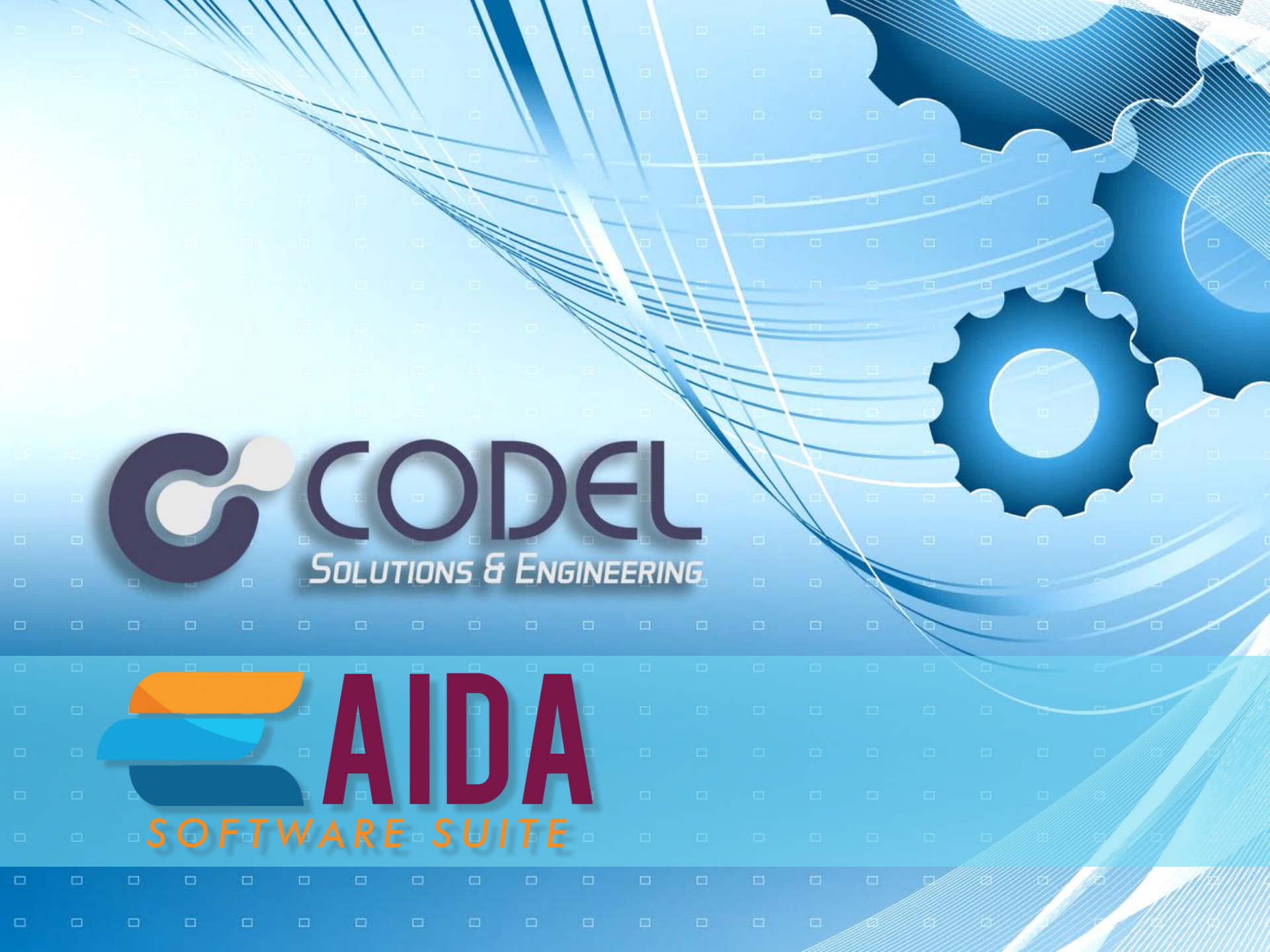
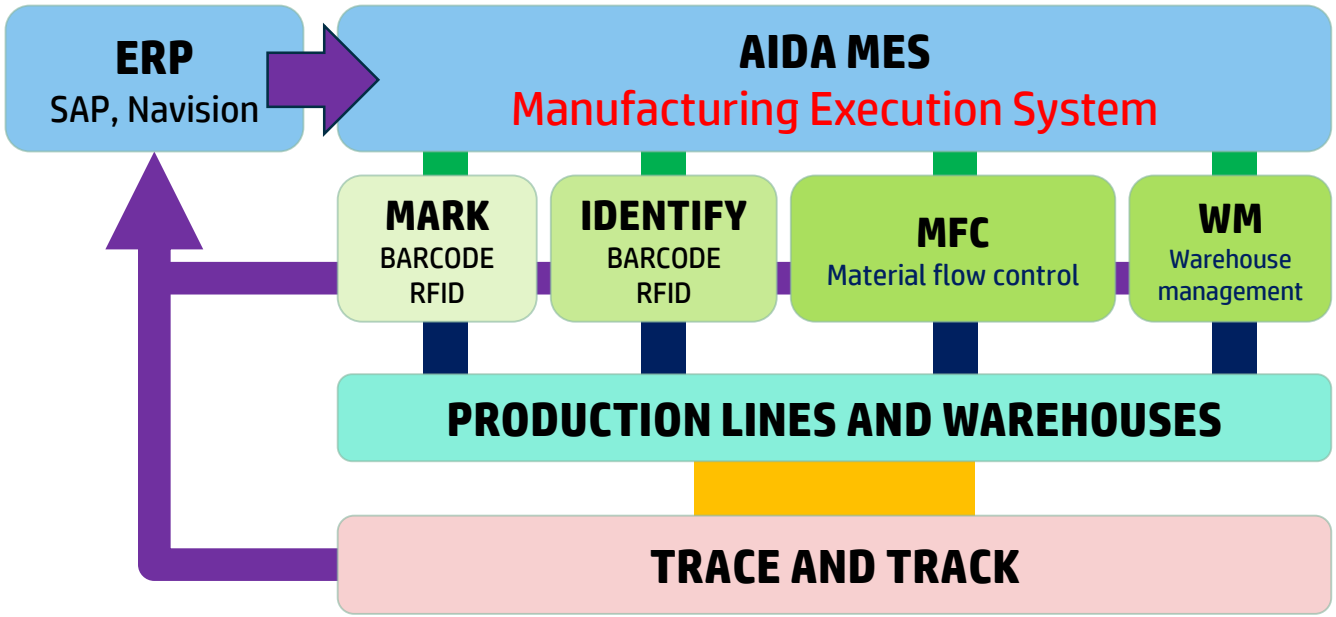

CODEL
SOLUTIONS & ENGINEERING
AIDA
SOFTWARE SUITE

AIDA - INDUSTRY 4.0



AIDA is **unique** system that **integrates** industrial machines, production process and data transmittion with ERP system like SAP or other.

AIDA suite is based on group of small, independent and interconnected modules that are design to manage different part of industrial procesess like communications, data transmission, system monitoring, machine control and other. Architecture based on multiple independed modules provide AIDA aplication to be easily modified and upgraded to meet costumer requirements.

AIDA aplication is designed to provide solution that is based on detailed and full process analysis which results in definnig optimal tehnical, tehnological and communication requirements integrated to provide fully functional tool.

AIDA - INDUSTRY 4.0

MANUFACTURE
EXECUTION
SYSTEM

AIDA
SOFTWARE SUITE

SAP
MIDDLEWARE

PRODUCTION
PROCESS AND
DATA
INTEGRATION

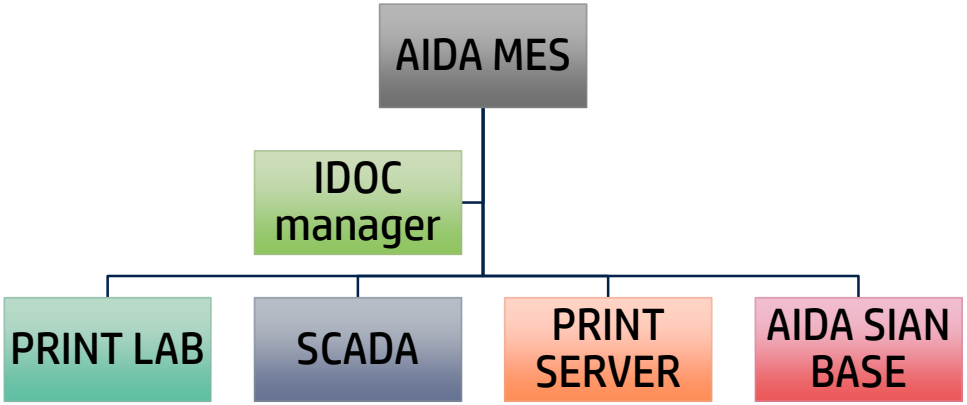
TRACK
AND
TRACE

Although **AIDA** was originally designed for collection, processing and forwarding of data , during the application of the actual operating conditions, in **AIDA** were integrated modules with different functionality , so today **AIDA** consists of the following modules :

AIDA-MES (AIDA Manufacture Execution Management)
AIDA-MK (Marking modul), Barcode printers and aplicators
AIDA-ID (Identification module)
AIDA-TT (Trace and Track)
AIDA-MFC (Material flow control)
AIDA-WM (Warehouse management)

AIDA MES is informatics systems for track and trace, as well as for quality management purposes, which is capable to:

- Exchange data with SAP ERP (AIDA middleware, full automated data receive, process and transmit)
- Exchange data and signals with automatic process equipment, to provide higher level of integration and provide ERP SCADA channels, as well as new functionality.
- Server based label designing and management, label generating and printing
- Manage printing on multiple channels simoultaniously, based on server program suite, and proprietery UDP LAN communication
- Generate GS1 standard signatures, integrated with label designing and printing
- Distribute various SSCC and other codes on the factory level
- Handle multiple SCADA points based on proprietary UDP communication, to present real time information (machine and ERP data)
- Provide all necessary client software and user interfaces



AIDA - INDUSTRY 4.0

IDOC manager

- IDOC Manager is expert system intended to data exchange with SAP, but can be successfully used for data exchange with any other system. Main characteristics: – Middleware data structure creating for:
  - – Saving and publishing data received from SAP or some other system
  - – Saving and publishing data received from AIDA or some other system
  - – Table structure and data types management
  - – Communication parameters management
  - – Automatic receive and transmit data
  - – Transaction logs

SCADA

- Monitor data and signals with automatic process equipment or ERP
  Real time process monitoring
  Material flow monitor
  Manage and control equipment and machines Through GUI interface
  Multilevel user control and privilages

PRINT LAB

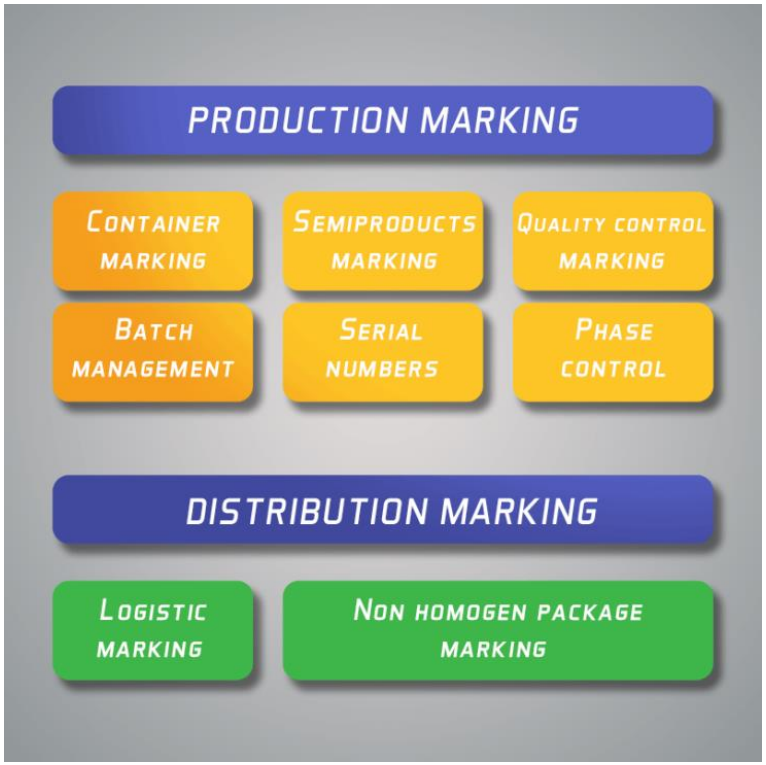
- Print LAB is used for:
- Creating costum made label design
  Asigning labels to printers

PRINT SERVER

AIDA SIAN BASE

- Aida Sian Base is database client for:
- Managing product order execution on each production line
  Printing management
  Printers management
  equipment Identification management
  Label management
  GS1 standard management (SSCC, aplication identifiers)
  Traceability data

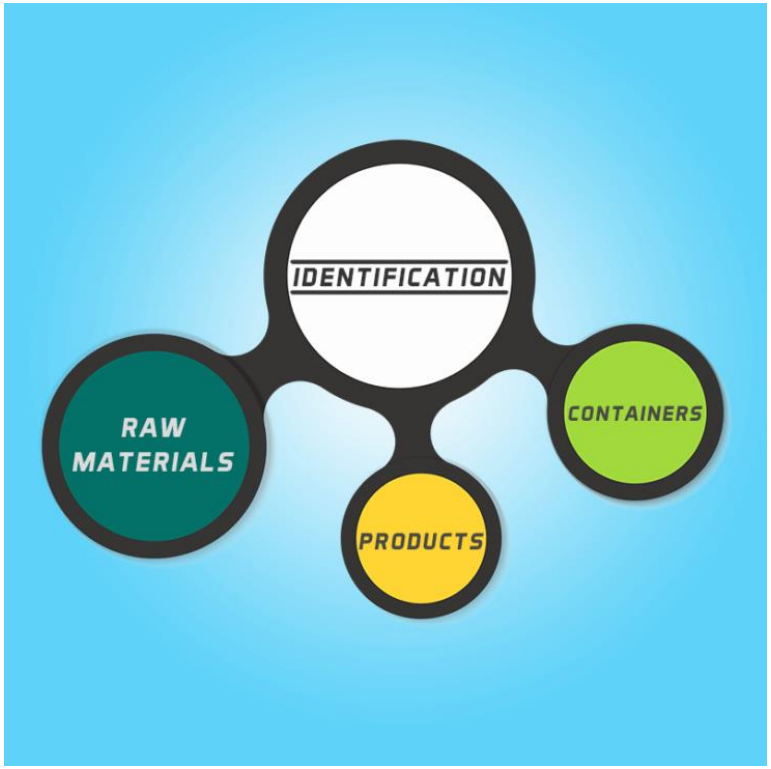
AIDA-MK (marking module) - barcode printers and aplicators



To fulfill all customers' requests we designed and produce program suite to handle all events connected with label marking. This suite is capable to use other printers as well, but the most effective is with Codel print module. We run the whole factory server based marking, identification and integration with ERP and process equipment. Marking system can be desinged and configured to fullfil different customers request, and perform them simultaniously. We provide solutions for marking products in:

- Production marking – includes marking all relevant materials, parts and products that are involved in production process
- Distribution marking – includes logistic marking and non homogen package marking.

AIDA-ID (Identification module)



Automatic identification and data acquisition includes different technologies to eliminate errors and save time performing automatic procedures The most common techologies used today are barcode and radio-frequncy identification, but other tecnologijes can be impemented, as well. Automatic identification is fast, simple and precize data entry method, to trace and track (products, vehicles, men force, actions and operations) Automatic identification makes possible real time data collect, displaying and process.

Identification includes:

- Raw materials identification according to internal marks or standard GS1 marks (like SSCC)
- Container identification in production process (RFID)
- Final product identification (in production, warehousing or distribution)
- Machine identification
- Operater identification
- Process or operations identification
- Server based identification management and execution
- ERP integration (SAP...)

AIDA-WM (Warehouse Management)

Providing tools for :

- Product and material marking
- Easy control of storage and movement of materials within warehouse
- Process transactions of materials wich includes: shipping, receiving, putaway and picking
- Location management
- FIFO/LIFO/FEFO product flow management
- Year-end , and partial inventory
- Share inforamtions with business systems: SAP or other

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