

IAC 01.02. Variance analysis

Process: [Product Costing](#)

Responsibility area: [Internal Control Monitor](#)

Risk

FRA justifies the usage of manual costing vs a reference list validated by plant manager and GCCO, controls inventory revaluation and analyzes variances

Process description

Variances of production costs are analyzed monthly to ensure inventory valuation and cost of sales accuracy

Control description

FRA:

- 1. WP2 description:
 - 1. compares list of manual costing vs result of ZWOCO50 transaction
 - 2. analyzes product costing variances month over month and checks that there were no blocking errors (CK40N reports)
 - 3. analyses variances (actual vs target) with the variable & fixed cost split (ZWPP_MCKOST or IMEP BW reports)
 - ZWOCO050 file with comments
 - CK40N checklist + CK40N analysis template
- 2. PF2 description:
 - 1 . Analysis of material cost variances Month N vs Month N-1 above 10K Materiality (ZZM_MAT_VAL_COMP report) r ZWPP_MCKOST or IMEP BW reports) with comments

Scope

WP2 & PF2

Frequency

D10

Control owner

[Finance Responsible Assigned \(FRA\)](#)

References

Error rendering
macro
'contentbylabel'

parameters should
not be empty

Content by label

There is no content with the specified labels

Control evidences

[IAC 01.02 Monthly variance analysis, CCR, manual costing.xls](#)
[IAC 01.02 template PF2.xlsx](#)

Guideline

Download the file [IAC 01.02 Monthly variance analysis, CCR, manual costing.xls](#)

There are 9 sheets in the file :

Read me first	ZWOCO050	CK40N Check list	CK40N	Variance Template	Perf. analysis	Revaluation	CC variance	IAC 01.09
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This template concerns the IAL WL02. The objective is to justify the usage of manual costing vs reference list validated by plant manager and GCCO, control inventories revaluation and analyze variances

Compare list of manual costing validated by plant manager and GCCO vs result of ZVOC0050

- Run the ZVOC0050 transaction
- Attach your ZVOC0050 file (with comments) in the tab named "ZVOC0050" in this Excel template

Analyze product costing variances month over month and check that there were no blocking errors (CK40N reports)

- Run the CK40N transaction
- Fill in the check list in the tab named check list in this Excel template
- Attach your CK40N analysis in the tab named CK40N in this Excel template

Analyze variance analysis

Fill in Variance Template tab

Fill in "Perf analysis plant spec" tab. Run the ZVPP40A transaction

- a1. Recurring cases of production line change: Please describe for your site
- a2. Recurring cases of switch between Raw material / Recycling: Please describe for your site
- b. Productivity variance: Standard analysis based on ZVPP40A
- c. Material purchased instead of produced: Please describe for your site
- d. Subcontractor variance: Please describe for your site
- e. Others: Please describe for your site

Fill in Revaluation: Run the ZVFA100A transaction tab

Site	
FRA's name	
Date	
Period	

N°	Control description	Done ?			Comments (compulsory for No and N/A)	Control Evidence (optional)
		Yes	No	N/A		
1	Messages analysis					
1a	Errors messages in CK40Ri are checked and corrected (red squares)					
1b	Warning messages are analyzed (yellow triangles)					
2	Excel analysis : all variances above threshold are analyzed *					
3	If applicable, valid legal entity integrated FIFO is used					
4	Control evidences are posted in the IAC eroom					
4a	Excel file with variance analysis & comments					
4b	Check-list					
4c	For Materials that are not fully activated is the "Do Not Cost" flag ticked					

Start the transaction **ZWOCO050**

1. Select Layout by clicking on



2. Click on **IAC 01.02**

[illegible]

Extraction of the historical updates of material

Updates dates		to		
User profile		to		
Object	ABAP: Variant Directory of Program ZWOC005000			
Table n°				
Field Name	Variant catalog for program ZWOC005000			
	Variant name	Short Description	Environment	Protected
Material	IAC 01.02	extract all manual modf	A	
Material	IAC 01.02UM	IAC 01.02-0241 0257 8073 CA	A	
Division	IAC 03.08.05		A	UMILER
Plant	IAC 03.08.05LM	IAC 03.08.05-0241 0257 8073 CA	A	UMILER
	IAC 03.08.05RW	RWASDEN IAC 03.08.05	A	RWASDEN
	IAC038085 0214	IAC038085 0214	A	
Selection	IAC038085 6375		A	ESCHUBER
	IAC038085 6864		A	ESCHUBER
	IAC038085 7523		A	ESCHUBER
	IAC038085 7580		A	ESCHUBER
Path and	IAC038085 8160	Extract all manual modificatio	A	X
Enter the	IAC038085 7461		A	XYZHOU
This will	JWAIAC 03.08.05	0242 Baton Rouge	A	ESCHUBER
If you di	MTIAC 03.08.05	8056 University Park	A	ESCHUBER
	NAIAC 03.08.05	North America Sites	A	
	RSIAC03.08.05	COMMERCIAL PRICE	A	
	TOLL-IAC038085	Dephelos In-Crate Warehouses	A	RSCHMITT
	IAC-PLV	IAC385-check manual cost	A	US70176
			A	PLV

1. enter the period
2. enter a plant or a list of plants

3. click on  to enter the path & the file name

Confirm 4 tables codes in "Field Name"

VERPR	BEPH1
BWPRH	VJBWH

Extraction of the historical updates of material



Updates dates **1** 01.10.2015 to 31.10.2015 

User profile 

Object class MATERIAL 

Table name MBEW 

Field Name VERPR to 

Material 

Material Type 

Division 

Plant **2** 7822 to 

Select deleted material number ?
Yes : ☐ No : ☒

Path and file name to create  EN\Mes documents\Contrôle IAC\ZWOCO050\test01.xls **3**

Enter the nb of records that will contain the file : 999 999

This will allowed a better cutting for excel or will provided a time-out.
If you don't want any cutting, leave 999999.

STEP 3

Upload the file in excel

1. choose the folder where you want to save the file
2. enter the file name
3. Select "Excel files" in files of type

Extraction of the historical updates of material



Updates dates 01.10.2015 to 31.10.2015 

User p 

Object 

Table 

Field N 

Material 

Material 

Division 

Plant 

Select 

Path a 

Enter 

This w 

If you 

Select File

Look in:  New folder (2)

Name Dat...

No items match your search.

Recent Places

Libraries

Computer

Network

File name: ZWOCO050 10.2015 **2**

Files of type: Excel Files (*.XLS;*.XLSX;*.XLSM) **3**

Open **4**

Cancel

STEP 4

Execute



It may result in a long runtime

Extraction of the historical updates of material

1 

Updates dates 01.10.2015 to 31.10.2015 

User profile 

Object class MATERIAL 

Table name MBEW 

Field Name VERPR to 

Material 

Material Type 

Division 

Plant 7822 to 

Select deleted material number ?
Yes : ☐ No : ☒

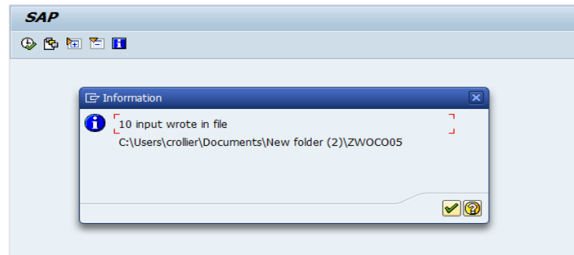
Path and file name to create  C:\Users\crollel\Documents\New folder (2)\ZWOCO050 **1**

Enter the nb of records that will contain the file : 999 999

This will allowed a better cutting for excel or will provided a time-out.
If you don't want any cutting, leave 999999.

STEP 5

There is an information message that informs that inputs were written in the file



STEP 7

The report was saved in excel

Each line of the file has to be justified with the following reason code :

1. Co-product /Sold waste /Recycled material
2. Integrated FIFO
3. Wrong Material file purchase info
4. Erroneous reception
5. Other (detailed explanation to be provided)

Save the file

Example

Material 64569 Blocs exutoire vrac was modified on July, 2nd

The old value was 550 € / T, the new value is 650 € / T

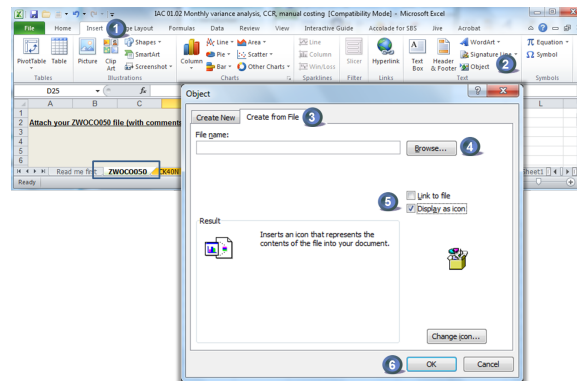
This material is a waste, that's the reason why it has a commercial price. The reason code that corresponds to this modification is the first one : 1-Co-product /Sold waste/Recycled material.

Material no	Description	Material type	Plant	Table name	Field code	Field name	update date	Old value	New value
64569	BLOCS EXUTOIRE VRAC	1MAT	1702	MBEW	BWPRH	Valuation price based on commercial law level 1	02.07.2009	550.00	650.00

STEP 8

Insert the file ZWOCO050 in the file IAC 01.02 of the month

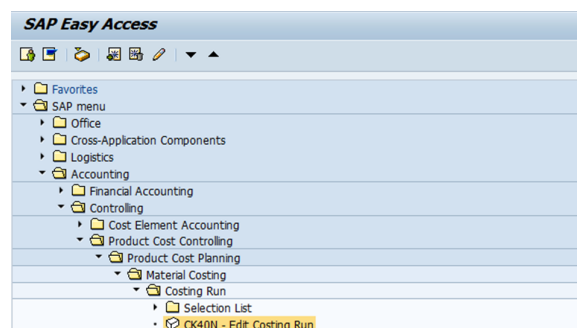
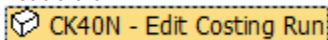
1. Select "insert"
2. Click on "Object"
3. Select "Create from File"
4. Click on "Browse" and select the file
5. Check "Display as icon"
6. Click on OK



STEP 1

Start the transaction using the menu path or transaction code CK40N

Double-click



STEP 2

1. enter the costing run of the month and

Enter ↵

Edit Costing Run

☐ With Reference

Costing Run

2F83SCC

1

Option

Costing Run Date

General Data

Processing

Costing Results

1. Expand

Edit Costing Run

☐ With Reference

Costing Run

RHOP1004

 Description

CCR RHODIA OPERATION AVRIL 2010

Costing Run Date

31.03.2010

1

Data

Create Cost Estimate

Flow Step	Authorization	Parameter	Execute	Log	Status	Materials	Errs	Still Op.
Selection						7438	0	
Struct. Explosion						7438	0	
Costing						7438	0	0
Analysis								
Marking						7438	0	0
Release						7438	0	0

Costing Levels

Material Overview

Analysis

STEP 4



All error messages must be cleared

When there is a warning message, it often happens that there is a mistake in the costing. So even if it is not compulsory, it is recommended to check the warning messages and try to correct it.

Note: Sometimes, despite not having any error, some materials remain in column "Still Open". This is related with a technical issue linked to the mixed-costing materials. In order to correct the display table it's necessary to execute transaction CKSU.

STEP 1

WP1 + PF1

When there are error  or

warning  messages, you must

click on  to analyse and clear them

Create Cost Estimate

Flow Step	Authorization	Parameter	Execute	Log	Status	Materials	Errs	Still Open
Selection						1726	26	
Struct. Explosion						1726	26	
Costing						1700	0	0
Analysis								
Marking								
Release								

STEP 2

WP1 + PF1

Click on  to have the list of messages

Costing Run: Selection - Log

Message log created on

26.12.2011

Number of Messages Collected

Information Messages	1
Warning Messages	72
Error Messages	26
Termination Messages	0
Total	99

STEP 3

WP1 + PF1

1 - Type of message



Error messages, must be cleared



Warning messages, must be analysed and cleared as much as possible



Information messages

2 - Message code

3 - Plant code

4 - Material code

5 - Message description

Costing Run: Selection - Log

Log created on 26.12.2011

Excep...	M...	M...	Plant	Material	Σ	A...	Message Text
W	128	7811	32787	1	CK	Material 32787 in plant 7811 has no accounting data	
W			77069	1	CK	Material 77069 in plant 7811 has no accounting data	
W			115117	1	CK	Material 115117 in plant 7811 has no accounting data	
W		7818	49739	1	CK	Material 49739 in plant 7818 has no accounting data	
W		7819	110142	1	CK	Material 110142 in plant 7819 has no accounting data	
I	172	7787	1615996	1	CK	Material 1615996 in plant 7787: No cost est. exists -> ra...	
E	310	7714	68858	1	CK	Material 68858 is marked for deletion	
E			19398	1	CK	Material 19398 is marked for deletion	
E			40928	1	CK	Material 40928 is marked for deletion	
E			50775	1	CK	Material 50775 is marked for deletion	
E			66785	1	CK	Material 66785 is marked for deletion	
E			101132	1	CK	Material 101132 is marked for deletion	
E			101628	1	CK	Material 101628 is marked for deletion	
E		7779	66785	1	CK	Material 66785 is marked for deletion	

STEP 4

WP1 + PF1

You can double-click on a message to have a more detailed description of the issue

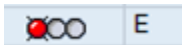
Material 68858 is marked for deletion

Message no. CK310

Diagnosis

Material 68858 was flagged for deletion internally. To delete this deletion flag, you have to change the indicator in the material master record.

[Change material master record](#)



CK060 - Object was not costed

CK249 - Cost component split for material not saved

CK310 - Material is marked for deletion

CK380 - No valid source of supply could be found

CK468 - No price could be determined for subcontracting

CK023 - No control record for Activity type CHEF/X332900700/ZZANO2 in version 000 / 2017 activity planning/qty planning

CK354 - Material XXXX in plant YYY has material status Z4 : Material deleted

CK430 - Missing formula in work center xxxxx

CK862 - Material XXX in plant XXX does not contain any segment for in-house production



- CK053 - Deletion indicator set in material - plant
- CK054 - Deletion indicator set in material - valuation area
- CK080 - Material plant : BOM not active
- CK082 - Material plant: no suitable BOM found
- CK128 - Material in plant has no accounting data.
- CK382 - Material does not exist in withdrawal plant
- CK858 - No suitable or valid production version

STEP 5

When errors are corrected and warning messages checked , costing analysis can begin. Click on

Analysis

Edit Costing Run

With Reference

Costing Run

2FR3SCX

Description

Rhodia Opérations CCR Mois de March 2015

Costing Run Date

28.02.2015

General Data

Create Cost Estimate

Flow Step	Authorization	Parameter	Execute	Log	Status	Materials	Eng	Stt Op
Selection	x>					7438	0	
Sheet Expansion	x>					7438	0	
Costing	x>					7438	0	0
Analysis	x>					7438	0	0
Marking	x>					7438	0	0
Release	x>					7438	0	0

Costing Levels

Material Overview

Analysis

STEP 6

Select the variant. In this example, we are using the variant /IAC0102

Costing Levels

Material Overview

Analysis

Analysis

Material	Material Description	Plant	Lot Size	per	Unit	%Var.	costl.
110995	POLYCARE 400 25 KG DRUM	7360	1.000	1.000	KG		
119855	RHODIASOLV IRIS 1000KG IBC		1.000	1.000	KG		
120258	RHODIASOLV IRIS BULK		1.000	1.000	KG		
129460	RHODIASOLV RPDE NA BULK		1.000	1.000	KG		
		7360					
10005	RHODOPAS DS 910 BULK	7379	1.000	1.000	KG		
10000	RHODOPAS DS 1002 BULK		1.000	1.000	KG		

STEP 7

Filter the plant you are responsible for

Costing Levels

Material Overview

Analysis

Analysis

Material	Material Description	Plant	Lot Size	per	Unit	%Va
22638	SILCOLAPSE 411 DRUM PLAST 200KG 225L	7822	1.000	1.000	KG	
22639	ANTIFOAM A FUT PLAST CUB 200KG DM		1.000	1.000	KG	
31948	TY B 50H1 BLACK LBO 0129 25KG PB/A		1.000	1.000	KG	
33082	TY C 216 V40 BLACK Z OCT 1TO (811)/E		1.000	1.000	KG	
34808	TY A 217 BLACK 1N 25KG PB (605)/E		1.000	1.000	KG	
34832	TY A 218 S30 BLACK 21N 25KG PB (605)/E		1.000	1.000	KG	

STEP 8

Save in excel : local file => spreadsheet

Costing Levels

Material Overview

Analysis

Analysis

Material	Material Description	Re	Lot Size	Unit
22638	SILCOLAPSE 411 DRUM PLAST 200KG 225L	0	1.000	KG
22639	ANTIFOAM A FUT PLAST CUB 200KG DM	0	1.000	KG

Spreadsheet

Word processing

Local File

Send

In which format should the list be saved ?

☐ unconverted

☒ Spreadsheet

☐ Rich text format

☐ HTML Format

☐ In the clipboard

STEP 9

Enter the directory & the file name and generate the file

Edit Costing Run

Directory

C:\Users\

File Name

7822 costing run.xls

Encoding

Generate

Replace

Extend

STEP 3

There is one purchase order to check.

=> Double-click on it

PO	Type	Vendor	Name	PGp	Order	Date
Item	Material		Short Text			Mat. Group
D I A	Plnt	SLoc	Order Qty	Un	Net Price	Curr. per Un
4501142	NB	53552	IMCD FRANCE SAS	FKK	17.03.2010	
0001	64235		BASE DE NIGROSINE/SOLVANT NOIR 7 FUT	0451		
	7822	FR59		80	KG	16,55 EUR 1 KG
			Still to be delivered	0	KG	0,00 EUR 0,00 %
			Still to be invoiced	0	KG	0,00 EUR 0,00 %
00020	64235		BASE DE NIGROSINE/SOLVANT NOIR 7 FUT	0451		
	7822	FR59		20	KG	16,55 EUR 1 KG
			Still to be delivered	0	KG	0,00 EUR 0,00 %
			Still to be invoiced	0	KG	0,00 EUR 0,00 %

In march, the purchase price is 16,55 € / KG

Standard PO 4501142662 Created by Chan-Moly OEUR									
Document Overview On ☐ Print Preview Messages ☐ Personal Setting									
Standard PO 4501142662 Vendor 53552 BCD FRANCE SAS Doc. date 17.03.2010									
Header									
Item	Material	Short Text	PO Quantity	UoM	Deliv. Date	Net Price	Currency	Per	Mat. Group
10	64235	BASE DE NIGROSINE/SO...	80	KG	23.03.2010	16,55 EUR	1		KG CHEM PROD_ZFR
20	64235	BASE DE NIGROSINE/SO...	20	KG	06.04.2010	16,55 EUR	1		KG CHEM PROD_ZFR

It corresponds to the price invoiced

= 1 324 € / 80 kg

= 16,55 € / kg

At the end of M-1, the MAP was 6,64 € / kg. As the purchase price of M is 16,55 € / kg, it is normal that the MAP increases in M.

Item [10] 64235, BASE DE NIGROSINE/SOLVANT									
Material Data Quantities/Weights Delivery Schedule Delivery Invoice Conditions Purchase Order History									
Sh. Text	MvT	Posting Date	Material Document	Item	Entry Date	Quantity	Time of Entry	Reference	Amount
GR	101	22.03.2010	5007814821	1	22.03.2010	80	13:30:44	111558	1 324,00 EUR
Tr./Ev. Goods receipt						80			1 324,00 EUR
IR-L		25.03.2010	5106826979	1	25.03.2010	80	10:24:22	111558	1 324,00 EUR
Tr./Ev. Invoice receipt						80			1 324,00 EUR



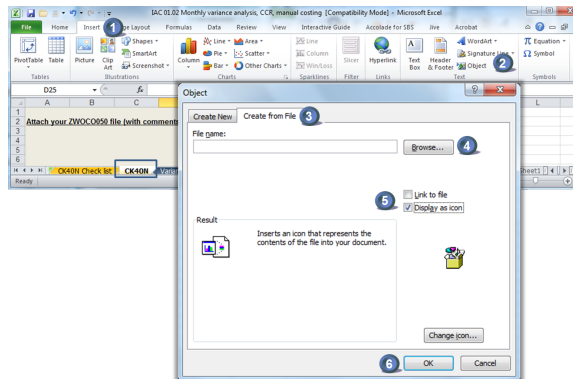
If there is a mistake in the calculation of the new MAP due to an error in the purchase order, invoice price etc:

- Ask to correct the purchase order,
- If the MAP is still not correct => use the field Commercial 1 in view accounting 2 to correct it manually,
- Prepare a documentation for control IAC 01.02

STEP 11

When the analysis is completed, insert the file with your comments in the file IAC 01.02 of the month (sheet "CK40N").

1. Select "insert"
2. Click on "Object"
3. Select "Create from File"
4. Click on "Browse" and select the file
5. Check "Display as icon"
6. Click on OK



Once the CK40N analysis was completed, fill the checklist to confirm that all tasks have been properly performed

1. enter your site, name, date & period
2. enter the status of the task
3. when a task has not been performed, it is compulsory to comment
4. integrated FIFO is only applicable in limited cases

Site					
FRA's name					
Date					
Period					

Standard Cost Calculation Check-List / FRA				
IAC 01.02				
N°	Control description	Done ? Yes No N/A	Comments (compulsory for No and N/A)	Control Evidence (optional)
1	Messages analysis			
1a	Errors messages in CK40N are checked and corrected (red squares)	No		
1b	Warning messages are analysed (yellow triangles)	Yes		
2	Excel analysis : all variances above threshold are analyzed	Yes		
3	If applicable, valid legal entity integrated FIFO is used	N/A		
4	Control evidences are posted in the IAC eroom			
4a	Excel file with variance analysis & comments	Yes		
4b	Check-list	Yes		

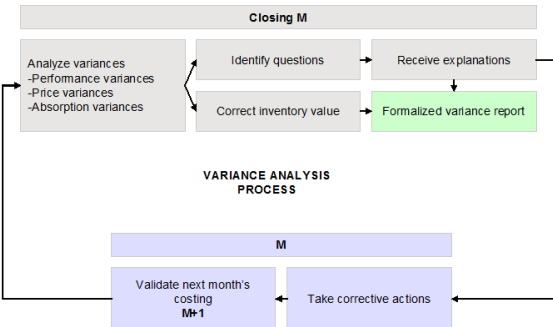
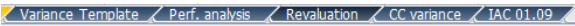


The variance is the difference between the expected standard cost and the actual cost incurred. Variance analysis involves breaking down the total variance to explain how much of it is caused by usage of resources being different from the standard and how much of it is caused by the price of resources being different from the standard.

Each site controller has the responsibility to analyze each month the variance and to explain this variance in order to :

- Understand the reasons
- Initiate corrective actions
- If needed adjust the inventory value and change the semi-standard way of calculation, depending on the origin of the variance.

This process of analysis, whatever the result be a change of costing or not, must be formalized, and archived as a justification of records based on following sheets :



Open the sheet "Variance Template"

STEP 1

Step 1: Open the file.

Choose the authorization scope and the period / fiscal year

SCOPE : SCO

BW File on

BW - IMEP - WP2 Variance Analysis

STEP 2

Control that the report BW = KE30:
Total column P = D05
Total column Q = E05
Total column R = F05

STEP 3

List the products that generate the main variances

Total		
128581	FENTAMINE MADHT BULK(CN)	101,523 CNY
128201	FENTACARE DHT21 I 75 BULK	109,349 CNY
128428	FENTACARE EAPB BULK(CN)	145,125 CNY
128568	FENTAMINE DMAPA CRUDE BULK(CN)	170,968 CNY
128192	FENTACARE DHT21 E 75 BULK	201,829 CNY
124051	FENTAMINE DMA1270 BULK	204,609 CNY
128620	JAGUAR C 14 S BULK(CN)	224,074 CNY
128541	FENTAMINE DMA1270D BULK(CN)	246,764 CNY
128567	FENTAMINE DMAPA BULK(CN)	354,980 CNY
128278	INT NITRIL HT BULK(CN)	618,017 CNY
TOTAL		2,377,238 CNY

STEP 4

Explain the main variances

a. structure: Production version change / Raw material / Recycling / Others

How to read this variance ?

- Material 53789 TY A 218 V30 BLACK 34NG XXXX was produced with a different production version than the one used for the costing
- In the production version (B332) used for the costing, it is forecasted to produce one batch in 18,239 hours. But this material was produced in 17,90 h on an other production line.

It creates the following variance on process order :

Order	Mat	Material description	Origin	Actual Qty	Tgt Qty	SCE	Item UM	FC Var	DEP Var	ProdVar	Pr.Vr
208485	53789	TY A 218 V30 BLACK 34NG XXXX	7822-1133 AMO	17,900	0,000	H		0,00	376,83	B332	A413
	53789	TY A 218 V30 BLACK 34NG XXXX	7822-1133 CNP	17,900	0,000	H		3 620,24	0,00	B332	A413
	53789	TY A 218 V30 BLACK 34NG XXXX	7822-1133 MANHO	17,900	0,000	H		2 665,67	0,00	B332	A413
	53789	TY A 218 V30 BLACK 34NG XXXX	7822-1141 AMO	0,000	18,239	H		0,00	385,40	B332	A413
	53789	TY A 218 V30 BLACK 34NG XXXX	7822-1141 CNP	0,000	18,239	H		3 719,52	0,00	B332	A413
	53789	TY A 218 V30 BLACK 34NG XXXX	7822-1141 MANHO	0,000	18,239	H		2 805,63	0,00	B332	A413
208485				53,790	54,717	H		239,24	9,57		

	Actual hours	Standard hourly rate 7822-1133	Actual costs	Std hours	Standard hourly rate 7822-1141	Standard costs	Variances
MANHO	17,90	148,92	2 665,67	18,24	153,83	2 805,63	-139,96
CNP	17,90	202,25	3 620,24	18,24	203,93	3 719,52	-99,28
E05 FC ProcessO Var			6 285,91			6 525,15	-239,24
AMO	17,90	21,05	376,83	18,24	21,13	385,40	-8,57
F05 DEP ProcessO Var			376,83			385,40	-8,57

b. yield: RM consumption is higher or lower than std quantity

How to read this variance ?

- The actual time (96 h) to produce material 64712 PA 66 MOLTEN POLYMER is higher than the standard time (84,261h)
- It creates the following variance on process order :

Order	Mat	Material description	Origin	Origin Description	Actual Qty	Tgt Qty	Item	FC Var	DEP Var	ProdVar	Pr.Vr
208088	64712	PA 66 MOLTEN POLYMER	7822-1304 AMO	ATY 2006/7822-1304/AMO	96,000	84,261	H	0,00	264,50	PC41	PC41
	64712	PA 66 MOLTEN POLYMER	7822-1304 CNP	ATY 2006/7822-1304/CNP	96,000	84,261	H	1 666,32	0,00	PC41	PC41
	64712	PA 66 MOLTEN POLYMER	7822-1304 MANHO	ATY 2006/7822-1304/MANHO	96,000	84,261	H	497,75	0,00	PC41	PC41
208088					288,000	252,783	H	2 164,07	264,50		

	Actual hours	Standard hourly rate 7822-1304	Actual costs	Std hours	Standard hourly rate 7822-1304	Standard costs	Variances
MANHO	96,00	42,45	4 075,83	84,26	42,45	3 576,73	498,30
CNP	96,00	141,95	13 626,91	84,26	141,95	11 960,60	1 666,32
E05 FC ProcessO Var			17 702,74			15 537,33	2 164,62
AMO	96,00	22,55	2 164,84	84,26	22,55	1 900,12	264,72
F05 DEP ProcessO Var			2 164,84			1 900,12	264,72

c. purchased vs produced: material is purchased instead of produced or vice & versa

How to read this variance ?

- Material 63324 is supposed to be produced but it was purchased
- As it is purchased, the production cost = 100 % CP while in the costing the production cost is splitted into CP / CNP / AMO

Order	Mat	Material description	Origin	Origin Description	Actual Qty	Tgt Qty	S...	Item	FC Var	DEP Var
2084538	63324	SB 27 AE 1 F (EX 27/A-00 MS) NAT (811)/E	63324	SB 27 AE 1 F (EX 27/A-00 MS) N	8 000	8 000	KG		2 863,94	0,00
	63324	SB 27 AE 1 F (EX 27/A-00 MS) NAT (811)/E	1050003	CARTON TOP 1121*1121*190	0	8,960	PC		0,00	0,00
	63324	SB 27 AE 1 F (EX 27/A-00 MS) NAT (811)/E	1050009	CARTON BOTTOM FOR CRATE 1	0	8,960	PC		0,00	0,00
	63324	SB 27 AE 1 F (EX 27/A-00 MS) NAT (811)/E	1050012	BELT REP FOR CARTON 1085X	0	8,960	PC		0,00	0,00
	63324	SB 27 AE 1 F (EX 27/A-00 MS) NAT (811)/E	1050019	CARTON SIDE EXT 1101X1101X	0	8,960	PC		0,00	0,00
	63324	SB 27 AE 1 F (EX 27/A-00 MS) NAT (811)/E	1050023	PE SACK 2000X3300 200µ	0	8,960	PC		0,00	0,00
	63324	SB 27 AE 1 F (EX 27/A-00 MS) NAT (811)/E	1060594	WOOD PALLET CP8 1140X1140	0	8,960	PC		0,00	0,00
	63324	SB 27 AE 1 F (EX 27/A-00 MS) NAT (811)/E	62575	SB 27 AE 1 F (ex 27/A-00 MS)	0	8 000	KG		8 836,34	0,00
	63324	SB 27 AE 1 F (EX 27/A-00 MS) NAT (811)/E							0,00	0,00
	63324	SB 27 AE 1 F (EX 27/A-00 MS) NAT (811)/E	7822-1008 UEELEC	ATY 2006/7822-1008/UELEC	0	0,256	MWH		0,00	0,00
	63324	SB 27 AE 1 F (EX 27/A-00 MS) NAT (811)/E	7822-1180 AMO	ATY 2006/7822-1180/AMO	0,000	5,336	H		0,00	59,65
	63324	SB 27 AE 1 F (EX 27/A-00 MS) NAT (811)/E	7822-1180 CNP	ATY 2006/7822-1180/CNP	0,000	5,336	H		155,15	0,00
	63324	SB 27 AE 1 F (EX 27/A-00 MS) NAT (811)/E	7822-1180 MANHO	ATY 2006/7822-1180/MANHO	0,000	5,336	H		0,34	0,00
	63324	SB 27 AE 1 F (EX 27/A-00 MS) NAT (811)/E	SETLEMENT	SETLEMENT					0,00	0,00
2084538					0,000	16,008	H		6 127,89	59,65

d. subcontractor: Material is produced by a subcontractor instead of an internal production

How to read this variance ?

- Same principle as the previous variance
- When a material is produced by a subcontractor instead of an internal production

e. others: to be commented

STEP 5

Fill in those information in « variance template » tab

	YTD	Comments	Action
D00 VC Variable Cost			
Others (D01+D55+D60+D70+D80)			
Std VC + Others			
1.Perf variance (D05)			
a. structure			
b. yield			
c. purchased vs produced			
d. subcontractor			
e. others			
2.Variance / CC (D45)			
a. utilities			
b. subcontractor			
c. others			
3.Revaluation (D50+D52)			
4.Purchase variance (D47)			
VC on MP Sales			

STEP 6

When there are recurring performance variances, they can be listed in the sheet "Perf. analysis"

a1. Structure: Recurring cases of production line change
Please describe for your site
a2. Structure: Recurring cases of switch between Raw material / Recycling
Please describe for your site
b. Yield: Productivity variance
Standard analysis based on ZWPP40A
c. Purchased vs produced: Material purchased instead of produced
Please describe for your site
d. Subcontractor variance
Please describe for your site
e. Others
Please describe for your site

STEP 1

Use the transaction **KE30** and choose the report **ZZZ-SOLV01**

Run Profitability Report: Initial Screen	
Report	Description
Report	
ZZZ-IFRS00	IFRS Periods
ZZZ-IFRS01	Per operation type
ZZZ-IFRS02	Variance Others
ZZZ-IFRS03	Quarter/Year
ZZZ-IFRS04	Month/Year
ZZZ-IFRS05	Do not use anymore
ZZZ-IFRS07	P&L Production variance New
ZZZ-SOLAUD	L2015 - Audit
ZZZ-SOLV00	IFRS Periods/Year
ZZZ-SOLV01	Per operation type
ZZZ-SOLV04	Month/Year
ZZZ-SOLVFC	L2015 - Income Statement
ZZZ-SOLVFCMT	L2015 - Income Statement / M

Enter

1. the reporting currency = 10
2. the period
3. the company code
4. the plant code
5. the IECRA (when applicable)
6. select : "Classic drilldown report"

Selection: Per operation type

Attributes

Report selections

Reporting Currency: 10
Fiscal year: 2015
From period: 10
To period: 10
Company Code: 6526
Plant: 8160 to
Customer:
Product:
Division:
Distr. Channel:
Trading Partner:
Enterprise: to
Product line 00: to
Iecra: 5 to
From Profit Center:
To Profit Center:

Output type

☐ Graphical report output
☒ Classic drilldown report
☐ Object list (more than one lead column)

STEP 2

To have the detail of the value field D45 VC CC Variance => click on the amount, right click and select "Line items" or click F9

222-SOLV01 6526 Rhodia Feixiang Spec 26.03.2013

Per operation type 1

Company Code 6526 Rhodia Feixiang Spec

Navigation: Company Code, Product, Division, Distr. Channel

Adapt report width: Enter

Help: F1
Choose: F2
Back: F3
Possible Entries: F4
Report parameters: F5
3D graphic column: F7
3D graphic: F8
Line items: F9
Save/Deletion: Ctrl+S
Cancel: F12
Exit: Shift+F4

Pal Lines	SD	FI	on	Order	xi	Cost Center					
Total standard VC	84,558,871.08	0.00	0.00	0.00	0.00	0.00	4,012.85	84,562,883.93			
D01 VC Duty VAT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
D05 VC Processo Var	0.00	0.00	0.00	2,483,315.84	0.00	0.00	0.00	2,483,315.84			
D45 VC CC Variance	0.00	0.00	0.00	1,438.66	0.00	0.00	927,363.18	0.00	929,501.84		
D47 CP Rev.T030	0.00	0.00	0.00	1,007,399.41	0.00	0.00	0.00	0.00	1,007,399.41		
D50 VC PC Reval. Var	0.00	0.00	0.00	13,940,406.08	0.00	0.00	0.00	0.00	13,940,406.08		
D52 CP Rev.CCR T030	0.00	0.00	0.00	10,658,044.14	0.00	0.00	0.00	0.00	10,658,044.14		
D55 VC Free 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
D60 VC Free 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
D70 Neutral.VC/marg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
D90 Ac margin	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
VC Variance	0.00	0.00	0.00	2,273,323.87	0.00	0.00	927,363.18	0.00	1,137,355.15		
VC on MP Sales	84,558,871.08	0.00	0.00	2,273,323.87	0.00	0.00	927,363.18	0.00	85,700,239.08		

STEP 3

Use the lay out /D45 CC VAR to have the variance by cost center

Display Actual Line Items: List

Choose layout:

Layout setting: All

Layout: /D45 CC VAR D45 CC variance analysis

Layout description: D45 CC variance analysis

/D47/G45 Lines D47 and G45 G507

/DIPH SG&A

/F01 F01

/EC DEP

/EC DEPPERIO Period fixed cost and depreciation

/FIPA All FIPA lines

/GMDATA Data por Gross Margin

/GOLDEN TAX golden tax

Currency	Sender cost center	D45 VC CC Variance
CNY	6526-9201	2,39-
CNY	8160-1050	578 119,71
CNY	8160-1051	282 321,47
CNY	8160-1052	9 204,15-
CNY	8160-1053	127 524,10
CNY	8160-1054	7 515,07-
CNY	8160-1055	441 620,78-
CNY	8160-1056	10 999,99
CNY	8160-7000	28 483,77
CNY	8160-7008	466 330,78
CNY	8160-7040	74 889,90
CNY		1 110 327,33

STEP 4

To have the detail of the cost centers, you can use the transaction S_ALR_87013611

Enter :

1. the controlling area
2. the period
3. the list of cost centers you want to analyse

Cost Centers: Actual/Plan/Variance: Selection

Data Source... 

Selection values

Controlling Area	2026	1
Fiscal Year	2015	
From Period	10	
To Period	10	2
Plan Version	0	

Selection groups

Cost Center Group			
Or value(s)	8160-1050	to	
Cost Element Group			
Or value(s)		to	

STEP 5

Double click on the amount you want to analyse

Cost Centers: Actual/Plan/Variance Date: 25.11.2015 Page: 2 / 2

Column: 1 / 2

Cost Center/Group	8160-7000	Purchase Costs Var
Person responsible:	50014824	
Reporting period:	10 to 10 2015	

Cost Elements	Act. Costs	Plan Costs	Var. (Abs.)	Var. (%)
98150890 VC FREIGHT ON RM	28 483,77		28 483,77	
* Debit	28 483,77		28 483,77	
99429900 PA-AS CP	28 483,77-		28 483,77-	
* Credit	28 483,77-		28 483,77-	
** Over/Underabsorption				

STEP 6

Fill you the variance template with your analysis

	YTD	Comments	Action
D00 VC Variable Cost			
Others (D01+D55+D60+D70+D80)			
Std VC + Others			
1.Perf variance (D05)			
a. structure			
b. yield			
c. purchased vs produced			
d. subcontractor			
e. others			
2.Variance / CC (D45)			
a. utilities			
b. subcontractor			
c. others			
3.Revaluation (D50+D52)			
4.Purchase variance (D47)			
VC on MP Sales			

STEP 1

Use the transaction KE30 and choose the report ZZZ-SOLV01

Run Profitability Report: Initial Screen

Report	Description
Report	
ZZZ-IFRS00	IFRS Periods
ZZZ-IFRS01	Per operation type
ZZZ-IFRS02	Variance Others
ZZZ-IFRS03	Quarter/Year
ZZZ-IFRS04	Month/Year
ZZZ-IFRS05	Do not use anymore
ZZZ-IFRS07	P&L Production variance New
ZZZ-SOLAUD	L2015 - Audit
ZZZ-SOLV00	IFRS Periods/Year
ZZZ-SOLV01	Per operation type
ZZZ-SOLV04	Month/Year
ZZZ-SOLVFC	L2015 - Income Statement
ZZZ-SOLVFCMT	L2015 - Income Statement / M

Enter

1. the reporting currency = 10
2. the period
3. the company code
4. the plant code
5. the IECRA (when applicable)
6. select : "Classic drilldown report"

STEP 2

To have the detail of the value field D47 Ec/T030 => click on the amount, right click and select "Line items" or click F9

STEP 3

Use the lay out **ID47 PPV** to have the variance by material code

Product	Σ	D47 CP Ec/T030
128730		118,48
128738		8 958,14-
128746		139 256,44
128747		160 507,75
128750		8 030,52
128751		52 574,80
128760		49 182,45
128763		84 364,24
128764		43 254,41-
128769		655,67
128772		0,18
128773		20 245,17

STEP 4

Explain the main variances

Display the standard costing of the material with CK13N.

Enter :

1. The material & plant code
2. The costing variant
3. The validity date

Enter ↵

The standard cost of the material code 128715 is

18 099,12 CNY / 1 000 kg

Display Material Cost Estimate with Quantity Structure

Costing Structure On Detail List On Hold

Material 128715 1
Plant 8160

Costing Data

Costing Variant zfo 2
Costing Version 1
Valid On 01.10.2015 3

Cost Estimates

Material 128715 DECYL ACID BU
Plant 8160

Costing Data Dates Qty Struct. Valuation History Costs

Costs Based On Costing Lot Size 1 000 KG

Itemization for material 128715 in plant 8160

Item	Resource	Resource (Text)	Quantity	Un	Σ	Total Value	COCr
1	8160 128715	DECYL ACID BU	1 000	KG		18 099,12	CNY
						18 099,12 CNY	
						18 099,12 CNY	

STEP 5

Display the actual purchase price of the same material with the transaction MB51.

Enter:

1. the material code
2. the plant code
3. the movement type = **101** to **102**
4. posting date = 1 month

Material Document List

Item Data

Material 128715 1 to
Plant 8160 2 to
Storage Location to
Batch to
Vendor to
Customer to
Movement Type 101 3 to 102
Special Stock to
Purchase Order to
Sales Order to
Sales order item to
Goods recipient to

Header Data

Posting Date 01.10.2015 4 to 31.10.2015
User name to
Trans./Event Type to
Material Document to
Reference to

The list of purchase orders to be analysed is displayed

Material Document List

Material 128715 Plant 8160

Material	Material Description	Quantity in the Bt	Quantity Bt	Amount in Lt	Batch	Customer	Vendor
128715	DECYL ACID BU	20 040 KG	20 040 KG	362 706,36	4502537641	C151029308	128197
4510 101	5017504930	1 29.10.2015	39 500 KG	39 500 KG	714 951,24	4502537336	C151029305
4510 101	5017504930	1 25.10.2015	39 470 KG	39 470 KG	714 972,27	4502537336	C151029306
4510 101	5017504930	1 17.10.2015	39 480 KG	39 480 KG	721 249,93	4502537336	C151017020
4510 101	5017504930	1 16.10.2015	39 740 KG	39 740 KG	719 255,03	4502537336	C151016009
4510 101	5017504930	1 10.10.2015	39 420 KG	39 420 KG	719 487,31	4502537336	C151010016
Total			218 020 KG	3 945 970,14			

STEP 6

Display a purchase order to calculate the purchase price variance

Item [10] 128715, DECYL ACID BU

Material Data Quantities/Weights Delivery Schedule Delivery Invoice Conditions Purchase Order History

Sh. Text	MvT	Posting Date	Material Document	Item	Entry Date	Delivery cost quantity	Quantity	Amount in Lt	Unit
DCGR		10.10.2015	5017504930	1	10.10.2015	39 420	0	5 806,56	CNY
						39 420	0	5 806,56 CNY	
						39 420	39 420	625 318,47	CNY
						0	39 420	625 318,47	CNY

a - Quantity purchased

b - Purchase price

STEP 3

Each month, you have to update the actual costs & hours.

The price variance & the absorption variance will be automatically calculated

Cost centers	EBI FC Period	Normal capacity (year)	Normal capacity (month)	Budget (month)	Actual hours	Standard capacity (h) (year)	Standard capacity (h) (month)	a price variance	L absorption variance	EBI + EBI Total CC variance	EBI FC absorption
PPPP-1000 Prod CC 1	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
PPPP-1000 Prod CC 2											
PPPP-1000 Prod CC 3											
PPPP-1000 Prod CC 4											
PPPP-1000 Prod CC 5											
PPPP-1000 Prod CC 6											
PPPP-1000 Prod CC 7											
CNP TOTAL MACHI											

CO-PA	IAC 01.09	=	Budget	Actual hours	IAC 01.09	=	=	-[(5)-(7)] x (3)/(7) + [(4)-(3)]	=	CO-PA
	(2) / 12				(6) / 12		(1) - (4)	(8) + (9)		

STEP 4

For the monthly update use the transaction S_ALR_87013611

Enter

1. the controlling area
2. the period
3. the group of production cost centers

Cost Centers: Actual/Plan/Variance: Selection

Data Source...

Selection values

Controlling Area: 2026 **1**

Fiscal Year: 2015

From Period: 1 **2**

To Period: 1

Plan Version: 0

Selection groups

Cost Center Group: 7971-1 **3**

Or value(s): to

Cost Element Group: to

Or value(s): to

STEP 5

1. Production cost centers
2. Actual fixed costs
3. Plan costs from IAC 01.09 (local currency)
4. Actual hour
5. Normal capacity from IAC 01.09 (h)

Variation: Cost Center

7971-1 Solvay Shanghai - Direct Production

7971-1000 Compounding **1**

7971-1001 Packing

Cost Center/Group: 7971-1000 Compounding

Person responsible: 50001634

Reporting period: 1 to 1 2015 **2** **3**

Cost Elements	Act. Costs	Plan Costs
99429910 PA-AS CNP	193 294,41	
99429920 PA-AS AMO	73 400,29	
99430020 Direct Labour	801 937,23	924 980,41
99430120 Dir Fxd Ohd/H (CNP)	1 015 636,63	1 171 468,27
99438000 Depreciation	472 298,16	541 763,89
* Credit	2 556 566,72	2 641 212,67
** Over/Underabsorption		1,74

Activity Types	Act. Acty	Plan Acty
AMO Direct Depreciation	2 322,42 H	2 678,75 H
MACHI DIR FIX O/H (CNP) /h	2 322,42 H	2 678,75 H
MANHO Direct Labour	2 322,42 H	2 678,75 H

STEP 6

Report the actual costs of each cost center per activity

$$1 = a + d$$

$$2 = c$$

$$3 = b + e$$

Cost Center/Group: 7971-1000

Person responsible: 50001634

Reporting period: 1

Cost Elements	Act. Costs
99429910 PA-AS CNP	a 193 294,41
99429920 PA-AS AMO	b 73 400,29
99430020 Direct Labour	c 801 937,23
99430120 Dir Fxd Ohd/H (CNP)	d 1 015 636,63
99438000 Depreciation	e 472 298,16
* Credit	2 556 566,72
** Over/Underabsorption	

Code	Description	EBI FC Period
7971-1000	Compounding	1 1208.931
7971-1001	Packaging	
CNP TOTAL MACHI		1208.931
7971-1000	Compounding	2 801.937
7971-1001	Packaging	
TOTAL MANHO		801.937
TOTAL CNP		2.090.868

Code	Description	D90 DE period
7971-1000	Compounding	3 545.698
7971-1001	Packaging	
TOTAL AMO		545.698

Report the actual hours of each cost center per activity

Cost Center/Group: 7971-1000

Person responsible: 50001634

Reporting period: 1

Activity Types	Act. Acty
AMO Direct Depreciation	a 2 322,42 H
MACHI DIR FIX O/H (CNP) /h	b 2 322,42 H
MANHO Direct Labour	c 2 322,42 H

Code	Description	Actual hours
7971-1000	Compounding	b 2.322
7971-1001	Packaging	
CNP TOTAL MACHI		2.322
7971-1000	Compounding	c 2.322
7971-1001	Packaging	
TOTAL MANHO		2.322
TOTAL CNP		

Code	Description	Actual hours
7971-1000	Compounding	a 2.322
7971-1001	Packaging	0
TOTAL AMO		2.322

STEP 7

Once the file is completed, the price & absorption variance can be reported in the variance analysis template

	Code	Description	a. price variance	b. absorption variance	E01 + E90 Total CC variance
CNP	7971-1000	Compounding	37.461	155.834	193.295
	7971-1001	Packaging	-146.790	2.940	-143.850
	TOTAL	MACRI	-109.329	158.762	49.446
	7971-1000	Compounding	-129.244	-129.045	1
	7971-1001	Packaging	1.892	4.893	6.785
	TOTAL	MANIO	-127.352	123.937	2
	TOTAL CNP		-237.373	288.619	49.446

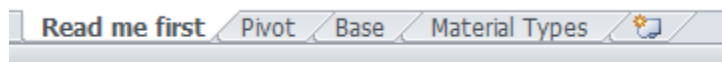
	Code	Description	a. price variance	b. absorption variance	D90 + F90 Total CC variance
AMO	7971-1000	Compounding	926	72.407	72.403
	7971-1001	Packaging	3.337	1.544	4.881
	TOTAL	AMO	4.272	74.010	78.282
	TOTAL AMO		4.272	74.010	78.282

January	
E00 FC Fixed Costs	2.025.287
4.CC variance (E01-E90)	49.446
a. price variance	-237.373
b. absorption variance	288.619
FC on production	2.074.733

F00 DEP Depreciation	581.344
4.CC variance (D90-F90)	78.282
a. price variance	4.272
b. absorption variance	74.010
DEP on production	659.627

Download the file [IAC 01.02 template PF2.xlsx](#)

There are 4 sheets in the file :



Overview of the 1st sheet: Read me first

A	B	C	D	E	F	G	H	I	J
IAC.01.02 - Monthly variance analysis									
This template concerns the IAC 03.07. The objective is to justify production costs variances and									
1- Pivot									
- Update the pivot table after updating the tab named "base"									
2- Base									
- Copy paste in this tab the data you have extracted from SAP (transaction ZM_MAT_VAL_COMP)									
3- Material Types									
- In this tab, you will find a recall of material types being extraced									



Overview of the 2nd sheet: Base

	A	B	C	D	E	F
	Plant	Material	Discription	Base Unit of Measure	Material Group	Description
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						

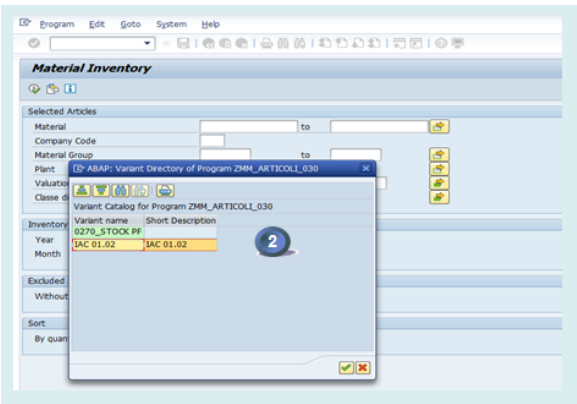
Overview of the 3rd sheet: Pivot

1	A	B	C	D	E	F	G	H	I	J	K
2	Row Labels	Sum of Stock - (2016 / N-1)	Sum of Value Stock - (2016 / N-1)	Sum of Stock - (2016 / N)	Sum of Value Stock - (2016 / N)	Sum of Unit price N-1	Sum of Unit price N	Sum of Variance %	(Unit price N - Unit price N-1)*Stock N	To be validated	1
3	(blank)										
4	(blank)										
5	Grand Total										
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											

STEP 1

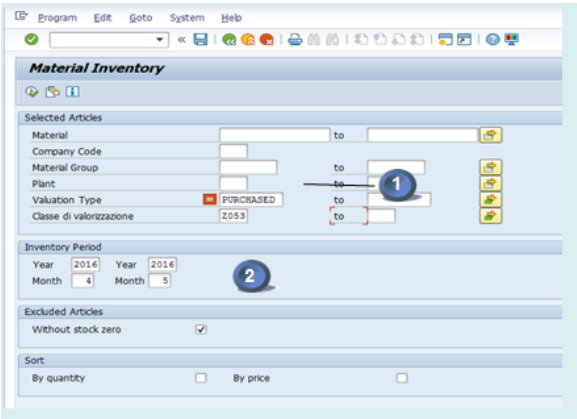
Start the transaction **ZMM_MAT_VAL_COMP** and select the layout

1. Select layout by clicking on 
2. Click on **IAC 01.02**



STEP 2

1. Enter a plant or a list of plants
2. Enter the periods (N-1 and N)



STEP 3

Execute 

i It may result in a long run time.

STEP 4

Download the file to excel

1. Extract the file through "export -> Spreadsheet"
2. Choose Excel (in office 2007...)
3. Execute

STEP 5

Update the template with the data retrieved in

1. Open excel file created in STEP 4 and copy all data starting "line 2"
2. Past the data in the template of IAC 01.02 PF2

STEP 6

The Pivot table in the template is refreshed

STEP 7

Comment all the materials lines marked as "To be validated"

