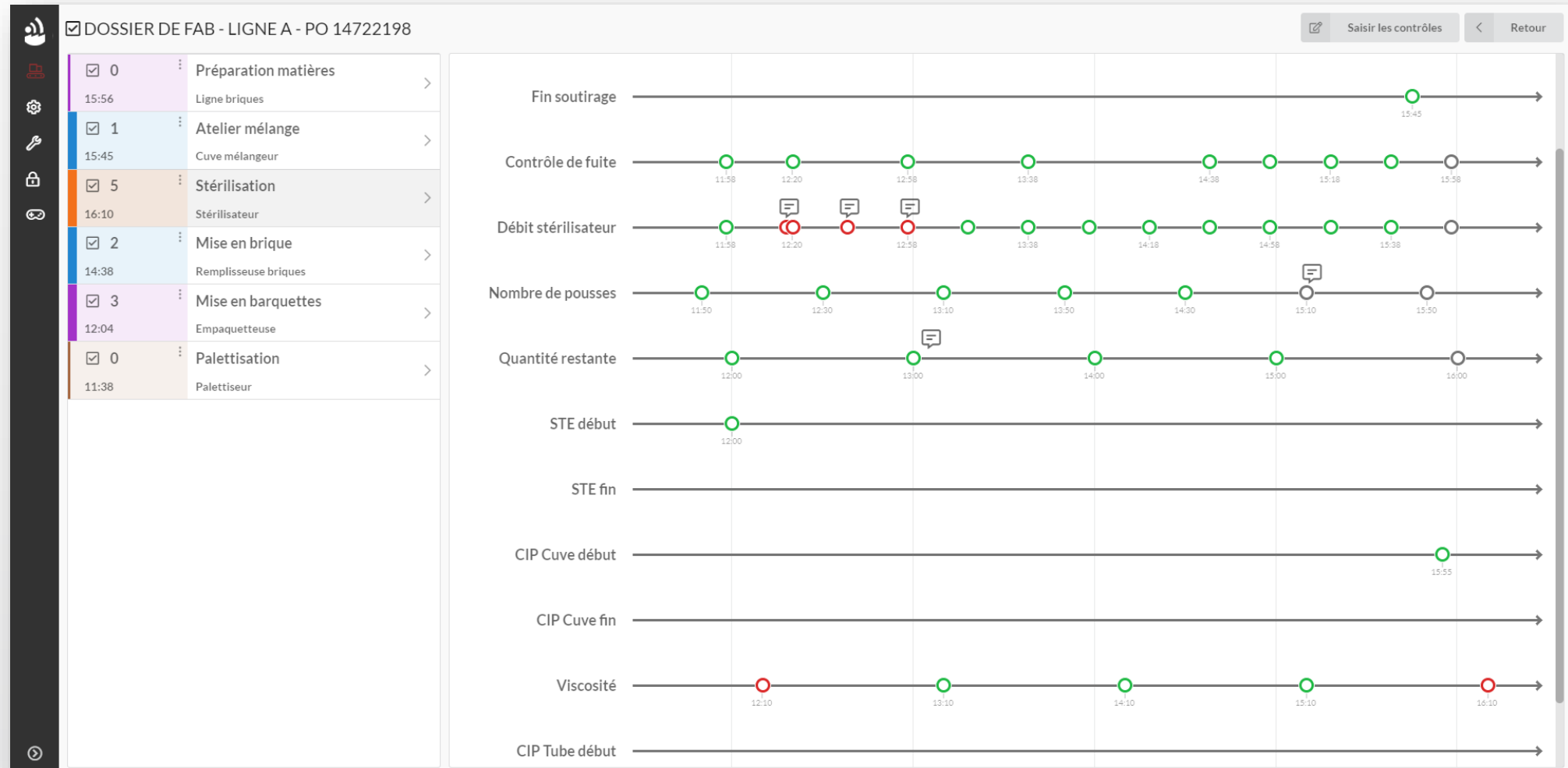


- **Run of the day**
 - Detail of production and change activities
- **Manufacturing in progress**
 - Access to controls and traceability
 - Graph of the march with end projection
 - Component visuals
- **Current position**
 - Performance
 - Pareto
 - Access to justification of losses

Cockpit Performance



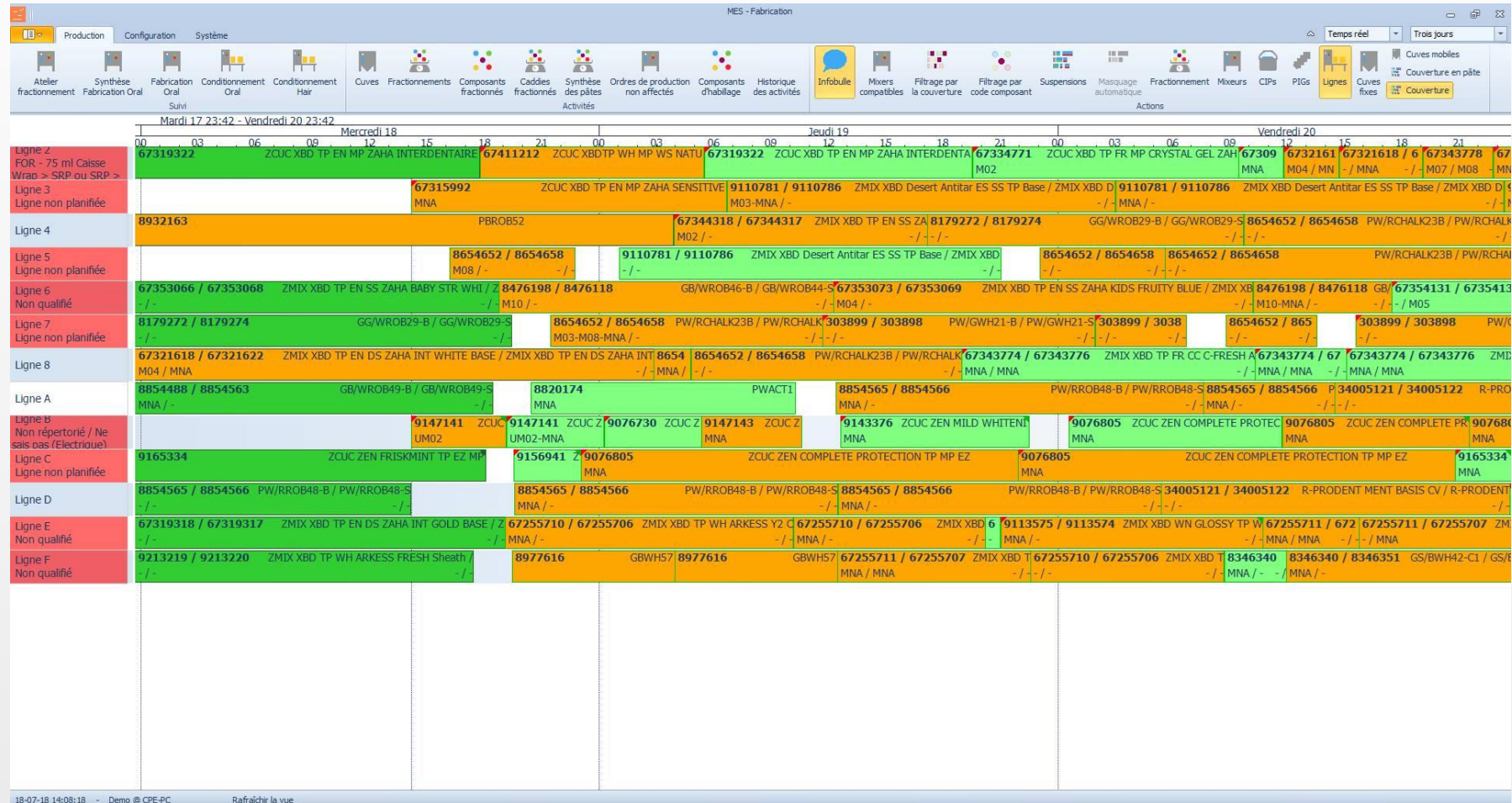
Cockpit Control



Cockpit Control

DOSSIER DE FAB - LIGNE A - PO 14722198		Enregistrer		Annuler		
0	Préparation matières Ligne briques	Début soutirage	15:15 Conforme	Conforme	Non Conforme	Commentaire
1	Atelier mélange Cuve mélangeur	Fin soutirage	15:45 Conforme	Conforme	Non Conforme	Commentaire
5	Stérilisation Stérilisateur	Contrôle de fuite	14:58 Conforme	Conforme	Non Conforme	Commentaire
2	Mise en brique Remplisseuse briques	Débit stérilisateur	14:58 Conforme	Conforme	Non Conforme	Débit insuffisant vanne bouchée
3	Mise en barquettes Empaquetteuse	Nombre de pousses	14:30 Conforme	Conforme	Non Conforme	Commentaire
0	Palettisation Palettiseur	Quantité restante	12:00 Conforme	Conforme	Non Conforme	Commentaire
		STE début	12:00 Conforme	Conforme	Non Conforme	Commentaire
		STE fin		Conforme	Non Conforme	Commentaire
		CIP Cuve début	15:55 Conforme	Conforme	Non Conforme	Commentaire
		CIP Cuve fin		Conforme	Non Conforme	Commentaire
		Viscosité	16:10 Non Conforme	Conforme	Non Conforme	Commentaire

Cockpit Scheduling



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