RAPIDVIEWS

SAP® Qualified
Partner-Packaged Solution

WHITE PAPER

How the PP RapidViews accelerate your Planning and Production deployment on SAP HANA ?

www.PerformanceAnalytics.com

www.rapidviews.io/en/

Summary

1. What is the SAP PP module?

The PP (Production Planning) module makes it possible to plan production based on both market demand and production capacity. PP creates schedules for production, procurement and purchasing. This ensures that we have the raw materials for production as needed. The module records the manufacturing process with, for example, planned budgets and actual budgets. It records the movement of goods when raw material is converted into a semi-finished product. This module plays a vital role in any manufacturer's supply chain and is primarily made for production managers or others who are involved in manufacturing and planning and in charge of optimizing production costs.

The PP module has 3 main components:

- Process Industry (SAP-PP-PI)
- Discreet manufacturing (SAP-PP)
- Repetitive manufacturing

Process Industry

Process Industry is used for the production of products which cannot be disassembled. Here, a machine called a workcenter in SAP is usually used for the production of a single product. The PP-PI solution is mainly used in industrial processes which use the notion of batch management to differentiate the items produced. The pharmaceutical, food, or chemical industries particularly use this solution. Process manufacturing counts its products in liters, meters or grams

Discreet manufacturing

Discrete manufacturing is used when a single machine is used for multiple production orders and these are scheduled according to production needs. The machine can be used to make different products. The products produced can be counted in units.

Repetitive manufacturing

Repetitive manufacturing is similar to discrete manufacturing but works without production orders (OF). The products are continuously produced for a long time, and the production does not require much control or production order.

These 3 components bring together concepts such as:

- Production planning
- Needs calculation (MRP)
- PIC (Industrial and Commercial Plan, sales forecast at company level), PDP (Master production plan, production forecast at factory level)
- Industrial and commercial plan: sales forecast (at company level)
- Production master plan: production forecast (at factory level)
- Calculation of needs and resources (men and machines)
- Capacity planning
- Manufacturing control
- Production monitoring
- Cost calculation
- Management of nomenclatures
- Range management

2. Rapid Views Company

Rapid Views is an innovative software editor to accelerate Business Intelligence deployment on SAP HANA.

Comes from the spin-off of the DeciVision R&D entity which has invested for 2 years on SAP HANA technology.

R&D as a driving force

The software developed by Rapid Views is the result of several years of Research & Development: we offer a unique solution on the market to accelerate your BI deployment on SAP HANA.

SAP trust

SAP encourages and consideres Rapid Views as a fantastic jumpstart for HANA BI implementation

The RapidViews solution is certified by SAP as "SAP Qualified Partner-Packaged Solution"

Strong values

Our employees share common values: a real passion for Business Intelligence, a strong functional BI expertise and the desired to provide a strong value proposition for our customers

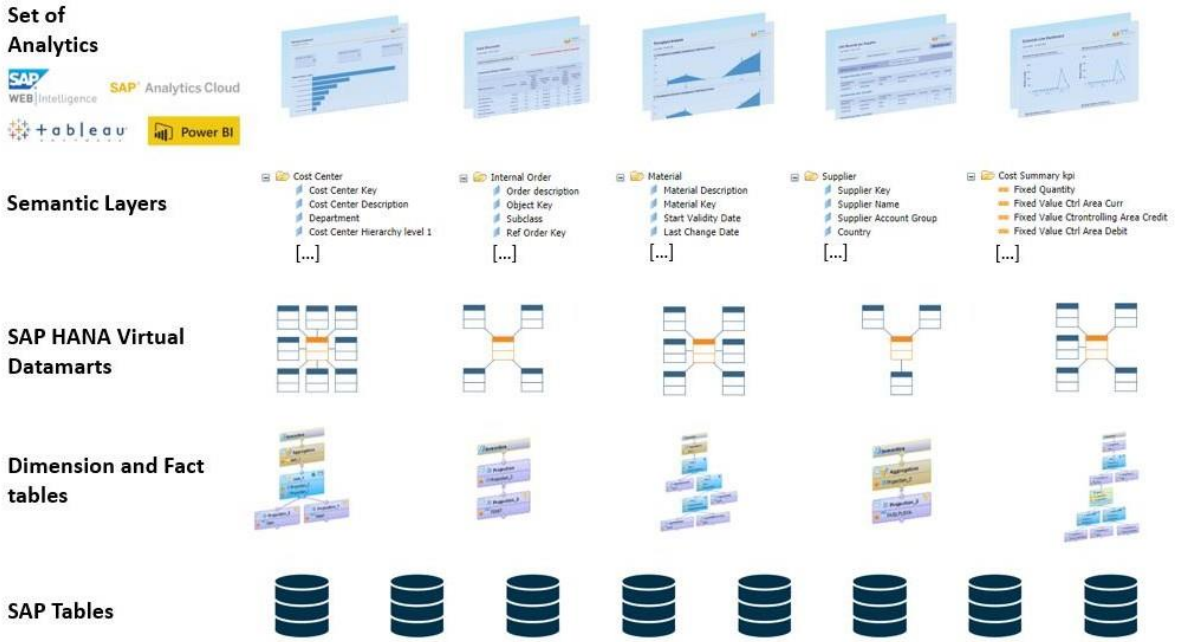
3. Les solutions RapidViews

3.1. Concept and presentation

RapidViews goal: to accelerate drastically any Datawarehouse projects on SAP HANA

In few words:

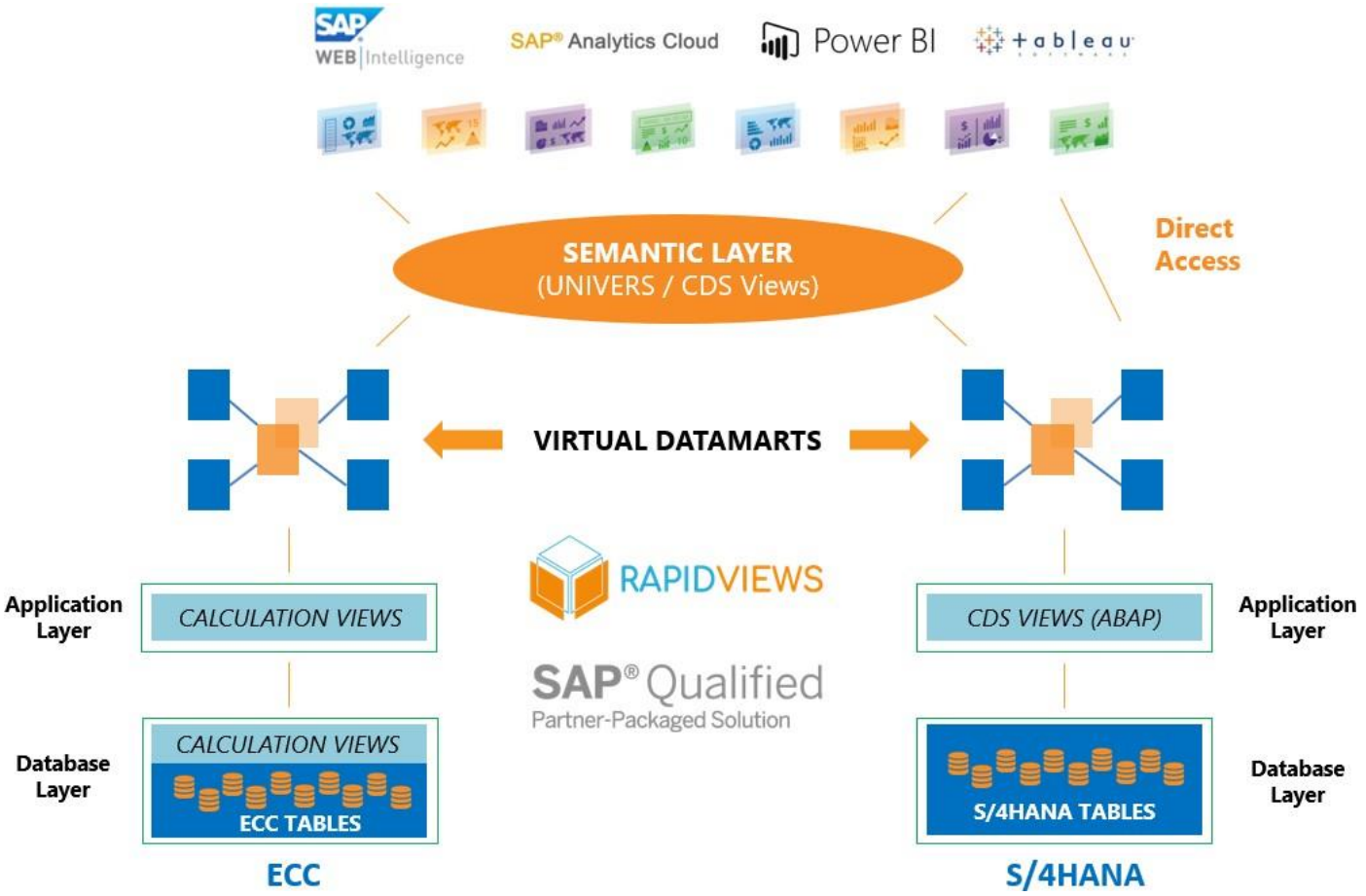
- Set of Business analytics built either with SAP Web Intelligence, SAP Analytics Cloud, Microsoft Power BI, Tableau Software.
- Semantic layers for operational reporting on SAP FI-CO, SD, MM and PP.
- Sets of datamarts" for SAP FI-CO, SD, MM and PP modules.
- A management console which integrates an intelligent repository and an interface for generating customer specifications
- A full Business Intelligence governance Repository.



RapidViews are certified by SAP:

3.1.1. Our global vision BI SAP ERP and BW

3.1.2. RapidViews Architecture

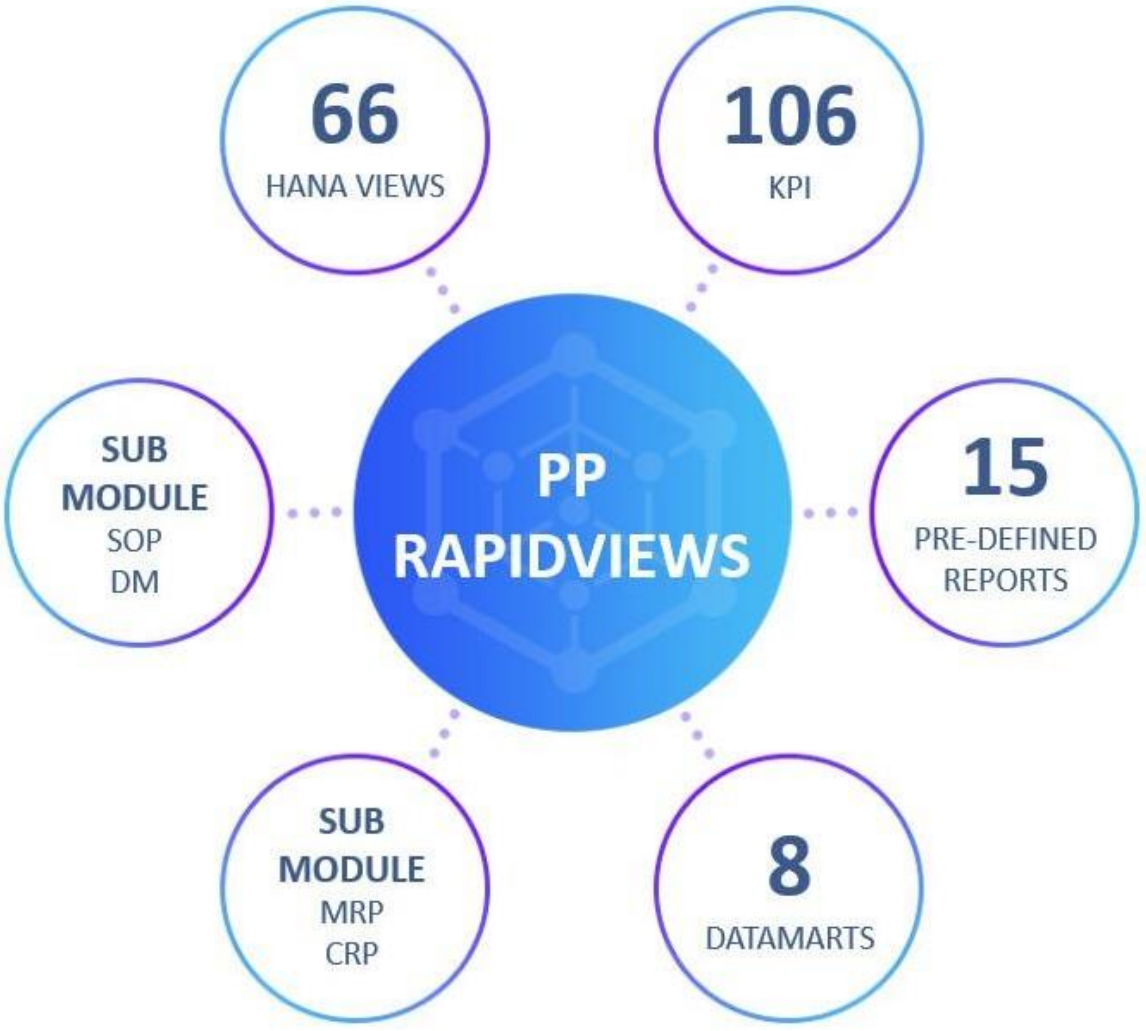


4. PP RapidViews Overview

4.1. PP RapidViews in figures

PP RapidViews includes **66 HANA Views, 106 KPI, 15 pre-defined reports and 8 datamarts**. It covers the following sub-modules:

- Sales & Operational Planning
- Demand Management
- Material Requirement Planning
- Capacity Requirement Planning



4.2. Semantic layer

- Account Assignment
- BOM Status
- Capacity Category
- Capacity Description
- Capacity Interval
- Company
- Cost Element
- Currency
- Capacity Planner Groups
- Control Key
- Exception Messages
- Element Type
- Factory Calendar
- Item Category
- MRP Group
- MRP Lots
- Material Production Version
- MRP Type
- Material
- MRP Controller
- Object Type
- Object Category
- Object Status
- Planned Order Type
- Profit Center
- Plant
- Production Order Type
- Procurement Type
- Planning Strategy
- Planning Strategy
- Requirement Version
- Requirement Type
- Scheduling Type
- Shift Group
- Shift Sequence
- Spare Part
- Special Procurement Indicator
- Special Requirement Type
- Supplier Details
- Standard Text
- Storage Location
- Task List Usage
- Task List Status
- Unit Of Measure
- Work Center
- Work Center Location
- BOM
- Capacity
- Capacity Requirement Planning
- Independent Requirement
- MRP
- Order Operations
- Planned Orders
- Production Orders
- Routing
- Measures

- Account Assignment
  - Account Assignment Category
  - Special Stock Indicator
  - Indicator: Consumption posting (Purchasing)
  - Goods Receipt Indicator
  - Invoice Receipt Indicator
  - Special stock ind.: Accounting/bookkeeping assignment
  - Special stock indicator: Logistics assignment
  - Special stock indicator: Transaction assignment
  - Account Assignment Category Description
- BOM Status
  - BOM Status
  - BOM Status Description
- Capacity Category
  - Capacity Category
  - Capacity Category Description
- Capacity Description
  - Capacity ID
  - Capacity Description
- Capacity Interval
  - Indicator: Workdays
  - Shift number of the available capacity
  - Capacity ID
  - Factory calendar ID
  - Grouping for Shift Definitions and Shift Sequences
  - Capacity utilization rate (percent)
  - End Date
  - Current weekday number within the available capacity cycle
  - Shift definition
- Production Order Type
  - Order Type
  - Order Type Description
- Procurement Type
  - Procurement Type
  - Procurement Type Description
- Planning Strategy
  - Planning Strategy Group
  - Planning Strategy Group Description
- Factory Calendar
  - Bit for workday 1
  - Bit for workday 2
  - Bit for workday 3
  - Bit for workday 4
  - Bit for workday 5
  - Bit for workday 6
  - Bit for workday 7
  - Bit for workday 8
  - Calendar: Termination flag
  - Calendar: Termination
  - Factory Calendar
  - Year from which data is stored
  - Year until which data is saved
  - Public Holiday Calendar
  - Start of factory calendar day number
  - Calendar: Calendar creator/changer
  - Day Date
  - Calendar: Creation or change time
  - Year, from which calendar is in buffer

- BOM
  - Alternative BOM
  - BOM category
  - BOM component
  - Deletion flag for BOMs
  - BOM Item Number
  - BOM item node number
  - BOM Item Text (Line 1)
  - BOM item text (line 2)
  - BOM Usage
  - Base unit of measure for BOM
  - Bill of material
  - Class number
  - Class Type
  - Component unit of measure
  - Indicator: co-product
  - Cost element
  - Indicator for relevancy to costing
  - Currency
  - Deletion Indicator
  - Fixed Quantity
  - Internal counter
  - Intra Material
  - Issuing plant
  - Item Category (Bill of Material)
- Capacity
  - Unit for available capacity
  - Active version of available capacity
  - Shift number of the available capacity
  - Available capacity version
  - Base Unit of Measurement for Capacity
  - Capacity allocation number
  - Capacity category
  - Capacity ID 2
  - Capacity ID 3
  - Capacity Key
  - Number of Periods to Which the Capacity Refers
  - Capacity planner group
  - Unit of measure of capacity
  - Capacity utilization rate (percent)
  - Role of work center capacity
- Capacity Requirement Planning
  - Unit of Measure for Activity/Operation
  - Actual finish / date
  - Actual finish / time
  - Actual start / date
  - Actual start / time
  - Counters for cap. rqmts. records (various caps. + indiv.caps)
  - Capacity ID
  - Status of a capacity requirements (object number)
  - ID of the capacity requirements record
  - Earliest finish /date
  - Earliest finish /time
- Independent Requirement
  - BOM explosion number
  - Base Unit of Measure
  - Date of Last Change
  - Delivery/order finish date
  - Independent requirements pointer
  - *Join key for DIM_MATERIAL_PROD_VERSION_DV*
  - Material Number
  - Planning period
  - Plant
  - Production Version
  - Requested Date
  - Requirements Plan Number
  - Requirements type
  - Version number for independent requirements
  - Unit of entry
- MRP
  - Availability indicator
  - Delivery/order finish date
  - Exception message key
  - Material number of higher-level assembly
  - *Join key for DIM_SPECIAL_PROCUREMENT_TYPE_DV*
  - *Join key for DIM_STORAGE_LOCATION_DV*
  - Lot size (materials planning)
  - Indicator: MRP element can be brought forward
  - MRP date
  - MRP element
  - MRP element number

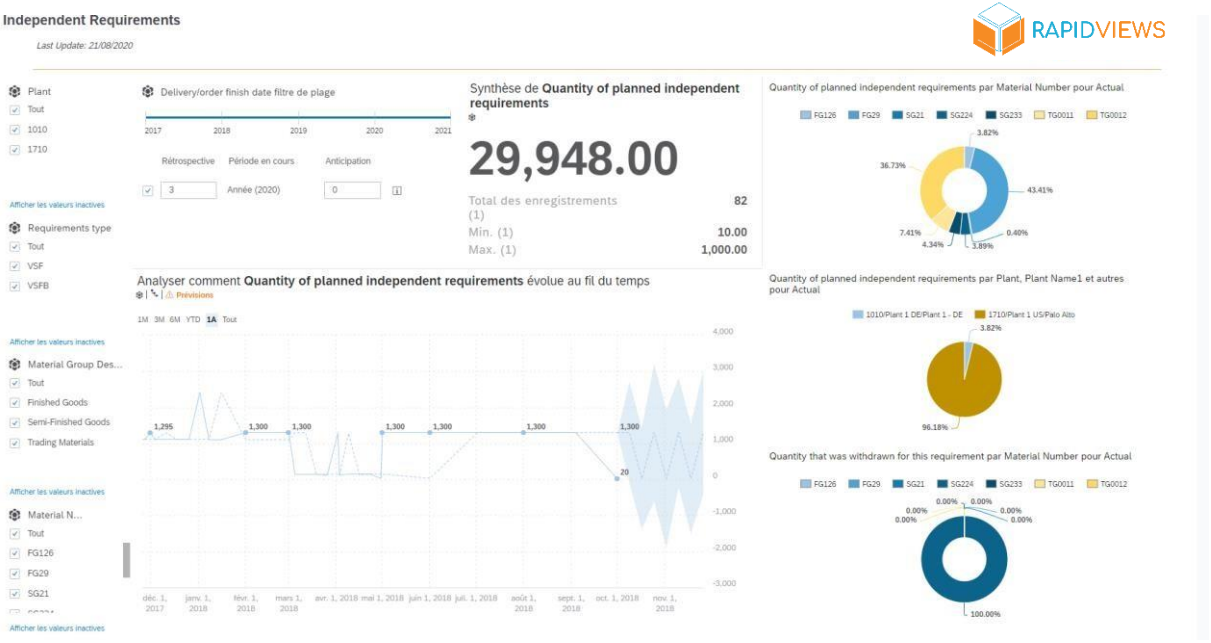
- Order Operations
  - Business Area
  - ID of the capacity requirements record
  - Company Code
  - Completion confirmation number for the operation
  - Confirmation counter
  - Control key
  - Controlling Area
  - Cost Element
  - Selection indicator for costing line items
  - Currency
  - Deletion Flag
  - General counter for order
  - Item number of the purchase requisition in the order
- Production Orders
  - Account Assignment Indicator
  - Actual finish date
  - Actual release date
  - Actual start date
  - Actual start time
  - Allocation set
  - Alternative BOM
  - Application
  - Apportionment Structure
  - Version of Available Capacity
  - BOM category
  - Date of BOM Explosion/Routing Transfer
  - BOM status
- Routing
  - Operation/Activity Number
  - Activity Type 01
  - Activity Type 02
  - Activity Type 03
  - Activity Type 04
  - Activity Type 05
  - Activity Type 06
  - Unit of Measure for Activity/Operation
  - BOM category
  - Node Number
  - Consumption period: backward
  - Bill of material
  - Consumption mode
  - Indicator: Continuous flow production
  - Control key
- Planned Orders
  - Account Assignment Category
  - Alternative BOM
  - Explosion date
  - BOM status
  - BOM Usage
  - Base Unit of Measure
  - ID of the capacity requirements record
  - Conversion indicator for planned order
  - Firming indicator for planned order data
  - Kanban Indicator
  - MRP Controller (Materials Planner)
  - Planning material
  - Object Number
  - Object type
- Measures
  - BOM
    - Base quantity
    - Component quantity
    - Price
    - Delivery time in days
    - Price Unit
    - Component scrap in percent
  - Capacity
    - Minimum capacity in volume unit or unit of measure
    - Maximum capacity in volume unit or unit of measure
    - Finish time in seconds (internal)
    - Start time in seconds (internal)
    - Cumulative break time in seconds (internal)
    - Operating time in seconds (internal)
    - Capacity
    - Individual capacities number
    - Denominator relationship: No. of indiv. capacities reference
    - Numerator relationships: No. of indiv. capacities reference
    - Number of individual capacities
    - Factory calendar weekday
    - Total Capacity in Hours
    - Operating Capacity in Hours
    - Available Capacity in Hours
  - Capacity Requirement Planning
  - Independent Requirement
  - MRP
  - Order Operations
  - Planned Orders
  - Production Orders
  - Routing

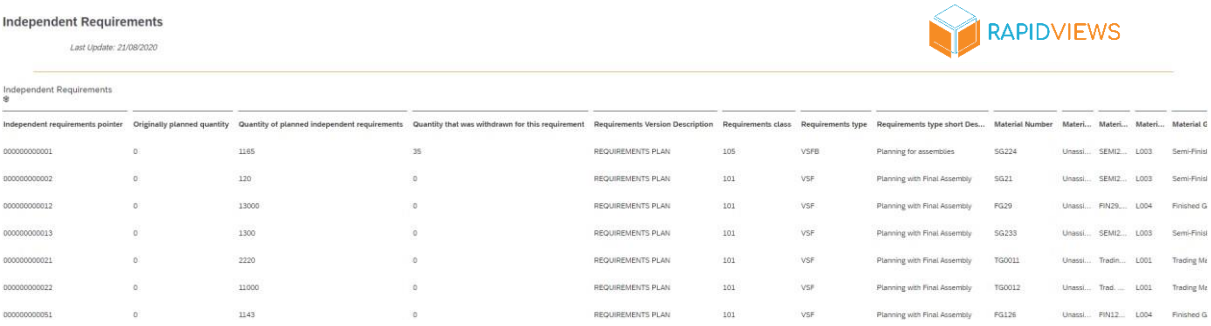
- Capacity Requirement Planning
  - Operation Quantity
  - Actual number of splits
  - Scheduled Capacity Requirements for Setup
  - Scheduled Capacity Requirements for Processing
  - Scheduled Capacity Requirements for the Teardown
- Independent Requirement
  - Quantity of planned independent requirements
  - Quantity that was withdrawn for this requirement
  - Originally planned quantity
  - Quantity in unit of entry
  - Numerator for conversion to Base Units of Measure
  - Denominator for conversion to base units of measure
- MRP
  - Quantity received or quantity required
  - Variable scrap quantity
  - Shortage Quantity
  - Excess stock quantity
  - Goods Receipt Processing Time in Days
  - Stock Days' Supply Without Receipts
  - First Receipt Days' Supply
- Order Operations
  - Operation Quantity
  - Operation Scrap
  - Total Yield Confirmed
  - Total Scrap Quantity Confirmed
  - Price Unit
  - Price
- Planned Orders
  - Total Planned Order Quantity
  - Reduced Quantity in the Planned Order
  - Partial Lot Quantity
  - Fixed Quantity of Scrap from Production
  - Requirement Quantity
  - Committed Quantity
  - Quantity in Unit of Entry
  - Goods Received Quantity
  - Issued Quantity
  - Goods Receipt Processing Time in Days
  - Numerator for conversion to Base Units of Measure
  - Denominator for conversion to base units of measure
  - Number Of Planned Orders
- Production Orders
  - Total scrap quantity in the order
  - Total order quantity
  - To lot size
  - From lot size
  - Lot size divisor
  - Base quantity 2
  - From lot size 2
  - To lot size 2
  - Float before production (in days)
  - Float after production (in days)
  - Scrap confirmed for order
  - Scheduled float before production in days
  - Scheduled float after production in days
  - Total confirmed rework quantity
- Routing
  - Minimum Lot Size
  - Maximum Lot Size
  - Fixed lot size
  - Setup and teardown time
  - Processing time
  - Interoperation time
  - From Lot Size
  - To lot size
  - Number of calls
  - Quantity of the material to be produced
  - Standard Value 01
  - Standard Value 02
  - Standard Value 03
  - Standard Value 04
  - Standard Value 05
  - Standard Value 06
  - Scrap factor
  - Minimum overlap time
  - Minimum Send-Ahead Quantity
  - Maximum number of splits
  - Minimum processing time
  - Maximum wait time
  - Minimum wait time
  - Standard queue time
  - Minimum queue time
  - Standard move time
  - Minimum move time
  - Minimum processing time in hours
  - Maximum wait time in hours

- Control Key
  - Indicator: Post goods receipt automatically
  - Indicator: Determine capacity requirements
  - Indicator: inspection characteristics for operation required
  - Indicator: Rework operation
  - Completion confirmation
  - Indicator: Service
  - Indicator: Scheduling
  - Control Key
  - Control key description
- Exception Messages
  - Selection group of exception messages
  - Indicator: create material requirements planning list
  - Do not set exception message
  - Exception message
  - Exception message number
  - Exception message priority
  - Exception message text
- Element Type
  - MRP Element
  - Abbreviation for MRP element
  - Description of MRP element - up to 10 characters
- Item Category
  - Item Category (Bill of Material)
  - Item category text
- MRP Group
  - MRP Group
  - MRP Group Description
- Object Type
  - Object Type
  - Object Type Description
- Object Category
  - Category of object causing the load (order category)
  - Object Category Description
- Object Status
  - Indicator: Status Is Inactive
  - Object number
  - Object status
  - Object Status Description
- Planned Order Type
  - Planned Order Type
  - Planned Order Type Description
- Shift Group
  - Grouping for Shift Definitions and Shift Sequences
  - Shift Grouping Description
- Work Center
  - Deletion flag for work center
  - Indicator: Backflushing
  - Plant
  - Object ID of the resource
  - Object Type
  - Object types of the CIM resource
  - Work center
  - Standard value
  - Standard Text
  - Unit for the standard queue time
- Production Order Type
  - Order Type
  - Order Type Description
- Procurement Type
  - Procurement Type
  - Procurement Type Description
- Planning Strategy
  - Planning Strategy Group
  - Planning Strategy Group Description
- Requirement Version
  - Version number for independent requirements
  - Requirements Version Description
- Requirement Type
  - Requirements type
  - Requirements class
  - Requirements type short Description
- Scheduling Type
  - Scheduling type
  - Scheduling Type Description
- Spare Part
  - Spare part number
  - Spare part indicator text
- Special Procurement Indicator
  - Special procurement - external display indicator
  - Special procurement - indicator Description
- Material Production Version
  - BOM Usage
  - Task List Type

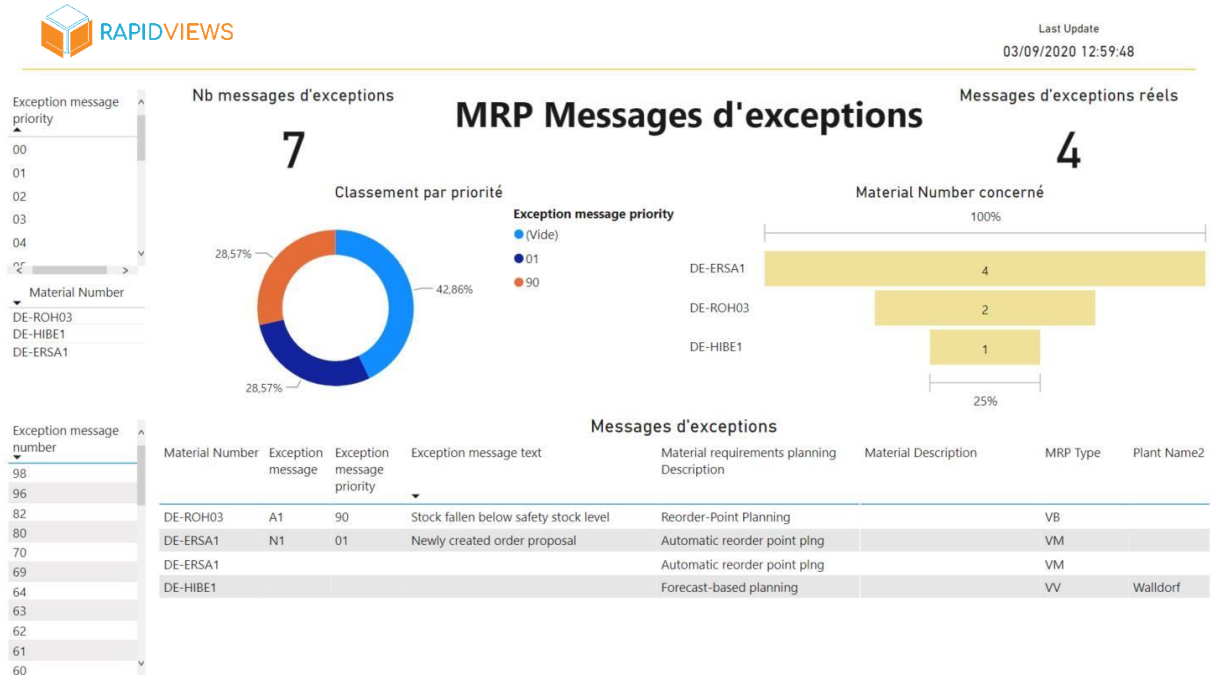
5. PP RapidViews: reports samples

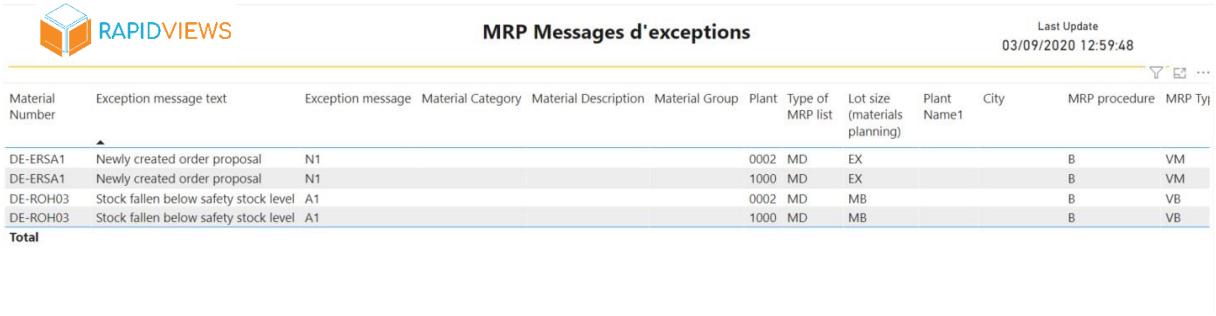
5.1. Independent requirements



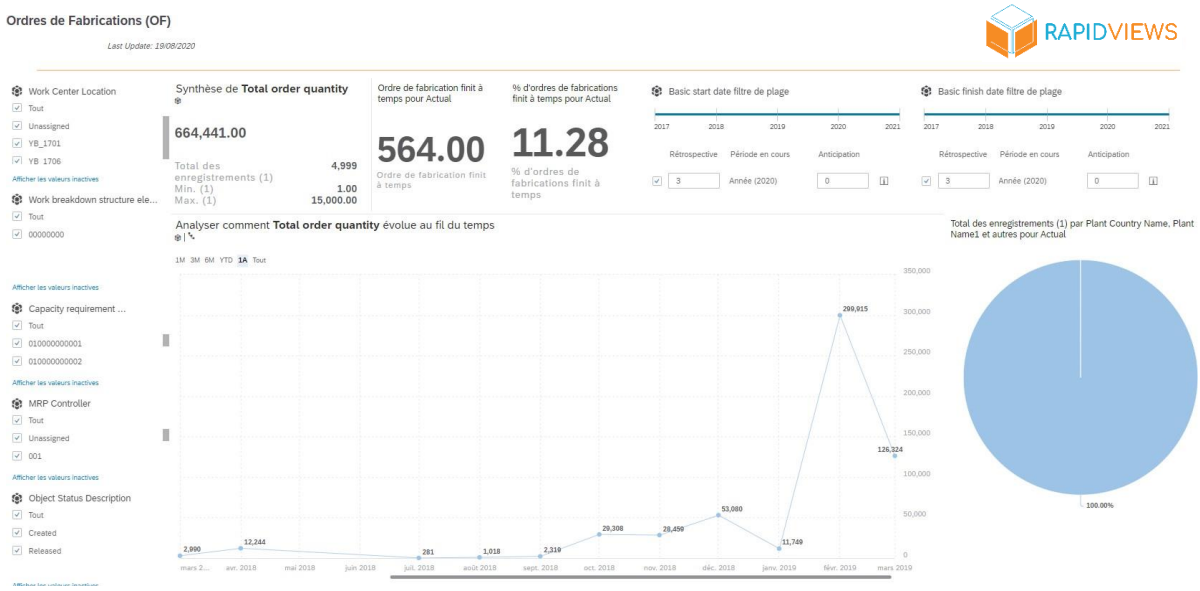


5.2. MRP Messages d'exceptions

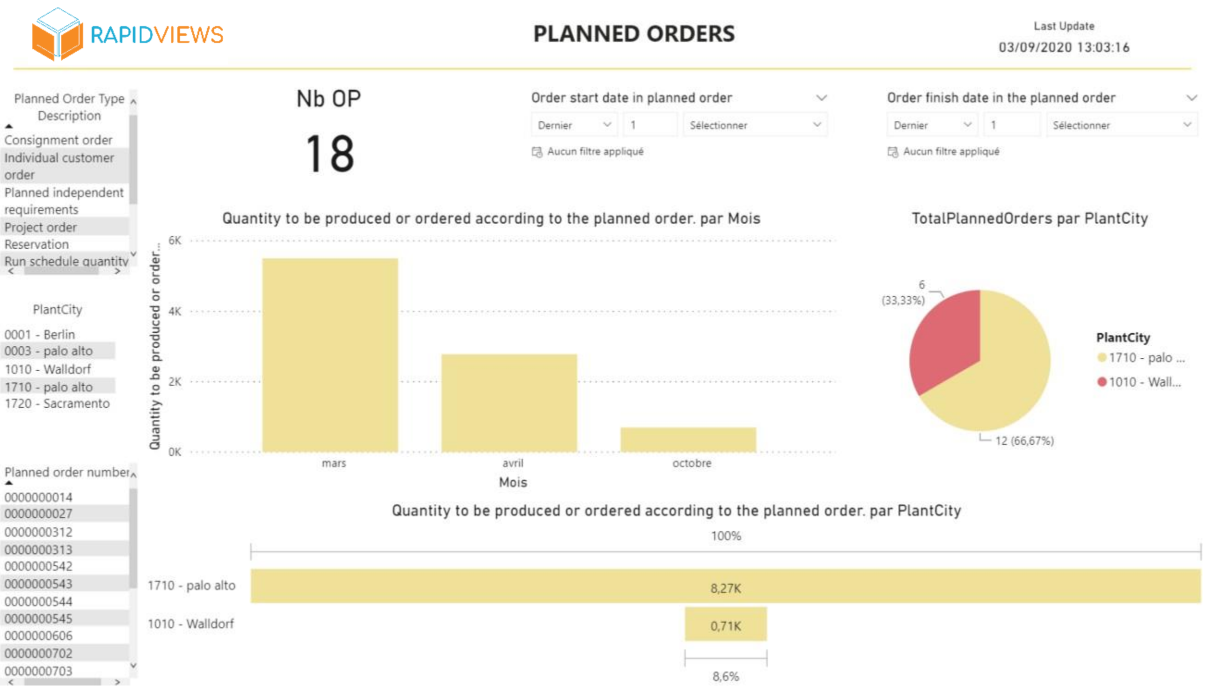


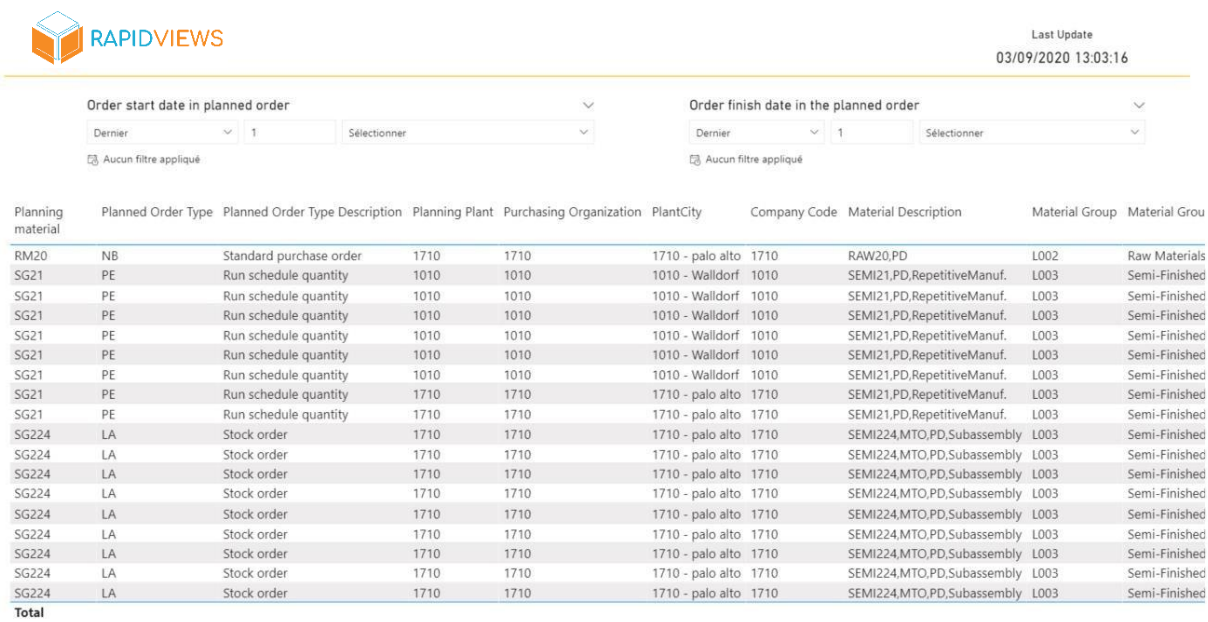


5.3. Ordres de Fabrications



5.4. Ordres de Production





Planning material	Planned Order Type	Planned Order Type Description	Planning Plant	Purchasing Organization	PlantCity	Company Code	Material Description	Material Group	Material Grou
RM20	NB	Standard purchase order	1710	1710	1710 - palo alto	1710	RAW20,PD	L002	Raw Materials
SG21	PE	Run schedule quantity	1010	1010	1010 - Walldorf	1010	SEMI21,PD,RepetitiveManuf.	L003	Semi-Finished
SG21	PE	Run schedule quantity	1010	1010	1010 - Walldorf	1010	SEMI21,PD,RepetitiveManuf.	L003	Semi-Finished
SG21	PE	Run schedule quantity	1010	1010	1010 - Walldorf	1010	SEMI21,PD,RepetitiveManuf.	L003	Semi-Finished
SG21	PE	Run schedule quantity	1010	1010	1010 - Walldorf	1010	SEMI21,PD,RepetitiveManuf.	L003	Semi-Finished
SG21	PE	Run schedule quantity	1010	1010	1010 - Walldorf	1010	SEMI21,PD,RepetitiveManuf.	L003	Semi-Finished
SG21	PE	Run schedule quantity	1010	1010	1010 - Walldorf	1010	SEMI21,PD,RepetitiveManuf.	L003	Semi-Finished
SG21	PE	Run schedule quantity	1710	1710	1710 - palo alto	1710	SEMI21,PD,RepetitiveManuf.	L003	Semi-Finished
SG21	PE	Run schedule quantity	1710	1710	1710 - palo alto	1710	SEMI21,PD,RepetitiveManuf.	L003	Semi-Finished
SG224	LA	Stock order	1710	1710	1710 - palo alto	1710	SEMI224,MTO,PD,Subassembly	L003	Semi-Finished
SG224	LA	Stock order	1710	1710	1710 - palo alto	1710	SEMI224,MTO,PD,Subassembly	L003	Semi-Finished
SG224	LA	Stock order	1710	1710	1710 - palo alto	1710	SEMI224,MTO,PD,Subassembly	L003	Semi-Finished
SG224	LA	Stock order	1710	1710	1710 - palo alto	1710	SEMI224,MTO,PD,Subassembly	L003	Semi-Finished
SG224	LA	Stock order	1710	1710	1710 - palo alto	1710	SEMI224,MTO,PD,Subassembly	L003	Semi-Finished
SG224	LA	Stock order	1710	1710	1710 - palo alto	1710	SEMI224,MTO,PD,Subassembly	L003	Semi-Finished
SG224	LA	Stock order	1710	1710	1710 - palo alto	1710	SEMI224,MTO,PD,Subassembly	L003	Semi-Finished
SG224	LA	Stock order	1710	1710	1710 - palo alto	1710	SEMI224,MTO,PD,Subassembly	L003	Semi-Finished
SG224	LA	Stock order	1710	1710	1710 - palo alto	1710	SEMI224,MTO,PD,Subassembly	L003	Semi-Finished
Total									

5.5. Dashboard