

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: MATERIAL

Object class: MATERIAL

Table name: MBEW

Field Name: VERPR

Material: 7822

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

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: ZWOCO050 10.2015

Table name: Excel Files (*.XLS;*.XLSX;*.XLSM)

File name: ZWOCO050 10.2015

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

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: MATERIAL

Object class: MATERIAL

Table name: MBEW

Field Name: VERPR

Material: 7822

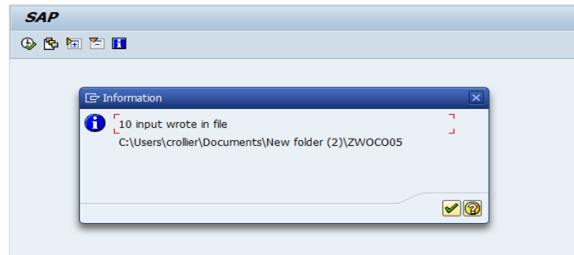
Select deleted material number? Yes: No:

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

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

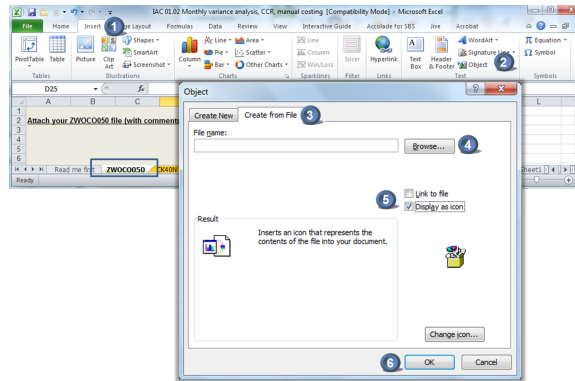
This material is a waste, that's the reason why it has a commercial price. The reason code that corresponds to this modification is the first one : 1-Co-product /Sold waste/Recycled material.

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

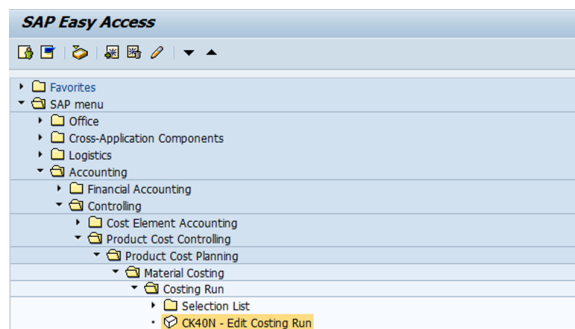
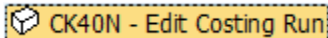
1. Select "insert"
2. Click on "Object"
3. Select "Create from File"
4. Click on "Browse" and select the file
5. Check "Display as icon"
6. Click on OK



STEP 1

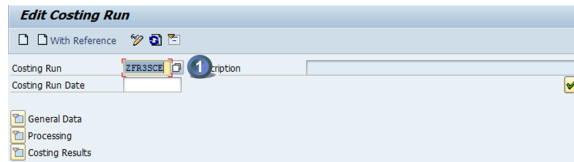
Start the transaction using the menu path or transaction code CK40N

Double-click



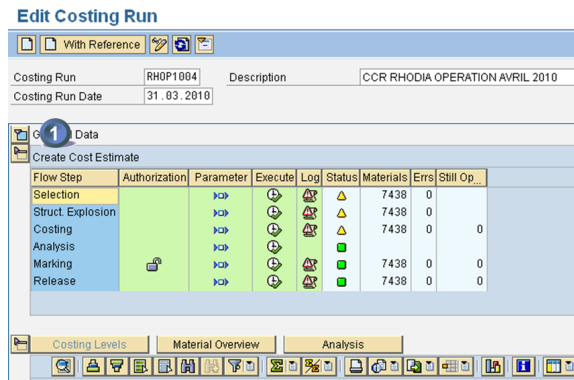
STEP 2

1. enter the costing run of the month and



STEP 3

1. Expand



STEP 4




i All error messages must be cleared

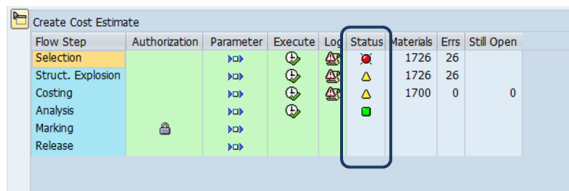
When there is a warning message, it often happens that there is a mistake in the costing. So even if it is not compulsory, it is recommended to check the warning messages and try to correct it.

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

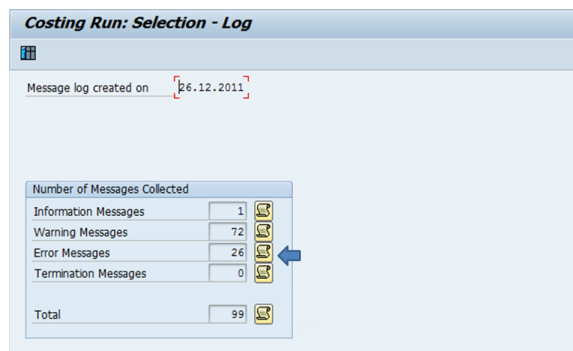
When there are error  or warning  messages, you must click on  to analyse and clear them



STEP 2

WP1 + PF1

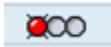
Click on  to have the list of messages





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

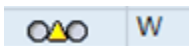
CK468 - No price could be determined for subcontracting

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

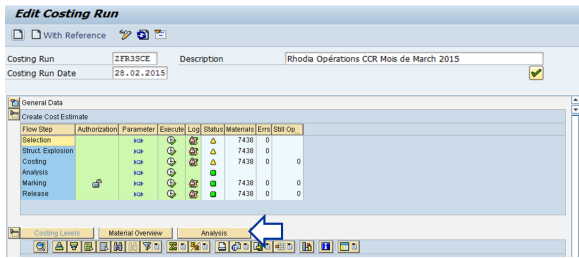
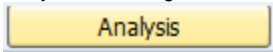
CK862 - Material XXX in plant XXX does not contain any segment for in-house production



- 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

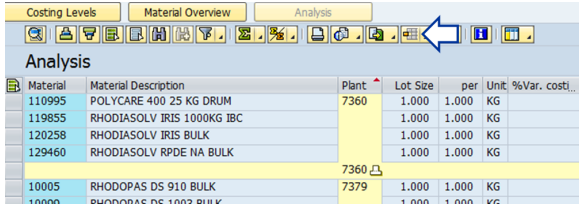
STEP 5

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



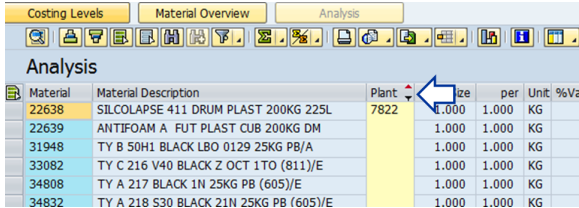
STEP 6

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



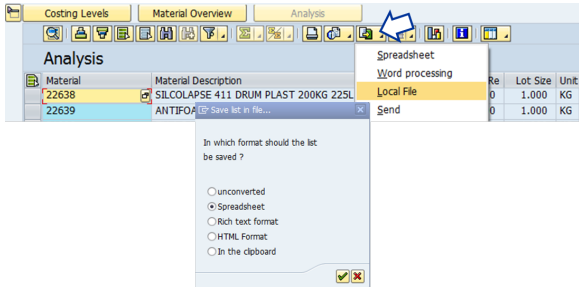
STEP 7

Filter the plant you are responsible for



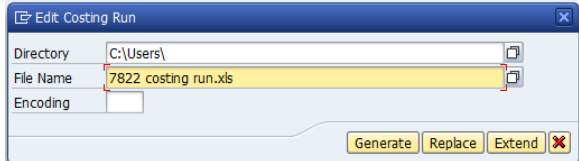
STEP 8

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

Material	Material description	Plant	Lot Size	per	BUin	%Var costing/M	Anticip reval	TotalStock	Val MatM	Costing Re	Var costing/M
60444	TY A 250F NOIR 2'IN 25KG SP (855)E	7822	1000	1000	KG	18,23		0	1.990,48	2.353,40	362,92
60447	TY A 250F NOIR 2'IN XXXX	7822	1000	1000	KG	-0,99		0	1.941,18	1.922,04	-19,14
60541	MM 858 C RIVET SAC 25 KG	7822	1000	1000	KG	-2,83	-36,34	167	7.685,66	7.468,01	-217,65
60701	TY A 250F NATUREL 25KG SP (855)E	7822	1000	1000	KG	-0,97	-128,04	6.900	2.029,13	2.009,43	-19,7
60858	MM 850 C CANULE SAC 25 KG	7822	1000	1000	KG	-3,54	-76,13	428,2	5.019,53	4.841,73	-177,8
61075	TY SX 11 BL NATUREL 25KG SP (855)E	7822	1000	1000	KG			0	2.360,00	2.360,00	0
61079	TY SX 10 BL NATUREL OCT 1'10 CPH (811)E	7822	1000	1000	KG			9.193,40	2.699,26	2.699,26	0
61118	CAPROLACTAME 60% VSAC	7822	1000	1000	KG			14.693,20	795,75	795,75	0
64151	MM 8329 C CALECHE SAC 25 KG	7822	1000	1000	KG	-33,65	31,69	0	5.157,50	3.422,12	-1.735,38
64158	MM 839 C PRISON SAC 25 KG	7822	1000	1000	KG	10,79		61	4.826,89	5.346,46	519,57
64235	BASE DE NIGROSINE/SOLVANT NOIR 7 FUT	7822	1000	1000	KG	21,69	704,28	488.737	6.642,91	8.083,94	1.441,03
64248	OXYDE ZINC QUALITE HERSE 365/5 25KG SAC	7822	1000	1000	KG	112,4	109,31	65.624	2.159,92	4.587,65	2.427,73

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€

Material	Material description	Plant	Lot Size	per	BUin	%Var costing/M	Anticip reval	TotalStock	Val MatM	Costing Re	Var costing/M
60444	TY A 250F NOIR 2'IN 25KG SP (855)E	7822	1000	1000	KG	18,23	> 10 %	0	1.990,48	2.353,40	362,92
60447	TY A 250F NOIR 2'IN XXXX	7822	1000	1000	KG	-0,99		0	1.941,18	1.922,04	-19,14
60541	MM 8488 C RIVET SAC 25 KG	7822	1000	1000	KG	-2,83	-36,34	167	7.685,66	7.468,01	-217,65
60701	TY A 250F NATUREL 25KG SP (855)E	7822	1000	1000	KG	-0,97	-128,04	6.900	2.029,13	2.009,43	-19,7
60858	MM 850 C CANULE SAC 25 KG	7822	1000	1000	KG	-3,54	-76,13	428,2	5.019,53	4.841,73	-177,8
61075	TY SX 11 BL NATUREL 25KG SP (855)E	7822	1000	1000	KG			0	2.360,00	2.360,00	0
61079	TY SX 10 BL NATUREL OCT 1'10 CPH (811)E	7822	1000	1000	KG			9.193,40	2.699,26	2.699,26	0
61118	CAPROLACTAME 60% VSAC	7822	1000	1000	KG			14.693,20	795,75	795,75	0
64151	MM 8329 C CALECHE SAC 25 KG	7822	1000	1000	KG	-33,65	31,69	0	5.157,50	3.422,12	-1.735,38
64158	MM 839 C PRISON SAC 25 KG	7822	1000	1000	KG	10,79		61	4.826,89	5.346,46	519,57
64235	BASE DE NIGROSINE/SOLVANT NOIR 7 FUT	7822	1000	1000	KG	21,69	> 10 %	488.737	6.642,91	8.083,94	1.441,03
64248	OXYDE ZINC QUALITE HERSE 365/5 25KG SAC	7822	1000	1000	KG	112,4		65.624	2.159,92	4.587,65	2.427,73

STEP 1

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 the 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

Material: 64235 1 to

Plant: 7822 2 to

Purchasing organization: to

Scope of list: BEST

Selection parameters: to

Document type: to

Purchasing group: to

Item category: to

Account assignment category: to

Delivery date: 01.03.2016 2 to 31.03.2016

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				
	Still to be delivered		80 KG		16,55 EUR	1 KG
	Still to be invoiced		0 KG		0,00 EUR	0,00 %
00020	64235		BASE DE NIGROSINE/SOLVANT NOIR 7 FUT	0451		
	7822	FR59				
	Still to be delivered		20 KG		16,55 EUR	1 KG
	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 IMCD FRANCE SAS | Doc. date: 17.03.2010

Item	Material	Short Text	PO Quantity	Deliv. Date	Net Price	Cur	Per	Mat. Group	Plnt
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

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	Cry
GR		101 22.03.2010	S007814821	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	S106826979	1	25.03.2010	80	10:24:22	111558	1 324,00	EUR
Tr./Ev. Invoice receipt						80			1 324,00	EUR

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.

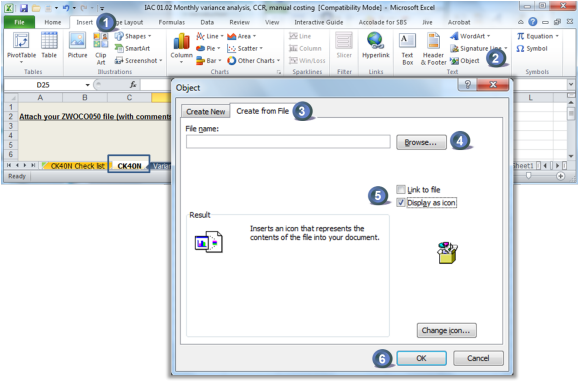
i If there is a mistake in the calculation of the new MAP due to an error in the purchase order, invoice price etc:

- 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

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

Standard Cost Calculation Check-List / FRA IAC 01.02				
N°	Control description	Done ?	Comments (compulsory for No and N/A)	Control Evidence (optional)
		Yes / No / N/A		
1	Messages analysis	2		
1a	Errors messages in CK40N are checked and corrected (red squares)	No	3	
1b	Warning messages are analyzed (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	
4	Control evidences are posted in the IAC eroom			
4a	Excel file with variance analysis & comments	Yes		
4b	Check-list	Yes		



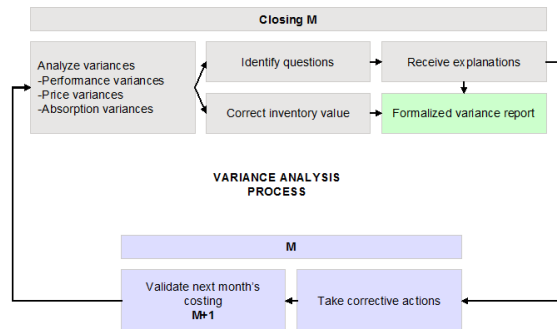
The variance is the difference between the expected standard cost and the actual cost incurred. Variance analysis involves breaking down the total variance to explain how much of it is caused by usage of resources being different from the standard and how much of it is caused by the price of resources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

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
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.	ProdVer	Pr.V.
2084955	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
2084955				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.	ProdVer	Pr.V.
208388	64712	PA 66 MOLTEN POLYMER	7822-1304 AMO	ATY 2006/7822-1304/AMO	96,000	84,261	H	0,00	284,50	PC41	PC41
	64712	PA 66 MOLTEN POLYMER	7822-1304 CNP	ATY 2006/7822-1304/CNP	96,000	84,261	H	1 866,32	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
208388					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	499,10
CNP	96,00	141,95	13 636,91	84,26	141,95	11 969,60	1 667,31
E05 FC ProcessO Var			17 712,74			15 546,33	2 166,41
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	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
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"

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 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: []
 Iecra: [] 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

222-90LV01 6526 Rhodia Feixiang Spec 26.03.2013

Per operation type 2 2013 1

Company Code 6526 Rhodia Feixiang Spec

Navigation: []
 Distances: []
 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
 Line Definition: Ctrl+L
 Cancel: F12
 Exit: Shift+F4

Pln. Lines	SD	FI	on	Order	cl	Cost. Center			
Total standard VC	84,558,871.08		0.00		0.00		0.00	4,012.85	84,562,883.93
D03 VC Busy V&Z	0.00		0.00		0.00		0.00	0.00	0.00
D05 VC Processo Var	0.00		0.00		2,483,315.84		0.00	0.00	2,483,315.84
D45 VC CC Variance	0.00		1,430.46		0.00		927,363.18	0.00	929,501.84
D47 CP Exp T030	0.00		1,007,399.41		0.00		0.00	0.00	1,007,399.41
D80 VC PC Reval. Var	0.00		13,940,406.08		0.00		0.00	0.00	13,940,406.08
D82 CP Rev.CCR T030	0.00		10,658,044.14		0.00		0.00	0.00	10,658,044.14
D83 VC Free 1	0.00		0.00		0.00		0.00	0.00	0.00
D80 VC Free 2	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
D89 Ac margin	0.00		0.00		0.00		0.00	0.00	0.00
VC Variance	0.00		2,273,323.87		2,483,315.84		927,363.18	0.00	1,137,355.15
VC on MP Sales	84,558,871.08		2,273,323.87		2,483,315.84		927,363.18	4,012.85	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	Layout description
/D45 CC VAR	D45 CC variance analysis
/DS7/G25	lines DS7 and G25 DS7
/DIPH SG&A	
/FO1	FO1
/FC DEP	
/FC DEPPERIO	Period fixed cost and depreciation
/FIPA	All FIPA lines
/GMDATA	Data per 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	2
To Period	10	
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

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: 1 10
 Fiscal year: 2015
 From period: 10 2
 To period: 10
 Company Code: 3 6526
 Plant: 8160 4 to []
 Customer: []
 Product: []
 Division: []
 Distr. Channel: []
 Trading Partner: []
 Enterprise: [] to []
 Product line 00: []
 Iecra: [] to []
 From Profit Center: []
 To Profit Center: []

Output type

Graphical report output
 Classic drilldown report 6
 Object list (more than one lead column)

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

222-SOLV01 6526 Rhodia Feixiang Spec 26.03.2013

Per operation type 2 1

Company Code 6526 Rhodia Feixiang Spec

Navigation: Division, 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/Definition Ctrl+S
 Cancel F12
 Exit Shift+F4

Pub Lines	SD	FI	on Order	Cost Center				
Total standard VC	84,558,871.08	0.00	0.00	0.00	0.00	4,912.85	84,562,883.93	
D01 VC Busy Var	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
D05 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	1,438.66	0.00	927,363.18	0.00	0.00	929,501.84	
D47 CP Ec/T030	0.00	1,007,389.41	0.00	0.00	0.00	0.00	1,007,389.41	
D80 VC PC Reval. Var	0.00	13,940,406.08	0.00	0.00	0.00	0.00	13,940,406.08	
D62 CP Rev.CCR T030	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	
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	
D50 Ac 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	927,363.18	0.00	0.00	1,137,356.15	
VC on MP Sales	84,558,871.08	2,273,323.87	2,483,315.84	927,363.18	0.00	4,912.85	85,700,239.08	

STEP 3

Use the lay out /D47 PPV to have the variance by material code

Display Actual Line Items: List

Save layout

Save as... Save with

Layout: Layout description

/D47-CP-T030 /D47-CP-Parameter-attributes
 /D47-PPV /D47-Purchase-price-variance
 /D47-PCS /Proc-D47-and-G25-6657

/DPH SGR4
 /F01 F01
 /EC DEP
 /EC DEPPERIO Period fixed cost and depreciation
 /FPA All FPA lines

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.

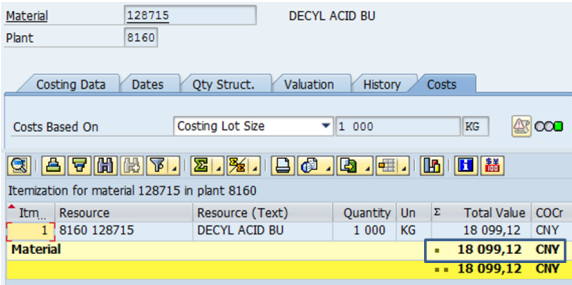
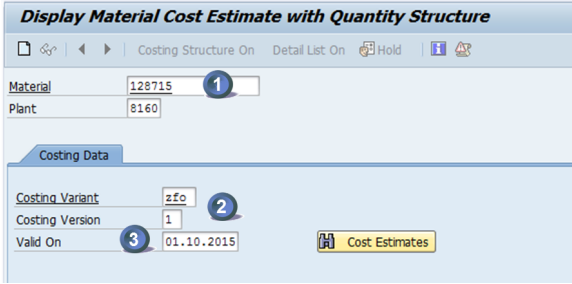
Enter :

- 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



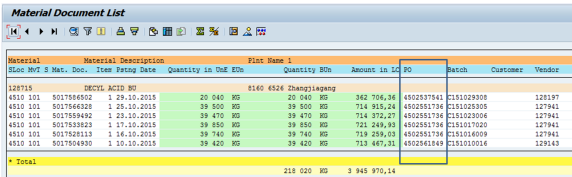
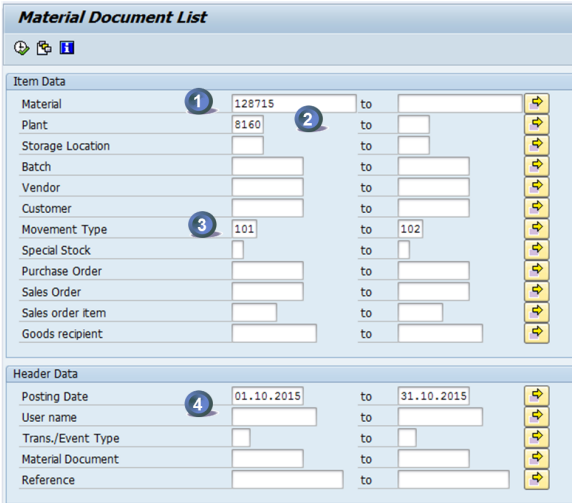
STEP 5

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

Enter:

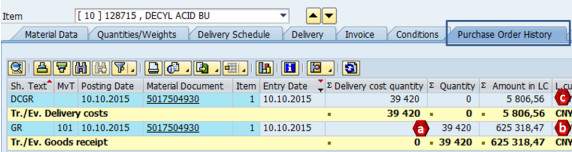
- 1. the material code
- 2. the plant code
- 3. the movement type = **101** to **102**
- 4. posting date = 1 month

The list of purchase orders to be analysed is displayed



STEP 6

Display a purchase order to calculate the purchase price variance



a - Quantity purchased

b - Purchase price

c - Delivery costs

d - TOTAL costs = b + c

e - Actual unit price = d / a

f - Standard cost (from CK13N)

h - Purchase price var = (f - e) / a

Purchase orders	4502561849	
Purch qty	39.420,00	KG a
Purchase price	625.318,47	CNY b
Delivery costs	5.806,56	CNY c
TOTAL costs	631.125,03	CNY
Actual unit price	16.010,27	CNY / Ton
Standard cost	18.099,12	CNY / Ton
Purchase price var	82.342,28	CNY

Each month, the inventory is revaluated with the new standard cost.

Revaluation = [Standard cost (M) – Standard cost (M-1) x Quantity 01/01/M (00h00)

The variance is due to a more or less efficient use of the time available to carry out the actual production. It compares the actual time taken to carry out an activity with the standard time allowed and values the difference at the standard.

The analysis is performed with the report ZWPP40A

Each month, the inventory is revaluated with the new standard cost. Revaluation = [Standard cost (M) – Standard cost (M-1) x Quantity 01/01/M (00h00)

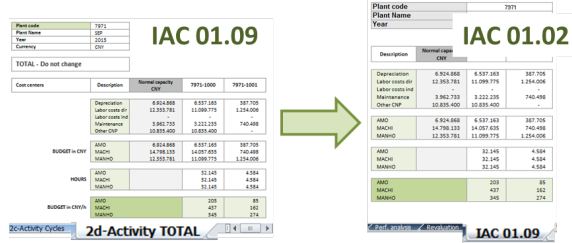
There is a revaluation of fixed costs when:

- there is a modification of the production process
- in January with the new standard hourly rate

STEP 1

Once a year, when the control IAC 01.09 is completed and uploaded in WP2.

- Copy the result of the sheet "2d-Activity TOTAL" and paste the result in the tab "IAC 01.09"



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	14.950.233	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		6.057.835	1.171.470	1.171.470	0	32.145	2.679
	7971-1001 Packaging		740.498	61.708	61.708	0	4.584	382
	TOTAL MACHI	0	14.798.133	1.233.178	1.233.178	0	32.145	3.061
	TOTAL MANHO	0	12.353.781	1.029.482	1.029.482	0	32.145	3.061
TOTAL CNP		0	27.851.914	2.262.659	2.262.659	0	32.145	3.061

		D30 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	544.764	544.764	0	32.145	2.679
	7971-1001 Packaging		387.705	32.309	32.309	0	4.584	382
	TOTAL AMO	0	6.924.868	577.072	577.072	0	32.145	3.061
	TOTAL AMO	0	6.924.868	577.072	577.072	0	32.145	3.061

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	b absorption variance	EBI + EB Total CC	EBI FC absorption
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
9999-1000 Prod.CC.1											
9999-1000 Prod.CC.2											
9999-1000 Prod.CC.3											
9999-1000 Prod.CC.4											
9999-1000 Prod.CC.5											
9999-1000 Prod.CC.6											
9999-1000 Prod.CC.7											
TOTAL	MACH										

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 **2**

Person responsible: 50001634 **3**

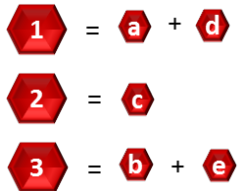
Reporting period: 1 to 1 2015

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 (CN	1 015 636,63	1 171 468,27
99438000 Depreciation	472 298,16	841 763,89
* Credit	2 556 566,72	2 641 212,67
** Over/Underabsorption		1,74 4

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 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 (G	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	
TOTAL MACH		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
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	
TOTAL MACH		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
TOTAL AMO		

STEP 7

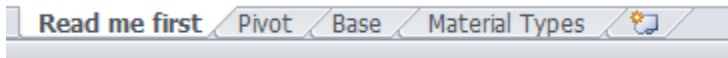
Once the file is completed, the price & absorption variance can be reported in the variance analysis template

	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	-109.327	158.762	49.445
	7971-1000	Compounding	-129.244	-129.244	-
AMO	7971-1001	Packaging	4.892	4.892	9.784
	TOTAL	MANHO	-129.244	129.037	2
	TOTAL CNP		-237.373	286.819	49.445

January	
E00 FC Fixed Costs	2.025.287
4.CC variance (E01-E90)	49.446
a. price variance	-237.373
b. absorption variance	286.819
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
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IAC.01.02 - Monthly variance analysis

This template concerns the IAC 03.07. The objective is to justify production costs variances and

1- Pivot

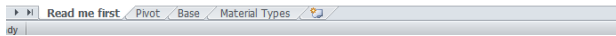
- Update the pivot table after updating the tab named "base"

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

