



ATS Global B.V.

# Digital Manufacturing for a Coffee Roasting Facility

*A European leader in coffee, tea and instant drinks chose Siemens Simatic IT MES to register and support their day-to-day manufacturing operations in their coffee roasting facility in The Netherlands.*



## Introduction

The European leader in coffee, tea and instant drinks chose Siemens Simatic IT MES to register and support the day-to-day manufacturing operations in their coffee roasting facility in The Netherlands. The coffee roasting facility produces a high volume of Finished Goods that are shipped to hundreds of retail locations across Europe. ATS integrated Simatic IT MES into their daily operations and drove the project through the entire lifecycle from kick-off through to go-live.

Starttijd	Eindtijd	Duur	Tijds categorie	Productie Lijn	Reden	Opmerking
07-05 00:01:55	07-05 00:06:33	00:04:38	Own Downtime	VPI-2	Overig > Uitstoot Verwerken	leegdraaien
07-05 00:08:46	07-05 00:11:59	00:03:12	Own Downtime	VPI-2	Overig > Overig	leegdraaien en afsluiten
07-05 00:11:59	07-05 00:14:10	00:02:11	Own Downtime	VPI-2	Overig > Overig	randgebeuren
07-05 00:14:10	07-05 00:48:01	00:33:51	Scheduled Dow...	VPI-2	Overig > Ordenwissel	
07-05 00:56:45	07-05 01:06:51	00:10:06	Own Downtime	VPI-2	Overig > Assistentie elders	
07-05 01:07:49	07-05 01:10:37	00:02:48	Own Downtime	VPI-2	Vulmachine > Technische storing (omschrijv...	ophopping
07-05 01:11:01	07-05 01:13:03	00:02:02	Own Downtime	VPI-2	Stapelaar > Technische storing (omschrijven)	te zwaar

## The Initial Customer Need

- ▶ Integration with the existing ERP system
- ▶ Product Traceability
- ▶ Advanced Warehouse Management
- ▶ OEE Visibility & Downtime Management

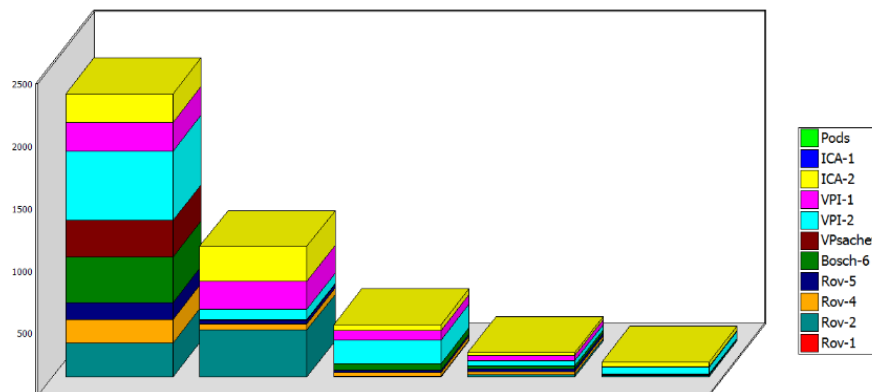
## The ATS Solution

Implementation of a Digital Manufacturing solution based on:

- ▶ Siemens Simatic IT Production Suite
- ▶ Siemens Simatic IT Process Libraries
- ▶ Siemens Simatic NET OPC server

## The Resulting Benefits

- ▶ Increased visibility into production operations
- ▶ Real-time inventory levels of Raw Materials and Finished Goods
- ▶ Reduced paperwork (digital data collection)
- ▶ Transparency about causes for downtimes
- ▶ Streamlined warehouse material movements
- ▶ Elimination of the isolated applications and data silos



## Project Details

- ▶ SIMATIC IT MES has been integrated with the ERP system at the Coffee Roasting Facility, to automatically download Material Master Data, Purchase Orders, Work Orders and Storage Locations.
- ▶ The interface between ERP and MES is also being utilized to make Operating Procedures available to the shop floor personnel in a digital format. The Electronic Work Instructions can be viewed directly on screen by multiple people simultaneously and as often as desired. This supports conformation of company standards and increases product consistency.
- ▶ SIMATIC IT MES has been integrated with the production equipment on the shop floor to register production events and machine downtimes, resulting in production performance data to monitor KPI's.
- ▶ SIMATIC IT MES has been integrated with the Date Coders and Label Printers to ensure the correct Use-By-Date and Production Lot is printed on the bags (sales units) and boxes (SKUs).
- ▶ Production (status) visibility has increased dramatically: Supervisors and operators have real-time insight into production status from anywhere in the plant using the HTML5 based portal.
- ▶ Warehouse operations have been streamlined and optimized: Automatic assignment of warehouse locations based on business rules for incoming Raw Materials and produced Finished Goods streamlines internal transportation of pallets that are being moved around in the plant.
- ▶ Plant Management has real-time insight into actual and historical performance rates of production lines (Overall Equipment Effectiveness) and performance bottlenecks.
- ▶ Optimized material utilization and waste reduction: Warehouse transfer clerks are assisted by picking and staging the right pallets for consumption at the lines. Automated "Material Stock Requests" generate transport orders for raw materials to ensure that input materials are replenished at the production line before it runs out of material, ensuring continuous production, better equipment utilization and less downtime.
- ▶ Production personnel are supported while preventing contamination of intermediate materials through smart moveable container management.
- ▶ Digitalization of production registration process on the shop floor has reduced the amount of paperwork on the floor and eliminated the need for the front office to enter the handwritten information into spreadsheets the next day.
- ▶ Reduced cost of ownership: Storing all production data together in a single relational database instead of in different (Excel) spreadsheets, drastically reduces the amount of time required to gather information and significantly improves the value of the generated reports.

## Contact Us

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ATS Global is the **Independent Solution Provider for Smart Digital Manufacturing**, with over 30 years' experience in the manufacturing systems arena and a wealth of experience undertaking Continuous Improvement initiatives and Manufacturing IT solution design, deployments and 24/7 support assignments.

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