

Functional Documentation - SCREEN (Packaging)

1.0 Overview

Business Context and Application Overview

The purpose of the application is to provide Solvay users a set of reports to follow-up Packaging costs.SCREEN is 2 Log & Pack Dashboards providing Cost transparency & key performances analysis.**One Single Source of Truth** for Procurement, Package Owners, Supply Chain and Finance, but also for Business as well in GBU and at Excellence Center Costs reconciled with P&LProviding **Cost transparency** making links between flows from Plants to Customers, Vendors & Packages including Volumes Sold, delivered and handling units,....**Providing** understanding of **action impacts** **from various programs** (E2E program, & all GBU projects) Leading to a **standard way to assess performances**Supporting the **identification of process issues** and **quality of data**

Application User Profile

Describe the key User profiles that exist for the application.

General role/Viewer role:

Approver role:

Target Users:

As examples: Controllers / Accountants

VERSION	DATE	MODIFIED BY	DESCRIPTION
0.01	13.11.2023	Karen Oppong	Initial draft

Application Type

Data Product Type

☒ Dashboard

☒ Report

☐ Advanced analytics

☐ AI

☐ Others <specify which one>

Technologies

☒ BW

☐ Tableau

☒ QlikSense

☐ Talend

☐ Dataiku

☐ Others <specify which one>

Data Sources

Note: list of all applications and various environment

☒ SAP PF1 (Production environment)

☒ SAP WP1

☐ SAP PI1

☐ BW (versions)

☐ iCare CRM

☐ CORE CRM

☐ Others <specify the name of the source>

2.0 Business Process

Capture the business process that the application supports . This can be describe through a process diagram or a business capability model

3.0 Application Feature Overview

Information about the existent Workbooks and the respective BW queries.

Reports	Definition	Prompts	BW Workbook Query	Query Technical Name
SCREEN - Pack. Inventory analysis (Core Workbook)	The aim of Inventory query is to provide users with an helicopter view in qty /value of Packaging stocks in WP1 and PF1 • Opening/closing stock in qty/value, including consignment stock • Stock variation in qty/value, by main categories: ◦ Purchasing + Consignment purchasing ◦ Manufacturing consumption ◦ Other receipts (GR) and issues (GI)		BW_WBK_S CRE_0001	
SCREEN - Pack. Manuf. Consumption analysis (Core Workbook)	The aim of this query is to provide users with a transversal view of Packaging material consumption in production process in WP1 and PF1		BW_WBK_S CRE_0003	
SCREEN - Pack. Purchasing analysis (Core Workbook)	The aim of Purchasing query is to provide users with a transversal view in qty /value of Packaging Materials purchasing in WP1 and PF1at following steps: • Agreements & Info Records • Orders • Good Receipt (GR) • Invoice Receipt (IR)		BW_WBK_S CRE_0002	

SCREEN - Pack. Inventory analysis (Core Workbook)

It is based on stock postings of Packaging materials

Packaging entries are filtered according to material Valuation classes and related Stock accounts: WP1 Z110 (GL Account 31000300) and PF1 Z051 (2110110000) + WP1 adjustment account 31000309

- Opening/Closing inventory figures are the sum up of all postings according to entered period in prompt (Ex. 01.2021 Closing All postings up to 31.01.2021 / Opening all postings up to 31.12.2020)
- Variation figures are the sum up of postings of selected period (Ex. 01.2021 All postings from 01.01.2021 to 31.01.2021)
- Entries are valued at the material standard price of posted period; this way, they are fully reconcilable with Working Cap. inventory values
- FI entries are enhanced with related material document data, mainly in order to catch movement type used to categorize stock variations as well as CO object assignment (Order, Cost center...)

SCREEN - Pack. Manuf. Consumption analysis (Core Workbook)

It includes:

- Packaging components: Actual + target quantities and costs
- Manufactured materials (so-called products):
 - Actual production quantities and costs (total + variable) of products including "direct" packaging consumption, in order to measure weight of packaging vs production metrics. "Direct" means that if finished B has semi finished A in its BoM, and if A has packaging component P in its BoM, only A is reported as product in Screen report (and not B) => multi level consumption is not supported.

SCREEN - Pack. Purchasing analysis (Core Workbook)

It mainly includes Purchase orders data (with Creation date greater than 01.2018)

- Packaging items are filtered according to Material Valuation Class: WP1 Z110 (GL Account 31000300) and PF1 Z051 (2110110000)

PO items w/o a Material (i.e. only assigned to a Material Group) are excluded from the report

- Both PO items for stock entry (see Acct Assignment Category #) and PO items assigned to a CO object like a Cost Center, a Maint. Order... (see <> #) are taken into accounts
- Additional Delivery costs are included in GRs/IRs valuation

It also includes FIGL data:

- Consignment GRs/IRs w/o a PO (with a Posting date greater than 01.2018)

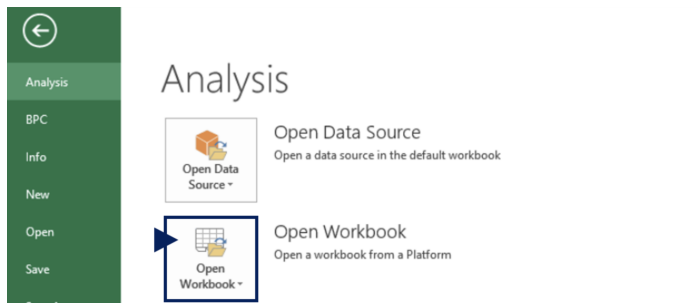
=> Same filter based on Material Val. Class in KOS/KBS FI items (see accounts WP1 40100380 / PF1 2320000000)

- Price diff. on GRs/IRs (with a Posting date greater than 01.2018) - To get Standard values in addition with POs values

=> Same filter based on Material Val. Class in PRD/AKO FI items (see accounts WP1 98151982 / PF1 6091311100)

Access the workbook

• Step One



- For Inventory Analysis, the workbook to be used is **BW_WBK_SCRE_0001** – SCREEN - Pack. Inventory analysis (Core Workbook)
- For Inventory Analysis, the workbook to be used is **BW_WBK_SCRE_0003** – SCREEN - Pack. Consumption analysis (Core Workbook)
- For Inventory Analysis, the workbook to be used is **BW_WBK_SCRE_0002** – SCREEN - Pack. Purchasing analysis (Core Workbook)

=> Go to Analysis for Office in excel

=> Click "Open Workbook"

- For Inventory Analysis, the workbook to be used is **BW_WBK_SCRE_0001** – SCREEN - Pack. Inventory analysis (Core Workbook)

Run the workbook

SCREEN - Pack. Inventory analysis - Aggregated (Core Query)

Auth. scope based on Comp. Code (Selection option,...	=	SOLVAY	1
	=	#	
* Conso. view? (1=Yes/0=No)		0	2
* Cal. Year/Month (Single value, Mandatory)		01.2021	3
Company Code (Multiple Values, Optional)		8090	4
Plant (Selection Option, Optional)	=		5
PRS Company code (Selection option, Optional)	=		6
Qty conv. unit (Single value)			7
Target Curr. for conversion (Single value, Optional)		EUR	8
1 - BFC GBU (Selection option, Optional)	=		9

It is mandatory to enter:

- Conso view (2) : enter **1** to apply the legal entity consolidation rate or **0** not to take the consolidation rate into consideration
- Cal. Year/Month (3) : MM.YYYY (= period)

It is also possible to enter:

- a Company Code (4)
- a Plant (5)
- a PRS Company code (6)
- a Qty conv. unit (7)
- Target Curr. for conversion (8) : the exchange rate used is **ZRH2** (same as [WCAP - Solvay Group Working Capital](#))
- BFC GBU (9)

Click "OK"

The report is displayed with :

1. The company code
2. The plant
3. The list of materials
4. Quantity key figures
5. Value key figures

1	2	3	4					5						
			202101 Opening Stock Qty (w/o Consign.)	202101 Purchasing Var. Qty	202101 Consign. Purch. Var. Qty	202101 Manuf. Consumpt. Var.	202101 Others Var. Qty	202101 Ending Stock Qty (w/o Consign.)	202101 Opening Stock Loc./Target Curr.	202101 Purchasing Var. Loc./Target Curr.	202101 Consign. Purch. Var. Loc./Target Tr.	202101 Manuf. Consumpt. Var.	202101 Others Var. Loc./Target Curr.	202101 Ending Stock Loc./Target Curr.
Comp	Plant	Material	PC	PC		PC	PC	PC	EUR	EUR		EUR	EUR	EUR
8090	7851	1012218 WOOD PALLET CP3 1140X1140	1 267	2 103		-1 434	-626	1 310	9 663,58	16 662,72		-11 362,01	-4 018,40	10 945,89
		1050016 WOOD PALLET CP1 1000X1200	416	210		-209	-39	378	3 429,52	1 742,64		-1 734,36	-218,46	3 219,34
		1059621 PE DRUM 220L PO BLUE UN	711	1 236		-1 516	-245	186	13 998,92	23 787,72		-29 176,51	-5 003,44	3 606,69
		1059746 PE DRUM 120L TO BLUE UN X180	84	108				192	1 042,33	1 307,21			-146,21	2 203,33
		1059750 PE DRUM 60L TO BLUE	37	72		-80		29	420,85	806,79		-896,43	-78,65	252,56
		1060506 IBC 1000L WOOD PAL UN IR ETFE EVENT NAT	179	1 020		-743	-194	262	13 580,25	76 311,74		-55 587,85	-15 060,51	19 243,63
		1060595 WOOD PALLET CP9 1140X1140 ISPM15							-107,92					-107,92
		1060791 PE SACK 600X1050X180 WHITE	8 952			-4 621	-150	4 181	10 310,14			-5 280,73	-171,43	4 867,98
		1060792 STEEL DRUM 217L TO 10/9/10 IV GREY	345	96		-33	-142	266	8 323,50	2 292,71		-788,12	-3 598,27	6 229,82
		1060793 STEEL DRUM 217L PO 9/9/9 RAW BLUE	1 268	3 324		-1 743	-1 844	1 005	17 629,35	53 026,61		-27 805,48	-28 549,40	14 301,08
		1060794 STEEL DRUM 217L PO 9/9/9 IV BLUE	226	1 505		-1 338		393	3 891,31	29 912,00		-26 592,87	318,52	7 528,96
		1060795 STEEL DRUM 217L TO 10/9/10 IV BLUE	434	284		-258		460	10 010,59	6 578,50		-5 976,24	43,77	10 656,62
		1060796 STEEL DRUM 217L TO 10/9/10 IV GREEN							-38,00					-38,00
		1060798 IBC 1000L PE PAL UN KAMLOCK NAT	12	40		-12		40	1 642,04	4 656,28		-1 396,89	-210,50	4 690,93
		1060799 STEEL DRUM 217L TO 10/9/10 IV BLUE	92	190		-126		156	2 200,32	4 506,24		-2 988,35	-4,15	3 714,06
		1869152 PE DRUM 220L PO ANTISTATIC UN Y1,6 BLACK	60	192				252	1 479,20	5 343,14			-324,26	6 498,08
		1892373 IBC 1000L WOOD PAL ANTISTAT UN Y1,9	74	40		-13	-26	75	8 510,46	4 560,00		-1 482,00	-2 964,00	8 624,46
		1909625 STEEL DRUM 200L TO IV GREEN REGENERATED	145				-40	105	2 175,00				-600,00	1 575,00
		1912378 PAPER BAG	3 053					3 053	3 266,71					3 266,71

- For Inventory Analysis, the workbook to be used is **BW_WBK_SCRE_0001 – SCREEN - Pack. Inventory analysis (Core Workbook)**

Run the workbook

It is mandatory to enter:

- Conso view (2) : enter **1** to apply the legal entity consolidation rate or **0** not to take the consolidation rate into consideration
- Calendar Month/Year (3) : MM.YYYY : from posting date

It is also possible to enter:

- a Company Code (4)
- a Plant (5)
- a PRS Company code (6)
- Target Curr. for conversion (7) : the exchange rate used is **CAR3**
- UoM for Qty conv. : Unit of Measure (VKG by default)
- BFC GBU (8)

Click "OK"

[BW_QRY_CPSPCK03_0001] SCREEN - Pack. Manuf. Consumpt. (vs Sales) analysis (Core Qu [DS_1])

Auth. scope based on Comp. Code (Selection option,...)	=	SOLVAY	1
	=	#	
* Conso. view? (1=Yes/0=No)		0	2
* Calendar Month/Year (Interval, Mandatory)		01.2021	3
Company Code (Multiple Values, Optional)		8090	4
Plant (Selection Option, Optional)	=		5
PRS Company code (Selection option, Optional)	=		6
Target Curr. for conversion (Single value, Optional)			7
UoM for Qty conv. (Single value, Optional)		VKG	8
1 - BFC GBU (Selection option, Optional)	=		9

Basic report

The report is displayed with :

- Pack. Actual Qty.**: actual packaging consumption on Production orders (Cost collectors / Process orders) (**IMEP - Index 1 = 3**. It corresponds to movement types 261/262)

2. Pack Costs bef. ML Reval.: value of actual packaging consumption
 - WP1: same as Actual costs (3)
 - PF1: standard value before month-end ML revaluation
3. Pack Actual Costs: value of actual packaging consumption
 - WP1: consumed qty at standard price ([IMEP - Index 1 = 3](#))
 - PF1: real value including month-end Material Ledger revaluation ([IMEP - Index 1 = 3](#))

			Pack. Actual Qty	Pack. Costs bef. ML Reval.	Pack. Actual Costs
Plant	Material (Pack.)			EUR	EUR
0087	1012231	BIG BAG 108X108X202 1000KG	15 000 VKG	0,00	0,00
	1081111	WOOD PALLET 1100X1100 4 WAYS	1 327 PC	600,18	600,18
	1081129	BIG BAG 108X108X202 1T BLCK STR MULTIWAY	1 739 PC	24 971,94	24 971,94

- For Inventory Analysis, the workbook to be used is **BW_WBK_SCRE_0003 – SCREEN - Pack. Consumption analysis (Core Workbook)**

Run the workbook

It is mandatory to enter:

- Conso view (2) : enter **1** to apply the legal entity consolidation rate or **0** not to take the consolidation rate into consideration
- Calendar Month/Year (3) : MM.YYYY : from posting date

It is also possible to enter:

- a Company Code (4)
- a Plant (5)
- a PRS Company code (6)
- Target Curr. for conversion (7) : the exchange rate used is [CAR3](#)
- UoM for Qty conv. : Unit of Measure (VKG by default)
- BFC GBU (8)

Click "OK"

[BW_QRY_CP5CPK03_0001] SCREEN - Pack. Manuf. Consumpt. (vs Sales) analysis (Core Qu [DS_1])

Auth. scope based on Comp. Code (Selection option,...)	=	SOLVAY	1
	=	#	
* Conso. view? (1=Yes/0=No)		0	2
* Calendar Month/Year (Interval, Mandatory)		01.2021	3
Company Code (Multiple Values, Optional)		8090	4
Plant (Selection Option, Optional)	=		5
PRS Company code (Selection option, Optional)	=		6
Target Curr. for conversion (Single value, Optional)			7
UoM for Qty conv. (Single value, Optional)		VKG	8
1 - BFC GBU (Selection option, Optional)	=		9

Basic report

The report is displayed with :

1. Pack. Actual Qty: actual packaging consumption on Production orders (Cost collectors / Process orders) ([IMEP - Index 1 = 3](#)). It corresponds to movement types 261/262)
2. Pack Costs bef. ML Reval.: value of actual packaging consumption
 - WP1: same as Actual costs (3)
 - PF1: standard value before month-end ML revaluation
3. Pack Actual Costs: value of actual packaging consumption
 - WP1: consumed qty at standard price ([IMEP - Index 1 = 3](#))
 - PF1: real value including month-end Material Ledger revaluation ([IMEP - Index 1 = 3](#))

			Pack. Actual Qty	Pack. Costs bef. ML Reval.	Pack. Actual Costs
Plant	Material (Pack.)			EUR	EUR
0087	1012231	BIG BAG 108X108X202 1000KG	16 1 VKG	0,00	0,00
	1081111	WOOD PALLET 1100X1100 4 WAYS	5 327 PC	600,18	600,18
	1081129	BIG BAG 108X108X202 1T BLCK STR MULTIWAY	1 739 PC	24 971,94	24 971,94

- For Inventory Analysis, the workbook to be used is **BW_WBK_SCRE_0002 – SCREEN - Pack. Purchasing analysis (Core Workbook)**

Run the workbook

It is mandatory to enter:

- Conso view (2) : enter **1** to apply the legal entity consolidation rate or **0** not to take the consolidation rate into consideration
- Calendar Month/Year (3) : MM.YYYY : Document fiscal period (Purchase order creation date / Goods Receipt posting date / Invoice Receipt posting date)

It is also possible to enter:

- a Company Code (4)
- a Plant (5)
- a PRS Company code (6)
- Target Curr. for conversion (7) : the exchange rate used is **CAR3** (same as **SPRINT - Solvay Purchasing Reporting INtelligence**)
- BFC GBU (8)

Click "OK"

Auth. scope based on Comp. Code (Selection option,...)

SOLVAY

#

1

* Conso. view? (1=Yes/0=No)

0

2

* Calendar Month/Year (Interval, Mandatory)

01.2018

12.2021

3

Company Code (Multiple Values, Optional)

0245

8090

4

Plant (Selection Option, Optional)

=

5

PRS Company code (Selection option, Optional)

=

6

Target Curr. for conversion (Single value, Optional)

7

1 - BFC GBU (Selection option, Optional)

=

8

The report is displayed with :

- The company code
- The plant
- PO Nb & PO Item (=Purchase order)
- The list of materials
- [Agreements & Info Records](#)
- [Ordered](#)
- [Goods receipt](#)
- [Invoice receipt](#)

1	2	3	4	5	6	7	8
Company	Plant	PO Nb	PO Item	Agreement	PO Qty	GR Value	GR Price
0087	1012231	1012231	1012231	1012231	1012231	1012231	1012231
0087	1012231	1012231	1012231	1012231	1012231	1012231	1012231

4.0 Functional Specification

4.1 General Data/Calculations

This section will approach the concepts/definitions that will be used in all the reports and required to understand the data from the reports.

Could be specific fields, closing activities, additional information to work and understand the reports.

Key figures

SCREEN - Pack. Inventory analysis (Core Workbook)

Quantity key figures

1. Opening Stock Qty (w/o. Consign.): in material base UoM, according to selected **period** in prompt (Ex. 01.2021 01.01.2021)
2. Purchasing Var. Qty: in material base UoM, according to selected **period** in prompt (Ex. 01.2021 01.01.2021 to 31.01.2021)

Packaging postings assigned to a PO (and not assigned to a Process order/Cost collector), mainly allocated to movement type 101/102 (GR goods receipt/Reversal)

3. Manuf. Consumpt. Var. Qty: in material base UoM, according to selected **period** in prompt

Packaging postings assigned to a Process order/Cost collector, also allocated to movement type 261/262 (GI for order/Reversal)

4. Others Var. Qty: all other GR/GI which are not Purchasing nor Manuf. consumption
5. Ending Stock Qty (w/o Consign.): in material base UoM, according to selected **period** in prompt (Ex. 01.2021 31.01.2021)

				202101 Opening Stock Qty (w/o Consign.)	202101 Purchasing Var. Qty	202101 Consign. Purch. Var. Qty	202101 Manuf. Consumpt. Var. Qty	202101 Others Var. Qty	202101 Ending Stock Qty (w/o Consign.)
Comp	Plant	Material		PC	PC		PC	PC	PC
8090	7851	1012218	WOOD PALLET CP3 1140X1140	1 267	2 103		-1 434	-626	1 310
		1050016	WOOD PALLET CP1 1000X1200	416	210		309	39	278
		1059621	PE DRUM 220L PO BLUE UN	111	236		16	45	86
		1059746	PE DRUM 120L TO BLUE UN X180	84	08				2
		1059750	PE DRUM 60L TO BLUE	37	72		80		29
		1060506	IBC 1000L WOOD PAL UN IR ETFE EVENT NAT	179	1 020		-743	-194	262
		1060595	WOOD PALLET CP9 1140X1140 ISPM15						
		1060791	PE SACK 600X1050X180 WHITE	8 952			-4 621	-150	4 181

Material 1012218 – Wood Pallet CP3 1140X1140



Consignment quantities are displayed separately

1. Consign. Purch. Var. Qty: Variation of stock consigned (Movement type 411 and Special stock indicator K (transfer from consignment to own stock))
2. Ending Stock Qty (Consign.): Consignment stock at the end of the period

				202101 Consign. Purch. Var. Qty	202101 Ending Stock Qty (Consign.)
Company code	Plant	Material		PC	PC
ZFR3	7622	1012305	WOOD PALLET 1090X1090 4 WAYS CIRC TT	6 020	1 899
		1016769	WOOD PALLET 890X1290 4 WAYS CIRC TT	437	1 824
		1081115	PAPER BAG TIXOSIL 58X107+16 GREEN	5 695	5 200
		1081116	PAPER BAG TIXOSIL 55X88+16 BLUE	23 400	58 833
		1081118	PAPER BAG TIXOSIL 65X107+16 YELLOW	13 000	26 810
		1909518	PAP. BAG TIXOSIL 65X107+16 PURPLE THERMO	5 200	47 197
		1909520	PAP. BAG ZEOSIL 65X107+16 BLUE THERMO		590
		1909878	PAPER BAG ZEOSIL 55X88+16 THERMO		2 830
	7681	1016510	BIG BAG 87X87X180 1000KG GR 40X70 HDPE	200	700
		1016513	BIG BAG 87X87X180 1000KG GR 45X65	25	
	7682	1137513	STAINLESS STEEL DRUM PO 33L		5

Var. Qty check (6) = Closing stock (5) - Opening stock (1) - Purchasing (2) - Consumption (3) - Others (4) = 0

		Opening Stock Qty (w/o Consign.)	202101 Purchasing Var. Qty	Manuf. Consumpt. Var. Qty	202101 Others Var. Qty	Ending Stock Qty (w/o Consign.)	Var. Qty check
Material		1	2	3	4	5	6
1012218	WOOD PALLET CP3 1140X1140	1 267	2 103	-1 434	-626	1 310	

Value key figures

- Opening Stock:** in Local (company) /Target currency, according to selected **period** in prompt (Ex. 01.2021 01.01.2021)
- Purchasing Var:** in Local (company) /Target currency, according to selected **period** in prompt (Ex. 01.2021 01.01.2021 to 31.01.2021)

Packaging postings assigned to a PO (and not assigned to a Process order/Cost collector), mainly relative to movement type 101/102 (GR goods receipt/Reversal)

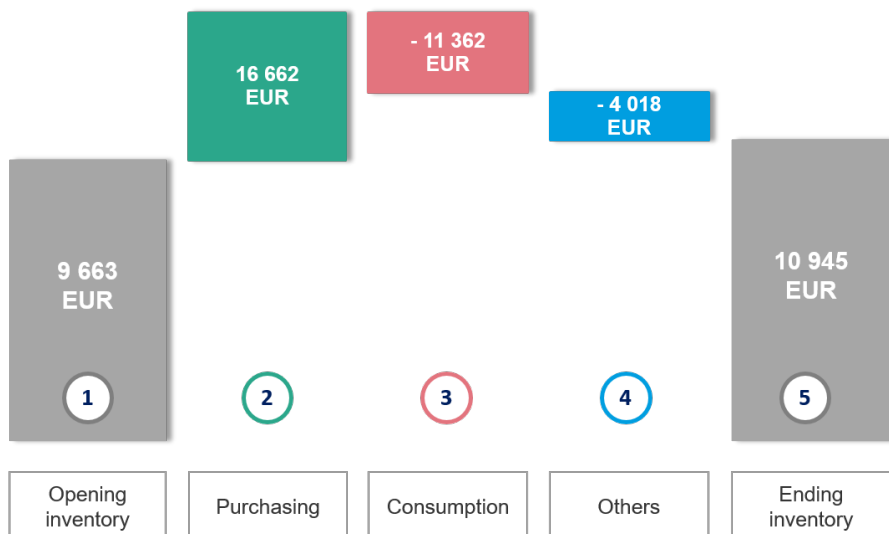
- Manuf. Consumpt. Var.:** in Local (company) /Target , according to selected **period** in prompt

Packaging postings assigned to a Process order/Cost collector, also related to movement type 261/262 (GI for order/Reversal)

- Others Var.:** all other GR/GI which are not Purchasing nor Manuf. consumption
- Ending Stock Loc./Target Curr.:** in Local (company) /Target currency, according to selected **period** in prompt (Ex. 01.2021 31.01.2021)

				202101 Opening Stock Loc./Target Curr.	202101 Purchasing Var. Loc./Target Curr.	202101 Consign. Purch. Var. Loc./Target Curr.	202101 Manuf. Consumpt. Var. Loc./Target Curr.	202101 Others Var. Loc./Target Curr.	202101 Ending Stock Loc./Target Curr.
Comp	Plant	Material		EUR	EUR		EUR	EUR	EUR
8090	7851	1012218	WOOD PALLET CP3 1140X1140	9 663,58	16 662,72		-11 362,01	-4 018,40	10 945,89
		1050016	WOOD PALLET CP1 1000X1200	3 429,52	1 442,64		-1 744,36	-2 748,46	3 229,34
		1059621	PE DRUM 220L PO BLUE UN	1 679,92	1 672,72		-29,20	-51,20	51 109,86
		1059746	PE DRUM 120L TO BLUE UN X180	1 33,83	1 31,91		-1,92	-1,92	1 31,91
		1059750	PE DRUM 60L TO BLUE	1 785,85	1 779,79		-6,06	-6,06	1 779,79
		1060506	IBC 1000L WOOD PAL UN IR ETFE EVENT NAT	13 580,25	76 311,74		-55 587,85	-15 060,51	19 243,63
		1060595	WOOD PALLET CP9 1140X1140 ISPM15	-107,92					-107,92
		1060791	PE SACK 600X1050X180 WHITE	10 310,14			-5 280,73	-171,43	4 857,98

Material 1012218 – Wood Pallet CP3 1140X1140



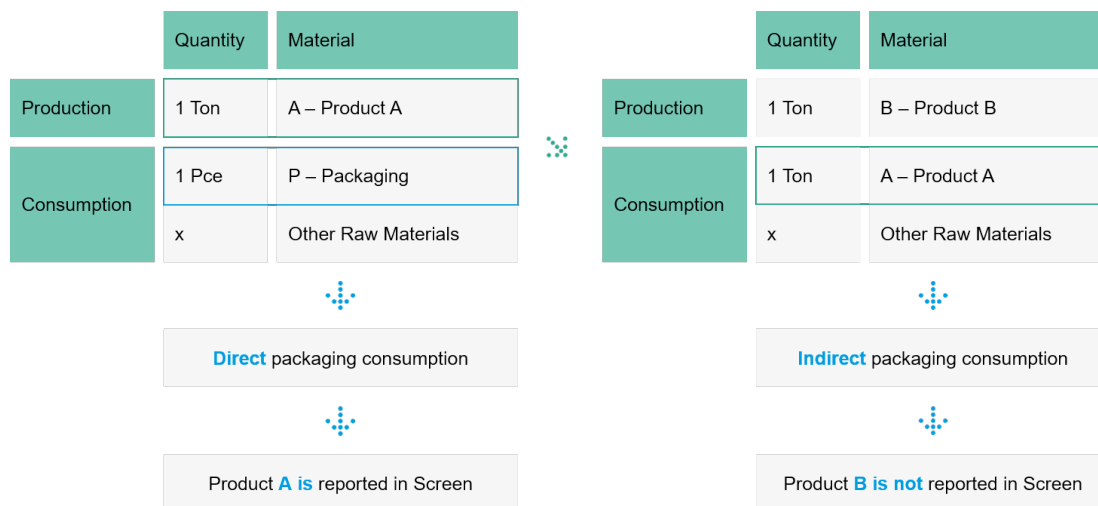
Variation value check (6) = Closing stock (5) - Opening stock (1) - Purchasing (2) - Consumption (3) - Others (4) = 0

		202101 Opening Stock Loc./Target Curr.	202101 Purchasing Var. Loc./Target Curr.	202101 Manuf. Consumpt. Var. Loc./Target Curr.	202101 Others Var. Loc./Target Curr.	202101 Ending Stock Loc./Target Curr.	Var. Value check
Material		EUR	EUR	EUR	EUR	EUR	EUR
1012218	WOOD PALLET CP3 1140X1140	1 9 663,58	2 16 662,72	3 -11 362,01	4 -4 018,40	5 10 945,89	6

SCREEN - Pack. Manuf. Consumption analysis (Core Workbook)

It includes:

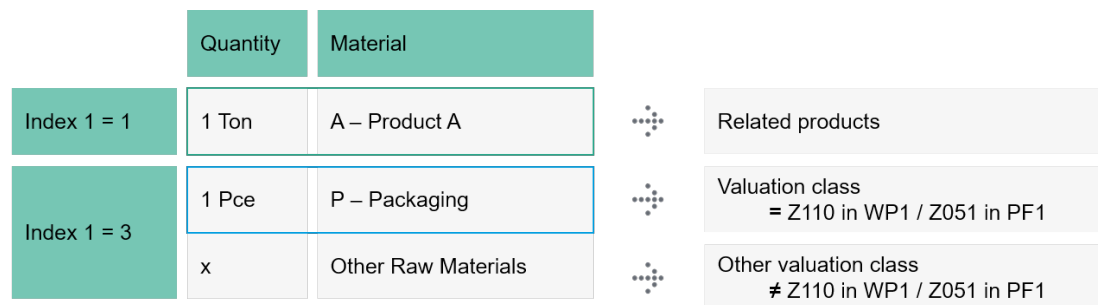
- Packaging components: Actual + target quantities and costs
- Manufactured materials (so-called products):
 - Actual production quantities and costs (total + variable) of products including "direct" packaging consumption, in order to measure weight of packaging vs production metrics. "Direct" means that if finished B has semi finished A in its BoM, and if A has packaging component P in its BoM, only A is reported as product in Screen report (and not B) => multi level consumption is not supported.



- Sold quantity, Net sales and Variables Cost of sales, in order to measure weight of packaging costs vs sales and costs of sales. Same products as identified above.

It mainly includes [IMEP - Integrated Manufacturing & Energy Performance](#) data

- Packaging materials are selected as BoM components ([IMEP - Index 1](#) = 3) according to their Valuation class: WP1 Z110 (stock account 31000300) and PF1 Z051 (2110110000)
- Related products are all the ones for which packaging is consumed in the same Plant / Period ([IMEP - Index 1](#) = 1)



It also includes [P&L](#) data (sales):

- For all selected products (see above), some related sales infos (including Sold quantity, Net sales and Variable Costs of Sales) are pulled from COPA at Company code / Period level. That means that for ex in Period 01.2021, if Material 10363 is produced in Plant 7851, the whole sales of 10363 in Company 8090 are taken into account, and not only sales from Plant 7851

Period 1

Company code 8090

			Plant 7851			Other plants	
Source			Quantity	Material		Quantity	Material
iMEP		Production	1 Ton	10363 – RHODAFAC			
		Consumption	5 Pces	1060794 – Drum			
			x	Other Raw Materials			
P&L		Sales	1 Ton	10363 – RHODAFAC			

- It is assumed that, most of the time, production and sales do not occur during the same period; for this reason, comparisons should be done for several rolling periods in order to minimize this time effect
- A technical split is performed in Screen in order to get iMEP packaging costs all along sales dimensions (Customer, Ship-to...) that do not exist in iMEP

Period 1

Company code 8090

Production (= iMEP)					Sales (= P&L)			
Plant	Packaging	Production Order	Pack costs by order	Finished product	Quantity Sold	Net sales	Ship-to	Pack costs by Ship-to
7851	1060794 - Drum	9066540	a 1 570 €	22480 - RHODAFAC	4 800 kg	14 000 €	55099 – NEW DOCKS	b 277 €
					22 400 kg	66 000 €	2012143 - OOSTVOGELS	1 293 €
		9066566	935 €	23128 - RHODASURF	67 000 kg	176 000 €	55099 – NEW DOCKS	935 €

Allocation of packaging costs by Ship-to

Ex:
 $17\% \times 1\,570\text{ € (a)}$
 $= 277\text{ € (b)}$

Production quantities & costs

- Prod. Actual qty: actual production qty issued from Production/Process orders (iMEP index 1 = 1)
- QUR *100: Pack. Actual qty / Prod. Actual qty * 100
 - Actual number of packaging units needed to produce 1 unit of finished product
- Prod. Actual Costs: Actual production costs
 - In WP1: Standard costs (iMEP index 1 = 3) + Process order variances (iMEP index 1 = 6)
 - In PF1: Production costs including Material ledger revaluation (iMEP index 1 = 3)
- Pack. vs Prod Total Costs %: Actual packaging costs / Prod. Actual Costs (3)
- Prod. Actual Var. Costs: Variable production costs (costs of raw materials & energy)
- Pack. vs Prod. Var. Costs %: Actual packaging costs / Prod. Actual Var. Costs (5)
- QUS *100: Pack. Target qty / Prod. Actual qty * 100
 - Theoretical number of packaging units needed to produce 1 unit of finished product (according to its standard Bill of Materials)

- Pack. vs Prod Sdt Costs %:** Packaging target costs / Production Actual costs (3) x 100 => Theoretical part of packaging costs in standard production costs
- Pack. vs Prod Sdt Var. Costs %:** Packaging target costs / Production Actual variable costs (5) x 100 => Theoretical part of packaging costs in variable standard production costs

		Prod. Actual Qty	QUR *100	Prod. Actual Costs	Pack. vs Prod Total Costs %	Prod. Actual Var. Costs	Pack. vs Prod. Var. Costs %	QUS *100	Pack. vs Prod Sdt Costs %	Pack. vs Prod Sdt Var. Costs %
Material (Pack.)		VKG		EUR		EUR				
1012218	WOOD PALLET CP3 1140X1140	18,900	562	53	5,76	4,43	6,87	19	50	56
1050016	WOOD PALLET CP1 1000X1200	18,870	8769	1,20	2,43	36,67	3,59	281	2,07	3,05
1059621	PE DRUM 220L PO BLUE UN	10,590	4294	55,97	6,08	59,88	7,18	621	6,11	7,22
1059750	PE DRUM 60L TO BLUE	3 595,500	2,22500	6 588,16	13,61	5 572,69	16,09	2,22500	13,61	16,09
1060506	IBC 1000L WOOD PAL UN IR ETFE EVENT NAT	751 231,970	0,09890	1 141 107,81	4,87	977 465,58	5,69	0,10190	5,02	5,86
1060791	PE SACK 600X1050X180 WHITE	96 790,330	4,77424	221 256,76	2,39	149 422,83	3,53	4,77424	2,39	3,53
1060792	STEEL DRUM 217L TO 10/9/10 IV GREY	5 065,500	0,65147	9 473,21	8,32	8 161,08	9,66	0,63636	8,13	9,43
1060793	STEEL DRUM 217L PO 9/9/9 RAW BLUE	268 802,160	0,64843	490 790,05	5,67	415 241,51	6,70	0,64352	5,64	6,67
1060794	STEEL DRUM 217L PO 9/9/9 IV BLUE	202 693,610	0,66011	494 632,23	5,38	412 079,54	6,45	0,65662	5,35	6,42
1060795	STEEL DRUM 217L TO 10/9/10 IV BLUE	40 477,740	0,63739	78 502,34	7,61	66 667,36	8,96	0,63455	7,55	8,89
1060798	IBC 1000L PE PAL UN KAMLOCK NAT	11 262,000	0,10655	22 351,34	6,25	19 617,32	7,12	0,17760	10,42	11,87
1060799	STEEL DRUM 217L TO 10/9/10 IV BLUE	19 369,360	0,65051	50 074,23	5,97	40 236,87	7,43	0,64783	5,94	7,40
1892373	IBC 1000L WOOD PAL ANTIST NAT UN Y1,9	11 972,000	0,10859	20 888,23	7,09	14 896,40	9,95	0,10150	6,63	9,30

Sales quantities & costs

- Sold Qty:** Quantity sold (BFC account = N8110)
- Sales:** Product net sales (BFC account = R10000 - Net sales)
- Var. CoS:** Variable costs of goods sold (BFC account = R15400 - Variable costs of sales)

by product sold (=Material (Prod.))

Company Code	Material (Prod.)	Sold Qty	Sales	Var. CoS
		VKG	EUR	EUR
8090	55394 ZEOSIL 1165MP BB 700 KG / WOOD PAL	1 599,750	2 675,75	3 041,99
	101441 ZEOSIL HRS 1200 MP BB 750 KG/ RETURN PAL	1 185,660	2 115,57	2 003,03
	135357 ZEOSIL 195MP BB 750 KG / ONE WAY PAL	35 999,720	43 451,71	14 650,32

Packaging costs / sales

- Pack. Costs per Sold unit * 100:** $\text{Pack. Actual Costs (a)} / \text{Sold Qty (b)} \Rightarrow$ Actual packaging cost for 1 unit of product sold
- Pack. Costs vs Sales %:** $\text{Pack. Actual Costs (a)} / \text{Sales (c)} \Rightarrow$ Weight of Actual packaging costs compared to related product sales
- Pack. Costs vs Var. CoS %:** $\text{Pack. Actual Costs (a)} / \text{Var. CoS (d)} \Rightarrow$ Weight of Actual packaging costs compared to related variable costs of sales

Material (Prod.)	Pack. Actual Costs	Sold Qty	Sales	Var. CoS	Pack. Costs per Sold unit *100	Pack. Costs vs Sales %	Pack. Costs vs Var. CoS %
	EUR	VKG	EUR	EUR			
55394 ZEOSIL 1165MP BB 700 KG / WOOD PAL	a 76,66	b 35 750	c 37 675,75	d 13 041,99	1 85	2 6	3 3
101441 ZEOSIL HRS 1200 MP BB 750 KG/ RETURN PAL	a 70,27	b 323 660	c 54 115,57	d 131 003,03	1 74	2 6	3 8
135357 ZEOSIL 195MP BB 750 KG / ONE WAY PAL	19 617,81	35 999,720	43 451,71	14 650,32	54,49	45,1	-133,9

SCREEN - Pack. Purchasing analysis (Core Workbook)

Agreements & Info Records

- Agreement Unit price** (in local & target currency)
- Info record Unit price** (in local & target currency)

Not all Purchase orders are created with reference to an Agreement/InfoRecord

PO Nb	PO Item	Material	Agreement Unit Price	InfoRecord Unit Price
4503216613	10	1060793 STEEL DRUM 217L PO 9/9/9 RAW BLUE	27.22	21.10

Ordered

1. **PO Qty:** Ordered qty in PO UoM & in Material base UoM ★
2. **PO value:** Ordered value in PO Currency & in Local (Company code) currency or in any Target currency if entered in prompt
3. **PO Unit Price:** Ordered value in Local curr. / Ordered qty in PO UoM & Ordered value in target curr. / Ordered qty in PO UoM

PO Nb	PO Item	Material		1		2		3	
				PO Qty PO UoM	PO Qty Base UoM	PO Value PO Curr.	PO Value Loc./Target Curr.	PO Unit Price (PO UoM) Local Curr.	PO Unit Price (PO UoM) Target Curr.
4503216613	10	1060793	STEEL DRUM 217L PO 9/9/9 RAW BLUE	PC	PC	EUR	EUR		
				276	276	4,482.24	4,482.24	16.24	16.24

Goods Receipt

1. **GR qty:** Quantity received in PO UoM & in Material base UoM
2. **GR value:** Value of goods received in PO Currency & in Local (Company code) currency or any Target currency if entered in prompt
3. **GR unit price:** GR value in Local curr. / GR qty in PO UoM & GR value in Local/Target curr. / GR qty in PO UoM
4. **GR Price diff.:** difference between GR value and standard value ★ of stock entry, in PO & Local or Target curr., when posted in GR doc.

★ Standard value = GR qty * Material standard price

PO Nb	PO Item	Material		1		2		3		4	
				GR Qty PO UoM	GR Qty Base UoM	GR Value PO Curr.	GR Value Loc./Target Curr.	GR Unit Price (PO UoM) Local Curr.	GR Unit Price (PO UoM) Target Curr.	GR Price diff. Doc. Curr.	GR Price diff. Loc./Target Curr.
4503216613	10	1060793	STEEL DRUM 217L PO 9/9/9 RAW BLUE	PC	PC	EUR	EUR			EUR	EUR
				276	276	4,482.24	4,482.24	16.24	16.24	-107.60	-107.60

Consignment

There are specific indicators to follow-up consignment:

1. **GR Consign. qty:** in Material base UoM
2. **GR Consign. value:** in Doc. Curr. & in Local (Company code) curr. or any Target curr. if entered in prompt
3. **GR unit price:** GR Consign. value in Doc. curr. / GR Consign. qty in base UoM & GR Consign. value in Local/Target curr. / GR Consign. qty in base UoM
4. **GR Price diff.:** difference between GR Consign. value and standard value of stock entry, in Doc. & Local or Target curr.

GR Unit Price & Price diff. columns/ratios are the same for both standard and consignment GR

						①	②	③		④		
Plant	PO Nb	PO Item	Material		FI Doc. Nb	GR Consign. Qty Base UoM	GR Consign. Value Doc. Curr.	GR Consign. Value Loc./Target Curr.	GR Unit Price (Po UoM) Local Curr.	GR Unit Price (Po UoM) Target Curr.	GR Price diff. Doc. Curr.	GR Price diff. Loc./Target Curr.
BWF	#	#	20166489	CYL 30L 229X1100 300BAR PI>SF6	6210644634	PC	EUR	EUR	103,30	103,30	-42,00	-42,00
						75	7 747,50	7 747,50				

Invoice Receipt

1. **IR qty:** Invoice receipt in PO UoM & in Material base UoM
2. **IR value:** Invoice receipt in PO Currency & in Local (Company code) currency or any Target currency if entered in prompt
3. **IR unit price:** Invoice value in Local curr. / IR qty in PO UoM & IR value in Local/Target curr. / IR qty in PO UoM
4. **IR Price diff.:** difference between GR value and standard value of stock entry, in PO & Local or Target currency, when posted in IR doc.

★ Standard value = IR qty * Material standard price

PO Nb	PO Item	Material		1		2		3		4	
				IR Qty PO UoM	IR Qty Base UoM	IR Value PO Curr.	IR Value Loc./Target Curr.	IR Unit Price (PO UoM) Local Curr.	IR Unit Price (PO UoM) Target Curr.	IR Price diff. Doc. Curr.	IR Price diff. Loc./Target Curr.
4503216613	10	1060793	STEEL DRUM 217L PO 9/9/9 RAW BLUE	PC	PC	EUR	EUR			EUR	EUR
				276	276	4,517.57	4,517.57	16.37	16.37	35.33	35.33

Consignment

As for goods receipt, there are specific indicators to follow-up consignment invoices:

1. **IR Consign. qty:** in Material base UoM
2. **IR Consign. value:** in Doc. Curr. & in Local (Company code) curr. or any Target curr. if entered in prompt
3. **IR unit price:** GR Consign. value in Doc. curr. / GR Consign. qty in base UoM & GR Consign. value in Local/Target curr. / GR Consign. qty in base UoM
4. **IR Price diff.:** difference between IR Consign. value and standard value of stock entry, in Doc. & Local or Target curr.

As Consignment invoices are auto invoices (MRKO tr.), no IR Price diff. should occur

IR Unit Price & Price diff. columns/ratios are the same for both standard and consignment IR

					1	2	3	4			
Plant	PO Nb	PO Item	Material		IR Consign. Qty Base UoM	IR Consign. Value Loc./Target Doc. Curr.	Consign. Value Loc./Target Curr.	IR Unit Price (PO UoM) Local Curr.	IR Unit Price (PO UoM) Loc./Target Curr.	IR Price diff. Doc. Curr.	IR Price diff. Loc./Target Curr.
BWF	#	#	20166489	CYL 30L 229X1100 300BAR P1>SF6	6313000945	PC	EUR	EUR			
					630	66 465,00	66 465,00	105,50	105,50		

4.2 Process Detail

4.2.1. Report/Process Definition

Domain	<insert name>
Application	>insert name>
Provider	<insert name>
Existing Documentation	<insert link>

This section represents the process with detail information for the application. Can include specific or special cases, complex logics , calculations, flows, among others.

5.0 Non-functional Descriptions

Please populate the relevant section and delete those that are not applicable.

5.1 Usability

Usability is about the ease with which a User can learn to start using the solution and the ease with which they can use the system. In addition to ease of learning and ease of use, usability also includes areas such as ease of recall, error avoidance and handling, accessibility among others e.g., 99% of metadata entry Users who have use the Maintenance Dashboard should be able to change filters, extract etc., when required. Maintenance data will be centrally stored in the Google Cloud platform, which will be available to other applications e.g., and Dashboards if needed.

5.2 Regulatory Compliance

Software systems must comply with legal and regulatory e.g., GDPR requirements, this can change depending on country, organisation industry and / or region. The software systems must be secure from unauthorized access. The Maintenance Dashboard will comply with Solvay's regulations and compliance e.g., access only granted to authorized Users.

5.3 Security

Security refers to essential aspects that assure a solution and its components will be protected against unauthorized access or malware attacks. Important considerations related to security aspects of a system are User authentication, User authorization or User access privileges, data theft, malware attacks, data encryption, and maintaining audit trails, e.g., only Users with administrator access shall be able to create new accounts and assign data access privileges to the new accounts e.g.,

- All data will be encrypted in the dashboard
- Only authorised Users / Administrative Users will be able to access data.
- Maintenance data will be split between either SCO or ECO, and Users will only have authority to one Entity data.

5.4 Performance

Performance defines how fast a software system or a particular section of it responds to certain User actions under a certain workload. In most cases, this metric explains how long a User must wait before the target operation happens e.g., the page renders, a transaction is processed, etc., given the overall number of Users now. Performance requirements may describe background processes invisible to Users, e.g., backup and speed of data transfers.

5.5 Reliability

Reliability is the ability of a solution or its component to perform its required functions without failure under predefined conditions for a specified time / period. Reliability can possibly be specified in terms of average time system runs before failure occurs, percentage of operations completed

successfully within a time / period, maximum acceptable failure probability, or number of failures within a period. Reliability aspects are in reference to (but not limited to) evaluation of the system to be considered as reliable, classification of reliability defining failures vs. regular failures, and the impact of failure on business operations. The Maintenance Dashboard will display data from the previous refresh of data.

5.6 Scalability

Scalability refers to the degree to which a solution can evolve to handle increased amounts of work. The increased amount of work could be in terms of the user base, transactions, data, network traffic, or other factors e.g., the system should be able to handle an additional load of a maximum of 5,000 Users every month for the next 6 months without any noticeable performance impacts.

5.7 Compatibility

Interoperability is the degree to which the solution is compatible with other components. It is a measure of how effectively the system interoperates with other software systems and how easily it integrates with external hardware devices.

Interoperability aspects to be discussed during elicitation are in reference to (but not limited to) software systems to be interfaced with along with data / messages to be exchanged and any standard data formats, hardware components to be integrated with, and any standard communication protocols to be followed e.g., Order Management system will push the order file into a secured file transfer protocol server from where it will be loaded into the system through a daily job. To guarantee between Google Cloud platform and SAP BW Queries e.g., BW_QRY_MVPMOR01_0002, Solvay has introduced a new tool called Xtract ([Xtract](#)).

5.8 Availability

Availability is the degree to which the solution is operable and accessible when required. It is a measure of time during which the system is fully operational e.g., available for use and sometimes included as a Service Level Agreement (SLA) considering its criticality to the business, e.g., the system shall be at least 99% available on weekdays between 09:00 to 18:30 Central European Time (CET).

5.9 Refresh of the Data

Data update 

SCREEN - Pack. Inventory analysis (Core Workbook)

SCREEN - Pack. Manuf. Consumption analysis (Core Workbook)

- [IMEP](#) data: several times a day from D1 to D6, once a day the rest of the month
- [P&L](#) data: several times a day from D2 to D5, once a day the rest of the month

SCREEN - Pack. Purchasing analysis (Core Workbook)

- Purchase orders data: once a day in the morning (French time)

=> Sources are the same than the ones used in [SPRINT - Solvay Purchasing Reporting INTelligence](#)

- FI data: at least 3 times a day