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**CASE** Full Traceability in Tobacco Industry (TPD directive compliance)

**CLIENT** British American Tobacco Croatia



## REASONS AND DRIVERS

The Tobacco Products Directive (TPD) or European Tobacco Products Directive (EUTPD) (2014/40/EU) is a directive of the European Union. This places limits on the sale and merchandising of tobacco and tobacco-related products in the EU. The aim of TPD was/is to improve the functioning of the internal market for tobacco and related products whilst ensuring a high level of health protection for European citizens. Based on the proposal of the European Commission, the Directive entered into force on 19 May 2014 and became applicable in the EU Member States on 20 May 2016.



## PROJECT IMPLEMENTATION

**AIDA SOFTWARE SUITE**

**MODULES**

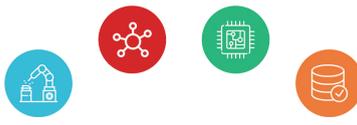
- AIDA-MES** AIDA MANUFACTURING EXECUTION SYSTEM
- AIDA-WM** WAREHOUSE MANAGEMENT
- AIDA-MK** MARKETING MODULE (E.G. BARCODE PRINTERS AND APPLICATIONS)
- AIDA-MFC** MATERIAL FLOW CONTROL
- AIDA-ID** IDENTIFICATION MODULE
- AIDA-TT** TRACK AND TRACE

AIDA is a unique system that integrates industrial machines, production processes, and data transmitting with ERP systems like SAP.

The Tobacco Products Directive is a very extensive EU requirement, meaning every pack of tobacco product must be marked with a unique serial number and those serial numbers must be recorded and sent to an EU event management system.

Serial codes for cigarette packs are provided by a governmental institution and have the supplementary role of providing tax traceability as well.

These and higher order/large grouping serial codes were provided by the AIDA Manufacturing Execution System (MES).



# REVEAL THE HIDDEN FACTORY



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## PRINTING LAYER



For this purpose, all higher-level packaging machines were equipped with automatic printer applicators to provide serial number label printing. Label sizes and types were adjusted according to the product packaging hierarchy, so the system would print and apply small labels on the lower hierarchy packages, specific corner-wrap labels on the transport cases and standard labels for pallettes.



## PRINTING INFRASTRUCTURE



All codes generated were GS1 compliant and one system handled printing across the whole factory at the semi-finished goods and finished goods levels. AIDA used several types of serial numbers, both custom and GS1 standard. All codes were managed and distributed to the machines. There was label adjustment on the production floor and all label templates were maintained on the server and automatically managed according to production order changes on the machines. There were various label designs to cover all markets, fonts, languages and graphical elements. Market and material specific information was maintained in SAP. The AIDA labelling system typically handles about 1 million labels per day.

## COMMUNICATION LAYER



Automatic data exchange with SAP was implemented, aided by the fact the AIDA MES uses SAP native data formats for communication. After palletization, information about the resulting palette was sent to SAP in real time, so the SAP finished goods warehouse database was kept up to date in real time - pallettes then could be placed on trucks immediately after production with all the relevant delivery processes and SAP documents available. The AIDA MES exchange data was integrated with several other systems including:

- SAP;
- SFQ - a shop floor quality system;
- TPD servers - TPD factory event management servers; and
- Production lines and other equipment.

THE PROJECT ACHIEVED ALL TARGETS SET BY THE CLIENT

