

# 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



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: 01.10.2015 to 31.10.2015

User profile: [ ] to [ ]

Object class: MATERIAL

Table name: MBEW

Field Name: VERPR to [ ]

Material: [ ] to [ ]

Material Type: [ ] to [ ]

Division: [ ] to [ ]

Plant: 7822 to [ ]

Select deleted material number ?  
Yes :  No :

Path and file name to create: E:\Mes documents\Contrôle IAC\ZWOCO050\test01.xls

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 profile: Select File

Object class: [ ]

Table name: [ ]

Field Name: [ ]

Material: [ ]

Material Type: [ ]

Division: [ ]

Plant: [ ]

Select deleted material number ?

Path and file name to create: [ ]

Enter the nb of records that will contain the file : [ ]

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

**STEP 4**

**Execute** 

It may result in a long runtime

**Extraction of the historical updates of material**

Updates dates: 01.10.2015 to 31.10.2015

User profile: [ ] to [ ]

Object class: MATERIAL

Table name: MBEW

Field Name: VERPR to [ ]

Material: [ ] to [ ]

Material Type: [ ] to [ ]

Division: [ ] to [ ]

Plant: 7822 to [ ]

Select deleted material number ?  
Yes :  No :

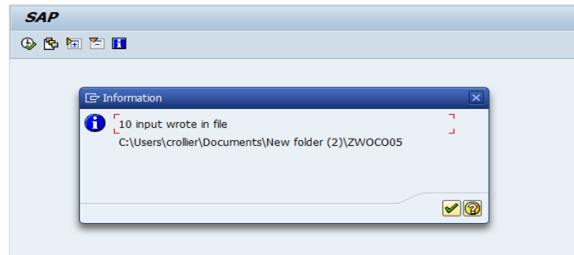
Path and file name to create: C:\Users\croller\Documents\New folder (2)\ZWOCO050

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

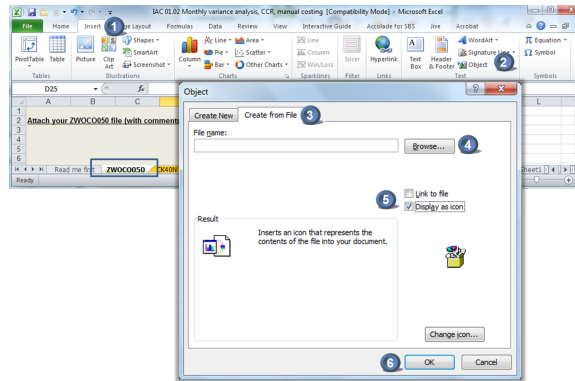
This material is a waste, that's the reason why it has a commercial price. The reason code that corresponds to this modification is the first one : 1-Co-product /Sold waste/Recycled material.

Material no	Description	Material type	Plant	Table name	Field code	Field name	update date	Old value	New value
64569	BLOCS EXUTOIRE VRAC	TRMAT	7822	MSECV	BWPRE	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

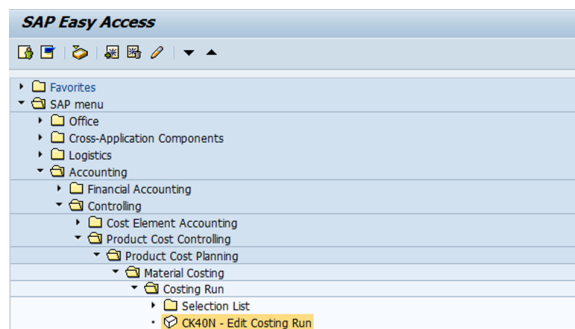
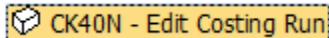
1. Select "insert"
2. Click on "Object"
3. Select "Create from File"
4. Click on "Browse" and select the file
5. Check "Display as icon"
6. Click on OK



**STEP 1**

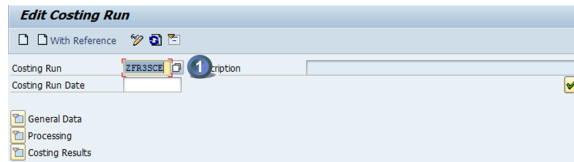
Start the transaction using the menu path or transaction code CK40N

Double-click



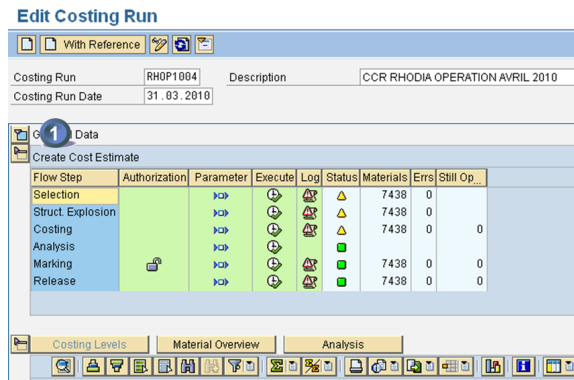
**STEP 2**

1. enter the costing run of the month and



**STEP 3**

1. Expand



**STEP 4**

**i** All error messages must be cleared

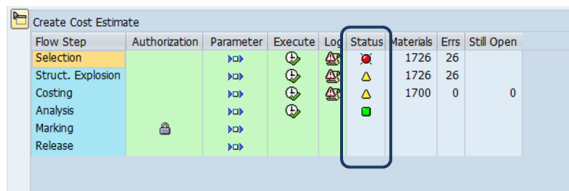
When there is a warning message, it often happens that there is a mistake in the costing. So even if it is not compulsory, it is recommended to check the warning messages and try to correct it.

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

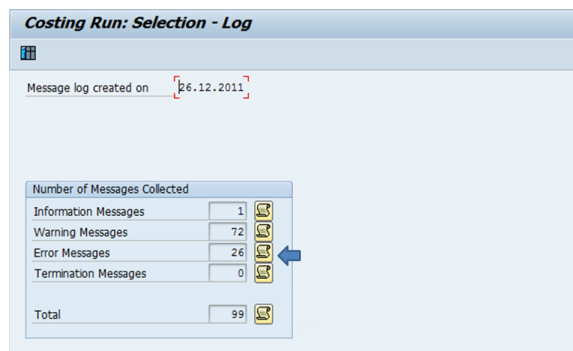
When there are error or warning messages, you must click on to analyse and clear them



**STEP 2**

WP1 + PF1

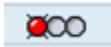
Click on to have the list of messages





**STEP 3**

**WP1 + PF1**

1 - Type of message

 **E** Error messages, must be cleared

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

 **I** 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

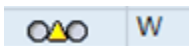
CK468 - No price could be determined for subcontracting

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

## Workflow history

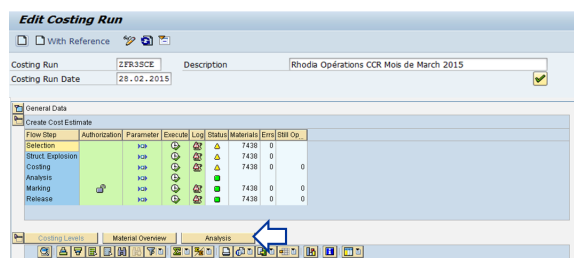
This view shows the 5 most recent entries. The complete workflow log is available from the 'Document Activity' menu item.

Aug 14, 2024	Actor	Type	Activity	Version
Published	 Gomes, Susana	State	changed state to <b>Published</b> at 1:24 pm	v13
Draft	 Gomes, Susana	State	gave <i>Approvers</i> approval at 1:24 pm	
		State	changed state to <b>Draft</b> at 1:24 pm	v13
<b>Oct 09, 2017</b>				
For Review	PEREIRA DINIZ, Sandra	Edit	updated the page at 9:49 am	
	PEREIRA DINIZ, Sandra	State	changed state to <b>For Review</b> at 7:49 am	v12
<b>Jul 06, 2016</b>				
Published	ROLLIER, Charlotte	State	changed state to <b>Published</b> at 4:12 pm	v11

### STEP 5

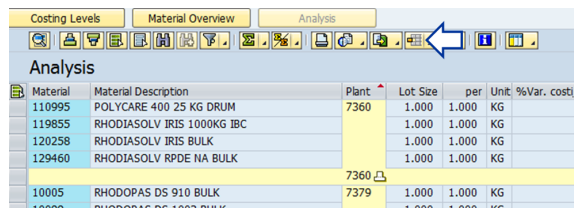
When errors are corrected and warning messages checked, costing analysis can begin. Click on

**Analysis**



### STEP 6

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



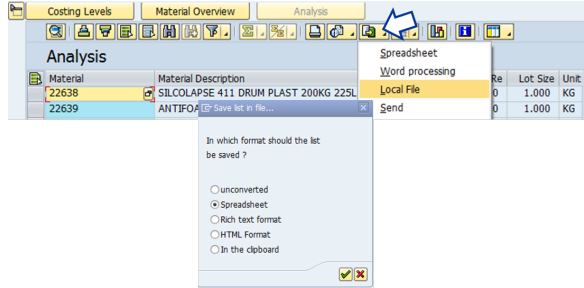
### STEP 7

Filter the plant you are responsible for

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 CLUB 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

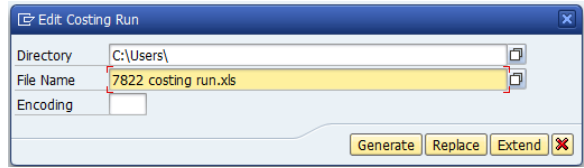
**STEP 8**

Save in excel : local file => spreadsheet



**STEP 9**

Enter the directory & the file name and generate the file



**STEP 10**

**i** All variances above a defined threshold must be commented. The threshold is defined by the FRA :

- Unit cost variance %
- Inventory revaluation value.

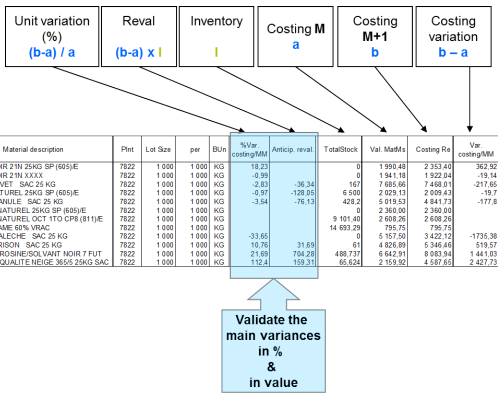
If the threshold is above +/- 10% at unit cost level or +/- 50 k€ at item inventory revaluation level should be authorized by RCOM.

**Open the file**

If:

- the unit variation is > 10% (or local threshold)
- or Anticipated reval is > 50 KEUR (or local threshold),

a deeper analysis is requested



In this example, the costing of the following materials 60444, 64151, 64158, 64235, 64248 have to be checked and validated

as the variance is above 10% or/and the revaluation above 50 k€

**STEP 1**


Material	Material description	Plant	Lot Size	per	BU	%Var costing/M	Anticip reval	TotalStock	Val MatM	Costing Re	Var costing/M
60444	TY A 206F NOIR 21N 25KG SP (605)/E	7822	1.000	1.000	KG	18,23		0	1.990,48	2.353,40	362,92
60447	TY A 206F NOIR 21N XXXX	7822	1.000	1.000	KG	-0,99	-36,34	167	7.685,66	7.468,01	-217,65
60701	TY A 206F NATUREL 25KG SP (605)/E	7822	1.000	1.000	KG	-0,97	-128,65	6.500	2.029,13	2.009,43	-19,7
60838	MM 8650 C CANULE SAC 25 KG	7822	1.000	1.000	KG	-3,54	-76,13	428,2	5.019,53	4.841,73	-177,8
61076	TY SX 11 BL NATUREL 25KG SP (605)/E	7822	1.000	1.000	KG			0	2.360,00	2.360,00	0
61079	TY SX 16 BL NATUREL OCT 1TO CPB (811)/E	7822	1.000	1.000	KG			9.181,40	2.608,26	2.608,26	0
61118	CARPOLACTAME 60% VSAC	7822	1.000	1.000	KG			14.693,29	795,75	795,75	0
64151	MM 8320 C CALECHE SAC 25 KG	7822	1.000	1.000	KG	-33,86		0	5.157,50	3.422,12	-1.735,38
64158	MM 8389 C PRISON SAC 25 KG	7822	1.000	1.000	KG	10,78	31,68	61	4.826,89	5.346,46	519,57
64236	BASE DE NIGROSINE/SOLVANT NOIR 7 FUT	7822	1.000	1.000	KG	21,09	704,28	488,737	6.642,91	8.083,94	1.441,03
64248	OX.YDE ZINC QUALITE NEIGE 3605 25KG SAC	7822	1.000	1.000	KG	112,61	159,21	65,624	2.159,92	4.587,65	2.427,73

Ex : 64235 BASE DE NIGROSINE /SOLVANT NOIR 7 FUT

The MAP increased from 6 643 € to 8 083 €

- We have to validate the MAP (Moving Average Price) by checking purchase orders of the month.
- It can also help to check the purchase variance of this material (KE30) to define where does the increase come from.

MAP end M-1	MAP end M
6 643 €	8 083 €



+ 1 441 €  
+ 21,69 %

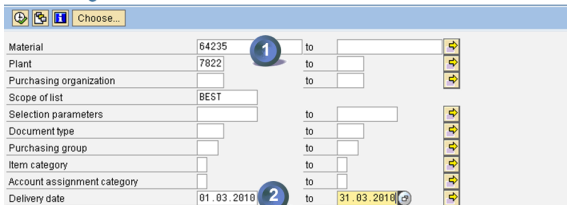
**STEP 2**

Display purchase orders with the transaction **ME2M**

Enter

1. the material code & the plant
2. the period

Purchasing Documents for Material



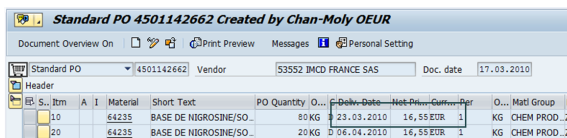
**STEP 3**

There is one purchase order to check.

=> Double-click on it

PO	Type	Vendor	Name	PGP	Order Date
4501142662	NB	53552	IMCD FRANCE SAS	FKR	17.03.2010
0001	FR59		BASE DE NIGROSINE/SOLVANT NOIR 7 FUT	0451	
			80 KG	16,55 EUR	1 KG
			Still to be delivered	0,00 EUR	0,00 €
			Still to be invoiced	0,00 EUR	0,00 €
00020	FR59		BASE DE NIGROSINE/SOLVANT NOIR 7 FUT	0451	
			20 KG	16,55 EUR	1 KG
			Still to be delivered	0,00 EUR	0,00 €
			Still to be invoiced	0,00 EUR	0,00 €

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

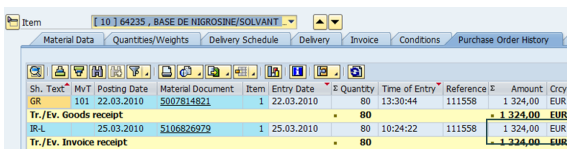


It corresponds to the price invoiced

= 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.



**i** 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

## Workflow history

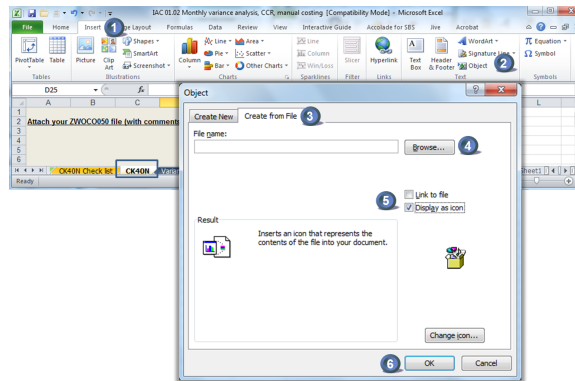
This view shows the 5 most recent entries. The complete workflow log is available from the 'Document Activity' menu item.

Jun 13, 2016	Actor	Type	Activity	Version
Published	Sylvain Michel Alexandre Pingont	State	changed state to <b>Published</b> at 2:02 pm (Space Initialization)	v6
Draft	Sylvain Michel Alexandre Pingont	State	gave <i>Approvers</i> approval at 2:02 pm	
		State	changed state to <b>Draft</b> at 2:02 pm	v6
From Nov 20, 2015 to Feb 29, 2016				
	Alexandra Lepercq and ROLLIER, Charlotte	Edit	multiple updates from <b>Alexandra Lepercq and ROLLIER, Charlotte</b>	ROLLI
	ROLLIER, Charlotte	Edit	created the page at 6:05 pm	

**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



## Workflow history


This view shows the 5 most recent entries. The complete workflow log is available from the 'Document Activity' menu item.

Oct 08, 2020	Actor	Type	Activity	Version
Published	GONCALO, Ana Catarina	Edit	updated the page at 11:32 am	
		State	changed state to <b>Published</b> at 9:32 am	v19
Draft	GONCALO, Ana Catarina	State	gave <i>Approvers</i> approval at 9:32 am	
		State	changed state to <b>Draft</b> at 9:32 am	v19
Jun 13, 2016				
Published	Sylvain Michel Alexandre Pingont	State	changed state to <b>Published</b> at 2:02 pm (Space Initialization)	v18
Draft	Sylvain Michel Alexandre Pingont	State	gave <i>Approvers</i> approval at 2:02 pm	
		State	changed state to <b>Draft</b> at 2:02 pm	v18
From Nov 20, 2015 to Apr 05, 2016				
	Alexandra Lepercq and ROLLIER, Charlotte	Edit	multiple updates from <b>Alexandra Lepercq and ROLLIER, Charlotte</b>	ROLLIE

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		1		
Date				
Period				



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

## Workflow history

This view shows the 5 most recent entries. The complete workflow log is available from the 'Document Activity' menu item.

May 18, 2016	Actor	Type	Activity	Version
Published	Sylvain Michel Alexandre Pingont	State	changed state to Published at 3:33 am (Space Initialization)	v4
Draft	Sylvain Michel Alexandre Pingont	State	gave <i>To be approved</i> approval at 3:33 am	
		State	changed state to Draft at 3:33 am	v4
From Nov 25, 2015 to Feb 09, 2016				
	Alexandra Lepercq and ROLLIER, Charlotte	Edit	multiple updates from Alexandra Lepercq and R, Charlotte	ROLLIE
Nov 20, 2015				
	ROLLIER, Charlotte	Edit	created the page at 6:54 pm	

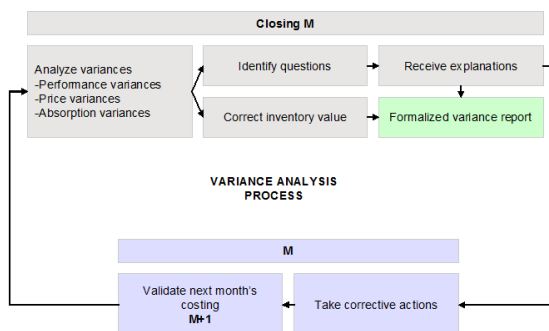
The variance is the difference between the expected standard cost and the actual cost incurred. Variance analysis involves breaking down the total variance to explain how much of it is caused by usage of resources being different from the standard and how much of it is caused by the price of resources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

[Variance Template](#) / [Perf. analysis](#) / [Revaluation](#) / [CC variance](#) / [IAC\\_01\\_09](#)



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
<b>TOTAL</b>		<b>2,377,238 CNY</b>

**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	PrVnr	PrVr
2084855	53789	TY A 218 V30 BLACK 34NG 0000	7822-1133 AMO	17,900	0,000	H		0,00	376,83	B332	A413
	53789	TY A 218 V30 BLACK 34NG 0000	7822-1133 CNP	17,900	0,000	H		3 620,24	0,00	B332	A413
	53789	TY A 218 V30 BLACK 34NG 0000	7822-1133 MANHO	17,900	0,000	H		2 665,67	0,00	B332	A413
	53789	TY A 218 V30 BLACK 34NG 0000	7822-1141 AMO	0,000	18,239	H		0,00	385,40	B332	A413
	53789	TY A 218 V30 BLACK 34NG 0000	7822-1141 CNP	0,000	18,239	H		3 719,52	0,00	B332	A413
	53789	TY A 218 V30 BLACK 34NG 0000	7822-1141 MANHO	0,000	18,239	H		2 805,63	0,00	B332	A413
2084855				53,700	54,717	H		239,24	8,57		

	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
<b>E05 FC ProcessO Var</b>			<b>6 285,91</b>			<b>6 525,15</b>	<b>-239,24</b>
AMO	17,90	21,05	376,83	18,24	21,13	385,40	-8,57
<b>F05 DEP ProcessO Var</b>			<b>376,83</b>			<b>385,40</b>	<b>-8,57</b>

**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	PrVnr	PrVr
2080980	64712	PA 66 MOLTEN POLYMER	7822-1304 AMO	ATY 20067822-1304/AMO	96,000	84,261	H	0,00	284,50	PC41	PC41
	64712	PA 66 MOLTEN POLYMER	7822-1304 CNP	ATY 20067822-1304/CNP	96,000	84,261	H	1 666,32	0,00	PC41	PC41
	64712	PA 66 MOLTEN POLYMER	7822-1304 MANHO	ATY 20067822-1304/MANHO	96,000	84,261	H	497,75	0,00	PC41	PC41
2080980					288,000	252,783	H	2 164,07	284,50		

	Actual hours	Standard hourly rate 7822-1304	Actual costs	Std hours	Standard hourly rate 7822-1304	Standard costs	Variances
MANHO	96,00	42,45	4 075,63	84,26	42,45	3 576,73	498,90
CNP	96,00	141,95	13 626,91	84,26	141,95	11 960,60	1 666,32
<b>E05 FC ProcessO Var</b>			<b>17 702,54</b>			<b>15 537,32</b>	<b>2 164,62</b>
AMO	96,00	22,55	2 164,84	84,26	22,55	1 900,12	264,72
<b>F05 DEP ProcessO Var</b>			<b>2 164,84</b>			<b>1 900,12</b>	<b>264,72</b>

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

STEP 6

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

### Performance variance 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 ZVPP40A
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
<b>ZZZ-SOLV01</b>	<b>Per operation type</b>
ZZZ-SOLV04	Month/Year
ZZZ-SOLVFC	L2015 - Income Statement
ZZZ-SOLVFCMI	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

Customer: [ ]

Product: [ ]

Division: [ ]

Distr. Channel: [ ]

Trading Partner: [ ]

Enterprise: [ ]

Product line 00: [ ]

iecra: [ ]

From Profit Center: [ ]

To Profit Center: [ ]

Output type

Graphical report output

Classic drilldown report

Object list (more than one lead column)

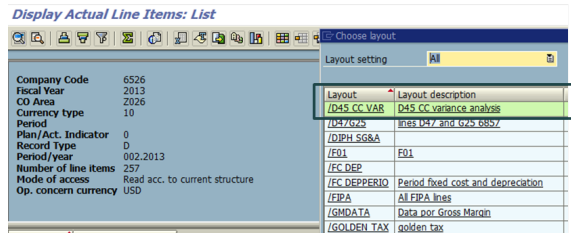
**STEP 2**

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

Pal. Lines	SO	PI	om	Order	cl	Coac. Centre	Customer
Total standard VC	84,558,871.08	0.00	0.00	0.00	0.00	0.00	84,562,853.93
D51 VC Duty VAE	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D55 VC Processo Var	0.00	0.00	2,483,315.84	0.00	0.00	0.00	2,483,315.84
D45 VC CC Variance	0.00	1,639.66	0.00	0.00	0.00	927,363.18	929,001.84
D47 CP Exp T030	0.00	1,077,399.41	0.00	0.00	0.00	0.00	1,077,399.41
D50 VC PC Reval. Var	0.00	13,940,406.08	0.00	0.00	0.00	0.00	13,940,406.08
D52 CP Rev.OCR T030	0.00	10,658,044.14	0.00	0.00	0.00	0.00	10,658,044.14
D58 VC Free 1	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
D70 Neutral. VC/marg	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D80 VC margin	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VC Variance	0.00	2,273,323.87	2,483,315.84	0.00	0.00	927,363.18	1,137,355.15
VC on MP Sales	84,558,871.08	2,273,323.87	2,483,315.84	927,363.18	0.00	4,012.85	85,700,239.08

**STEP 3**

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



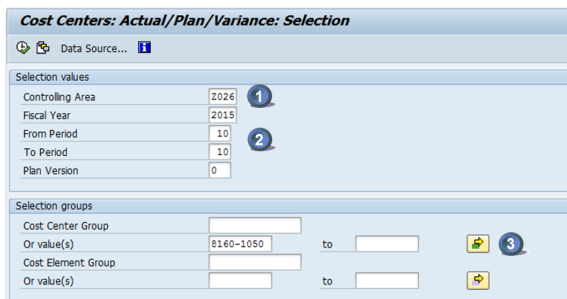
Currency	Sender cost center	D45 VC CC Variance
CNY	6526-9201	2,39-
CNY	8160-1050	578 119,71
CNY	8160-1051	282 321,47
CNY	8160-1052	9 204,15-
CNY	8160-1053	127 524,10
CNY	8160-1054	7 515,07-
CNY	8160-1055	441 620,78-
CNY	8160-1056	10 999,99
CNY	8160-7000	28 483,77
CNY	8160-7008	466 330,78
CNY	8160-7040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



**STEP 5**

Double click on the amount you want to analyse

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

Cost Center/Group: 8160-7000 Purchase Costs Var Column: 1 / 2

Person responsible: 50014824

Reporting period: 10 to 10 2015

Cost Elements	Act. Costs	Plan Costs	Var. (Abs.)	Var. (%)
99150890 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				

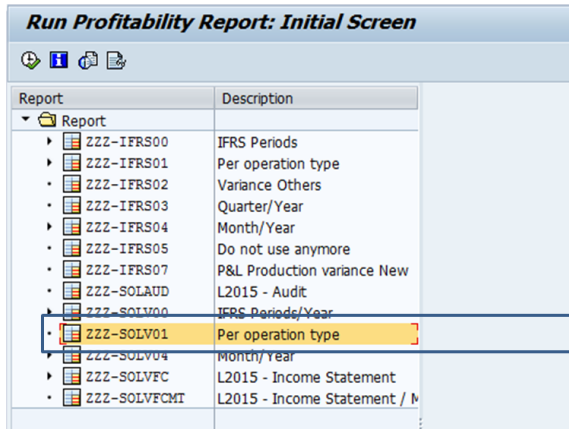
**STEP 6**

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			

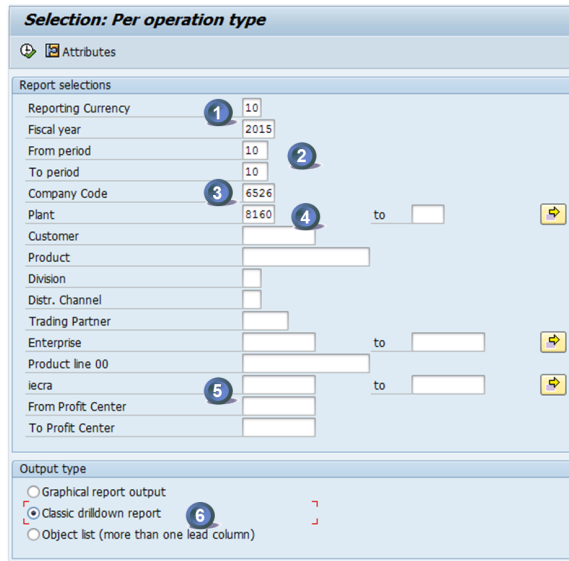
**STEP 1**

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



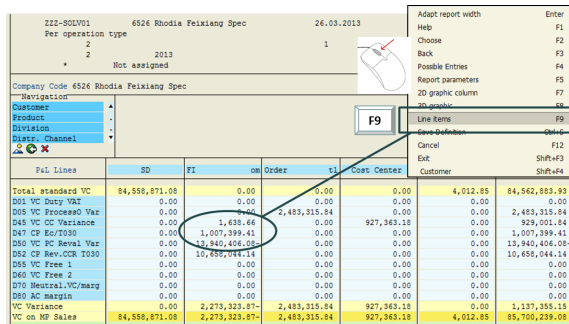
**Enter**

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"



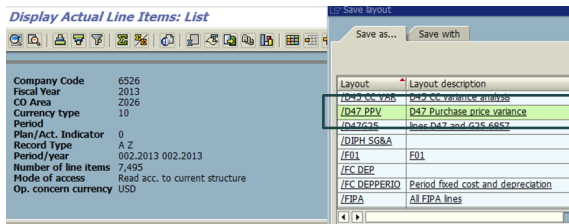
**STEP 2**

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 **/D47 PPV** to have the variance by material code



Product	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**

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
<b>Material</b>						<b>18 099,12 CNY</b>	
						<b>** 18 099,12 CNY</b>	

**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



**STEP 2**

Update the sheet "CC variance" and enter:

- the list of production cost centers
- the column "normal capacity (year)"
- the column "Budget (month)" - usually it is equal to the column "Normal capacity (month)"
- the column "standard capacity (h) (year)"

		Normal capacity CNY		7971-1000	7971-1001
BUDGET in CNY		AMO	6.924.868	6.537.163	387.705
		MACHI	14.326.193	14.057.635	740.498
		MANHO	12.53.781	11.099.775	1.254.006
HOURS		AMO		32.145	4.584
		MACHI		32.145	4.584
		MANHO		32.145	4.584

		E01 FC Period	Normal capacity (year)	Normal capacity (month)	Budget (month)	Actual hours	Standard capacity (h) (year)	Standard capacity (h) (month)	
CNP	7971-1000	Compounding	14.057.635	1.171.470	1.024.230		32.145	2.679	
	7971-1001	Packaging	740.498	61.708	61.708		4.584	382	
	<b>TOTAL MACHI</b>		14.798.133	1.233.178	1.233.178		0	3.061	
	7971-1000	Compounding		11.099.775	924.981	924.981		32.145	2.679
	7971-1001	Packaging		1.254.006	104.500	104.500		4.584	382
<b>TOTAL MANHO</b>		0	12.353.781	1.028.482	1.028.482		0	3.061	
<b>TOTAL CNP</b>		0	27.151.914	2.262.659	2.262.659				

		D99 DE period	Normal capacity (year)	Normal capacity (month)	Budget (month)	Actual hours	Standard capacity (h) (year)	Standard capacity (h) (month)
Amo	7971-1000	Compounding	6.537.163	544.784	544.784	0	32.145	2.679
	7971-1001	Packaging	387.705	32.309	32.309	0	4.584	382
	<b>TOTAL AMO</b>		6.924.868	577.072	577.072	0	0	3.061
<b>TOTAL AMO</b>		0	6.924.868	577.072	577.072			

**STEP 3**

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

The price variance & the absorption variance will be automatically calculated

Cost centers	E01 FC Period	Normal capacity (year)	Normal capacity (month)	Budget (month)	Actual hours	Standard capacity (h) (year)	Standard capacity (h) (month)	Δ price variance	Δ absorption variance	E01 + E99 Total CC variance	E99 FC absorption
PP99-1000 Prod.CC.1	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
PP99-1000 Prod.CC.2											
PP99-1000 Prod.CC.3											
PP99-1000 Prod.CC.4											
PP99-1000 Prod.CC.5											
PP99-1000 Prod.CC.6											
PP99-1000 Prod.CC.7											
PP99-1000 Prod.CC.8											
PP99-1000 Prod.CC.9											
PP99-1000 Prod.CC.10											
<b>TOTAL MACH</b>											

CO-PA	IAC 01.09	=	Budget	Actual hours	IAC 01.09	=	=	=	- [(5) - (7)] x [(3) / (7)] + [(4) - (3)]	=	CO-PA
-------	-----------	---	--------	--------------	-----------	---	---	---	---	---	-------

**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 Sakey Shanghai - Direct Production

7971-1000 Compounding (1)

7971-1001 Packing

Cost Center/Group: 7971-1000 Compounding (2)

Person responsible: 50001634

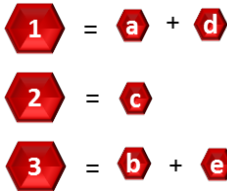
Reporting period: 1 to 1 2015 (3)

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 Fix Ovd/H (CN)	1 015 636,63-	1 171 468,27-
99438000 Depreciation	472 296,16-	544 763,99-
* 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



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

Code	Description	E01 FC Period
7971-1000	Compounding	1 1208,931
7971-1001	Packaging	1 1208,931
<b>TOTAL MACHI</b>		<b>2322</b>
7971-1000	Compounding	2 801,937
7971-1001	Packaging	2 801,937
<b>TOTAL MANHO</b>		<b>1603,874</b>
<b>TOTAL CNP</b>		<b>2010,868</b>

Code	Description	D90 DE period
7971-1000	Compounding	3 545,688
7971-1001	Packaging	3 545,688
<b>TOTAL AMO</b>		<b>1091,712</b>
<b>TOTAL AMO</b>		<b>545,688</b>

Report the actual hours of each cost center per activity

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	b 2,322
<b>TOTAL MACHI</b>		<b>2,322</b>
7971-1000	Compounding	c 2,322
7971-1001	Packaging	c 2,322
<b>TOTAL MANHO</b>		<b>2,322</b>
<b>TOTAL CNP</b>		<b>2,322</b>

Code	Description	Actual hours
7971-1000	Compounding	a 2,322
7971-1001	Packaging	a 0
<b>TOTAL AMO</b>		<b>2,322</b>
<b>TOTAL AMO</b>		<b>2,322</b>

**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
7971-1000	Compounding	37,461	155,834	193,295
7971-1001	Packaging	-146,796	2,948	-143,850
<b>TOTAL MACHI</b>		<b>-109,335</b>	<b>158,782</b>	<b>49,447</b>
7971-1000	Compounding	-12,644	124,644	112,000
7971-1001	Packaging	4,992	4,992	9,984
<b>TOTAL MANHO</b>		<b>-7,652</b>	<b>129,636</b>	<b>121,984</b>
<b>TOTAL CNP</b>		<b>-116,987</b>	<b>288,418</b>	<b>171,431</b>

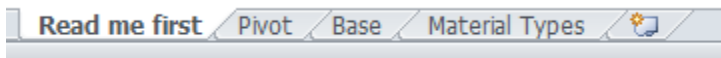
  

Code	Description	a. price variance	b. absorption variance	D90 + F90 Total CC variance
7971-1000	Compounding	935	72,467	1,007,467
7971-1001	Packaging	3,337	1,544	4,881
<b>TOTAL AMO</b>		<b>4,272</b>	<b>74,010</b>	<b>10,153</b>
<b>TOTAL AMO</b>		<b>4,272</b>	<b>74,010</b>	<b>78,282</b>

		January
<b>E00 FC Fixed Costs</b>		<b>2.025.287</b>
<b>4.CC variance (E01-E90)</b>		<b>49.446</b>
a. price variance		-237.373
b. absorption variance		286.819
<b>FC on production</b>		<b>2.074.733</b>
<b>F00 DEP Depreciation</b>		<b>581.344</b>
<b>4.CC variance (D90-F90)</b>		<b>78.282</b>
a. price variance		4.272
b. absorption variance		74.010
<b>DEP on production</b>		<b>659.627</b>

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 extracted



Overview of the 2nd sheet: Base


	A	B	C	D	E	F
	Plant	Material	Description	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						

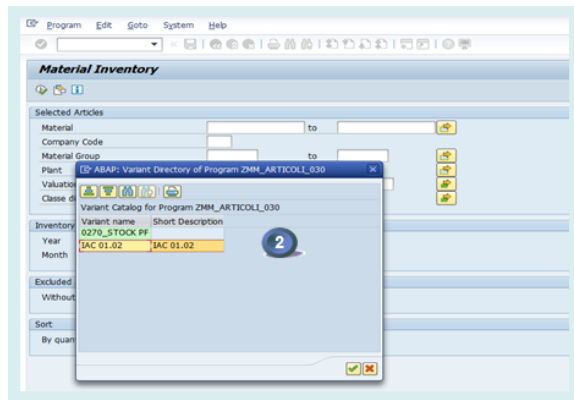
Overview of the 3rd sheet: Pivot

	A	B	C	D	E	F	G	H	I	J	K
	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 %	Sum of Materiality	(Unit price N - Unit price N-1)*Stock N	To be validated
3											
4	(blank)	-	-	-	-	-	-	0%	-	> 10k materiality	Comments
5	(blank)	-	-	-	-	-	-	0%	-	ok	
6	Grand Total	-	-	-	-	-	-	0%	-	ok	
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

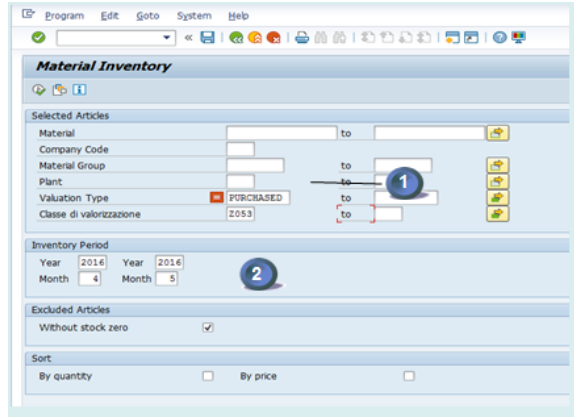
1. Select layout by clicking on 
2. Click on IAC 01.02



STEP 2

1. Enter a plant or a list of plants

2. Enter the periods (N-1 and N)

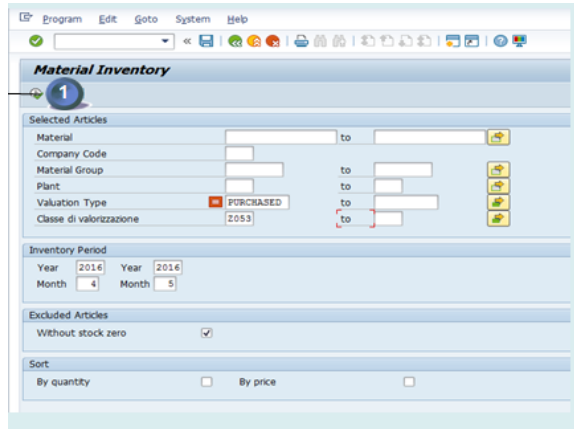


**STEP 3**

Execute



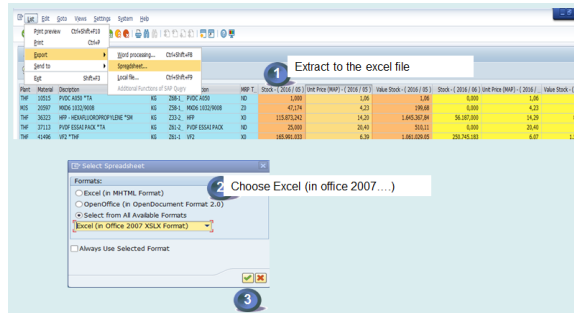
It may result in a long run time.



**STEP 4**

Download the file to excel

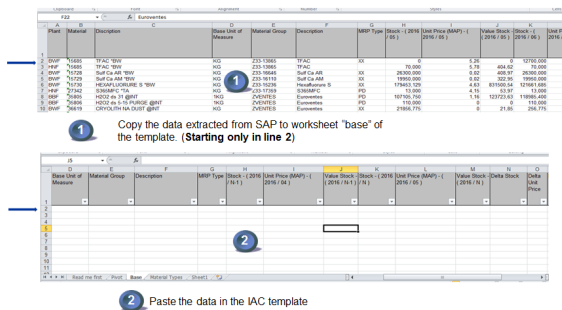
1. Extract the file through "export -> Spreadsheet"
2. Choose Excel (in office 2007...)
3. Execute



**STEP 5**

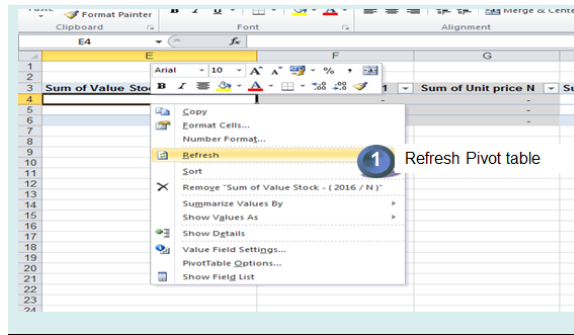
Update the template with the data retrieved in

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"

Year Labels	Sum of Stock	Sum of Value Stock	Sum of Stock (K)	Sum of Value	Sum of Unit price	Sum of Value (K)	Sum of Materiality	Value stock (Materiality)	To be validated	Comments
00494	815148.04	1538725.97	888344.26	1388844.78	1.5754	2.9641	9%	1,297,891.68	OK	
00495	0	0	0	0	0	0	0%	0	OK	
15728	2036	408.97	2036	408.97	0.0166	0.0166	0%	0	OK	
15729	1966	393.24	1966	393.24	0.0162	0.0162	0%	0	OK	
15730	17663.129	35328.64	17663.129	35328.64	1.4038	1.4038	7%	48,194.43	OK	
3619	2184.715	4369.43	2184.715	4369.43	0.0165	0.0165	0%	0	OK	
3622	89176	178352.23	89176	178352.23	1.3883	1.3883	6%	62,729.24	To be validated	
3623	1706	3412.42	1706	3412.42	0.0165	0.0165	0%	6,194.04	To be validated	
3624	19781	39562	19781	39562	0.016	0.016	0%	0	OK	
3627	2124.715	4249.43	2124.715	4249.43	0.0165	0.0165	0%	0	OK	
3628	17789.024	35578.048	17789.024	35578.048	1.4038	1.4038	7%	21,764.92	OK	
3631	80000	160000	80000	160000	0.016	0.016	0%	0	OK	
3635	20163	40326	20163	40326	0.016	0.016	0%	76.41	OK	
3632	4876	9752	4876	9752	0.016	0.016	0%	1,644.43	To be validated	
3633	188	376	188	376	0.0016	0.0016	0%	0	OK	
3634	1848.762	3697.524	1848.762	3697.524	0.0062	0.0062	0%	1,311.22	To be validated	