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

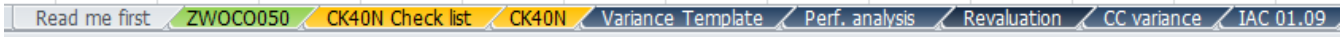
IAC 01.02 Monthly variance analysis, CCR, manual costing.xls

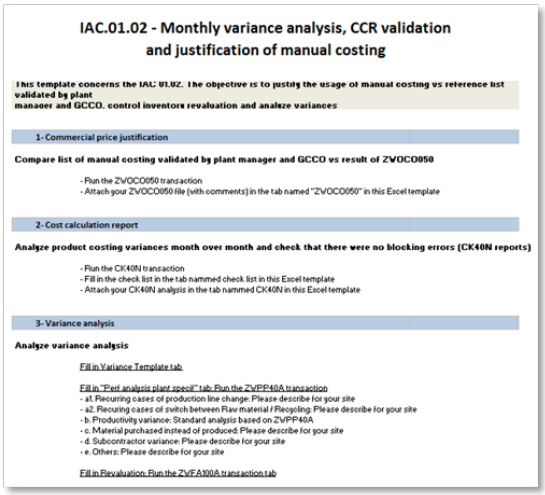
IAC 01.02 template PF2.xlsx

Guideline

Download the file IAC 01.02 Monthly variance analysis, CCR, manual costing.xls

There are 9 sheets in the file :





IAC.01.02 - Monthly variance analysis, CCR validation and justification of manual costing

This template concerns the IAC 01.02. The objective is to justify the usage of manual costing vs reference list validated by plant manager and GCCO, control inventory revaluation and analyze variances

1- Commercial price justification

Compare list of manual costing validated by plant manager and GCCO vs result of ZWOCO050

- Run the ZWOCO050 transaction
- Attach your ZWOCO050 file (with comments) in the tab named "ZWOCO050" in this Excel template

2- Cost calculation report

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

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

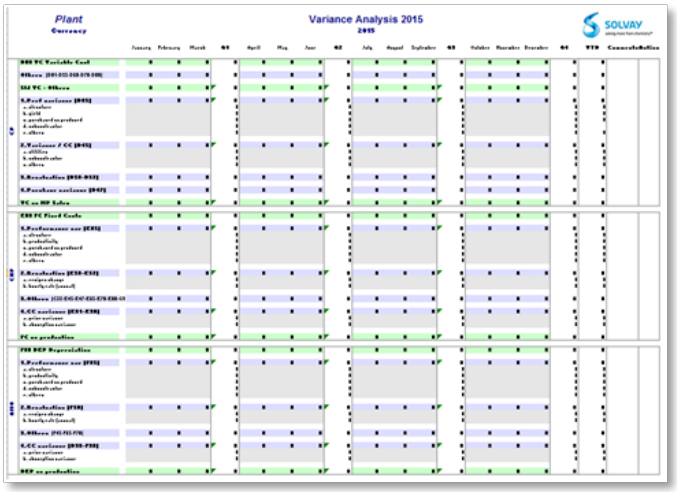
3- Variance analysis

Analyze variance analysis

Fill in Variance Template tab

Fill in "Perf analysis plant specif." tab: Run the ZVPP40A transaction
- a1. Recurring cases of production line change: Please describe for your site
- a2. Recurring cases of switch between Raw material / Recycling: Please describe for your site
- b. Productivity variance: Standard analysis based on ZVPP40A
- c. Material purchased instead of produced: Please describe for your site
- d. Subcontractor variance: Please describe for your site
- e. Others: Please describe for your site

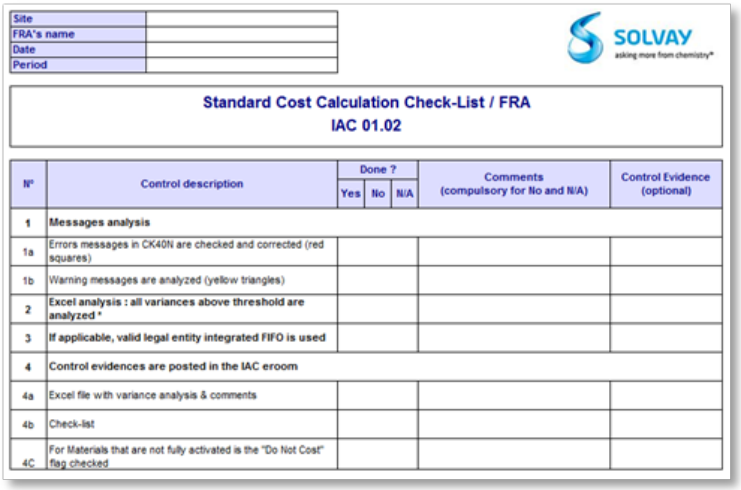
Fill in Revaluation: Run the ZVFA100A transaction tab



Plant
Currency

Variance Analysis 2015

SOLVAY



Site	
FRA's name	
Date	
Period	

SOLVAY
asking more from chemistry®

Standard Cost Calculation Check-List / FRA
IAC 01.02

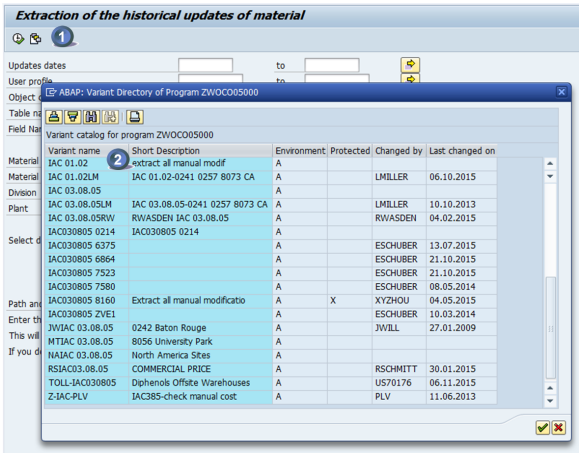
N°	Control description	Done ? Yes	Done ? No	Done ? N/A	Comments (compulsory for No and N/A)	Control Evidence (optional)
1	Messages analysis					
1a	Errors messages in CK40N are checked and corrected (red squares)					
1b	Warning messages are analyzed (yellow triangles)					
2	Excel analysis : all variances above threshold are analyzed *					
3	If applicable, valid legal entity integrated FIFO is used					
4	Control evidences are posted in the IAC eroom					
4a	Excel file with variance analysis & comments					
4b	Check-list					
4C	For Materials that are not fully activated is the "Do Not Cost" flag checked					

STEP 1

Start the transaction **ZWOCO050**

Select the Layout

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



Extraction of the historical updates of material

Updates dates

ABAP: Variant Directory of Program ZWOCO05000

Variant catalog for program ZWOCO05000

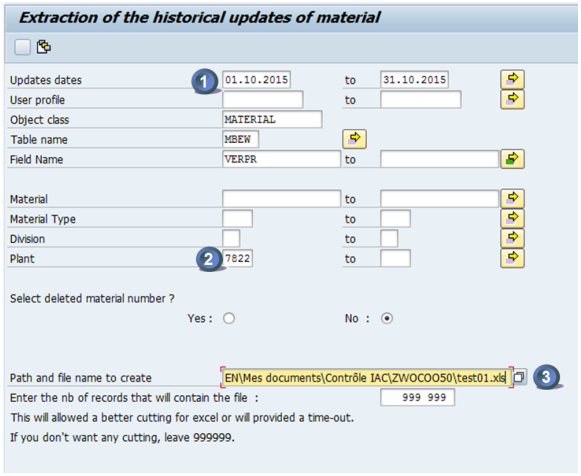
Variant name	Short Description	Environment	Protected	Changed by	Last changed on
IAC 01.02	extract all manual modif	A			
IAC 01.02LM	IAC 01.02-0241 0257 8073 CA	A		LMILLER	06.10.2015
IAC 03.08.05		A			
IAC 03.08.05LM	IAC 03.08.05-0241 0257 8073 CA	A		LMILLER	10.10.2013
IAC 03.08.05RW	RWASDEN IAC 03.08.05	A		RWASDEN	04.02.2015
IAC030805 0214	IAC030805 0214	A			
IAC030805 6375		A		ESCHUBER	13.07.2015
IAC030805 6864		A		ESCHUBER	21.10.2015
IAC030805 7523		A		ESCHUBER	21.10.2015
IAC030805 7580		A		ESCHUBER	08.05.2014
IAC030805 8160	Extract all manual modificatio	A	X	XYZHOU	04.05.2015
IAC030805 ZVE1		A		ESCHUBER	10.03.2014
JWIAC 03.08.05	0242 Baton Rouge	A		JWILL	27.01.2009
MTIAC 03.08.05	8056 University Park	A			
NAIAC 03.08.05	North America Sites	A			
RSIAC03.08.05	COMMERCIAL PRICE	A		RSCHMITT	30.01.2015
TOLL-IAC030805	Diphenols Offsite Warehouses	A		US70176	06.11.2015
Z-IAC-PLV	IAC385-check manual cost	A		PLV	11.06.2013

STEP 2

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

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

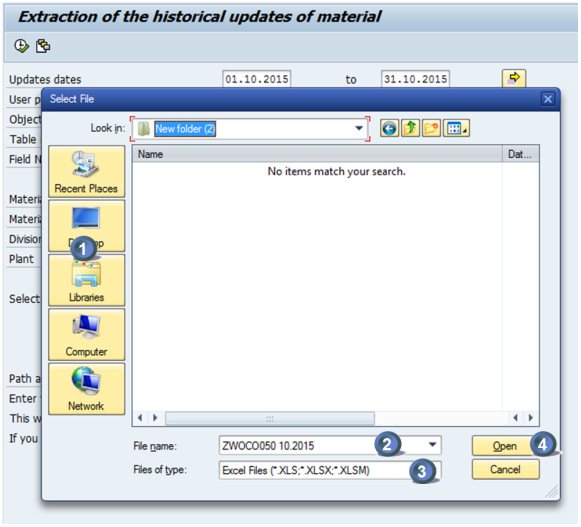
Confirm 4 tables codes in "Field Name"	
VERPR	BEPH1
BWPRH	VJBWH



STEP 3

Upload the file in excel

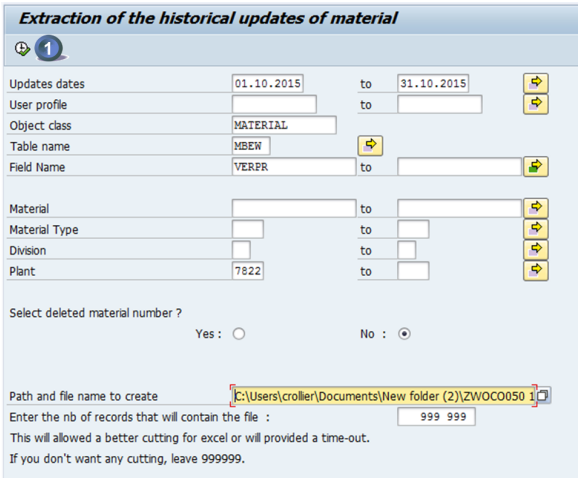
1. choose the folder where you want to save the file
2. enter the file name
3. Select “Excel files” in files of type



STEP 4

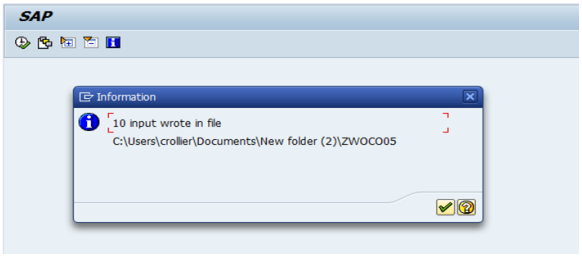
Execute 

It may result in a long runtime



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

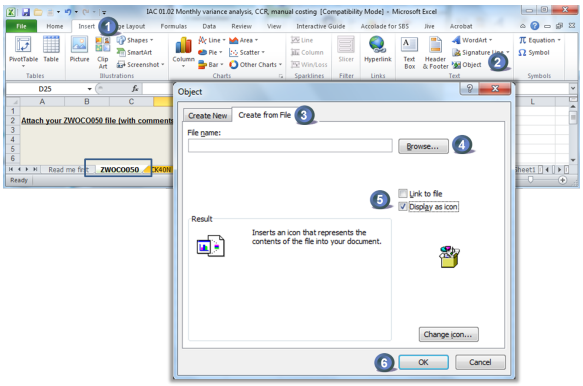
This material is a waste, that's the reason why it has a commercial price. The reason code that corresponds to this modification is the first one : 1-Co-product /Sold waste/Recycled material.

Material nb	Description	Material type	Plant	table name	Field code	Field name	update date	Old value	New value
64569	BLOCS EXUTOIRE VRAC	ZMAT	7822	MBEW	BWPRH	Valuation price based on commercial law: level 1	02.07.2009	550.00	650.00

STEP 8

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

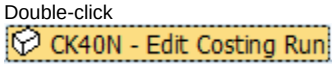
1. Select "insert"
2. Click on “Object”
3. Select “Create from File”
4. Click on “Browse” and select the file
5. Check “Display as icon”
6. Click on OK

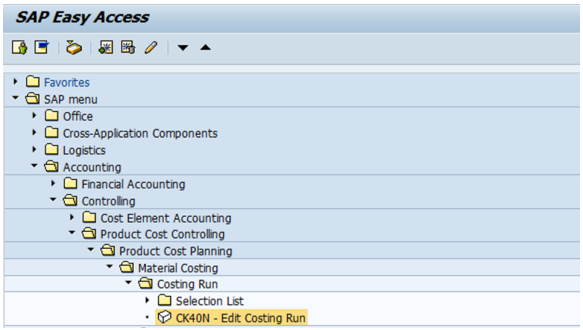


STEP 1

Start the transaction using the menu path or transaction code CK40N

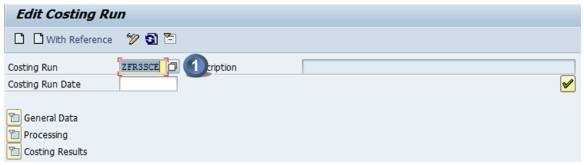
Double-click





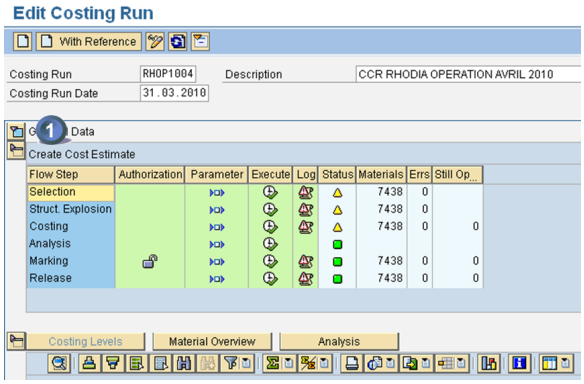
STEP 2

1. enter the costing run of the month and Enter



STEP 3

1. **Expand**



STEP 4

All error messages must be cleared

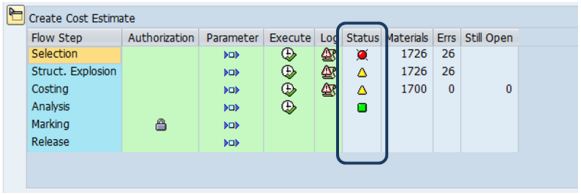
When there is a warning message, it often happens that there is a mistake in the costing. So even if it is not compulsory, it is recommended to check the warning messages and try to correct it.

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

STEP 1

WP1 + PF1

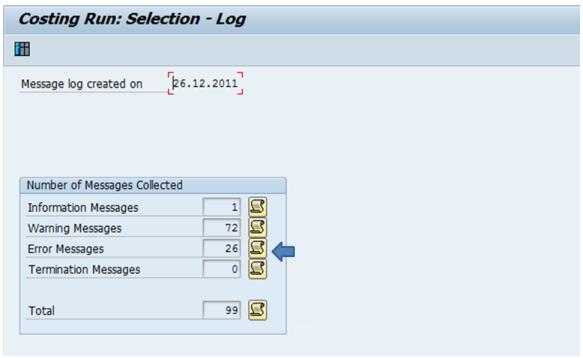
When there are error or warning messages, you must click on to analyse and clear them



STEP 2

WP1 + PF1

Click on to have the list of messages



STEP 3

WP1 + PF1

1 - Type of message

 Error messages, must be cleared

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

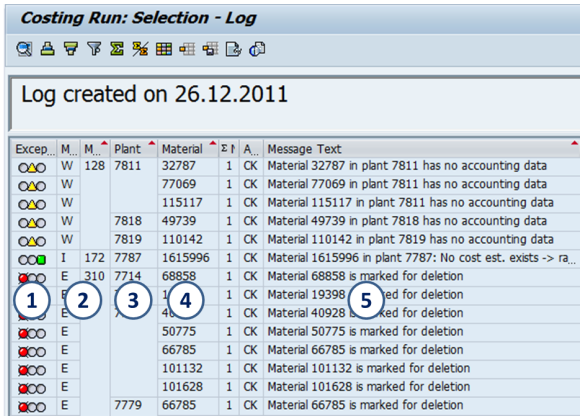
 Information messages

2 - Message code

3 - Plant code

4 - Material code

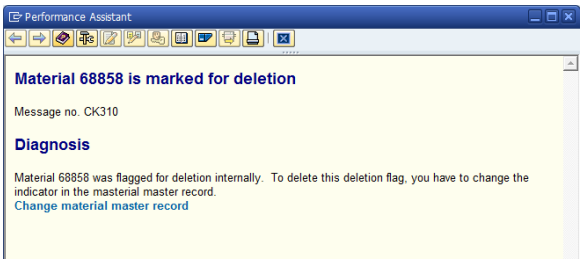
5 - Message description



STEP 4

WP1 + PF1

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



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

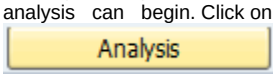
Workflow history

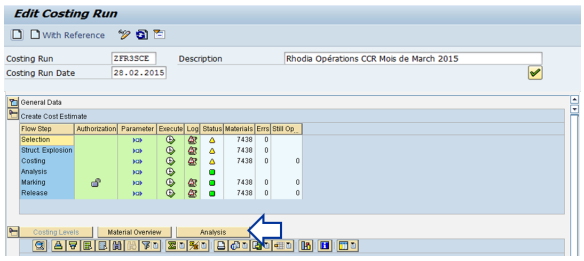
This view shows the 5 most recent entries. The complete workflow log is available from the 'Document Activity' menu item.

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

STEP 5

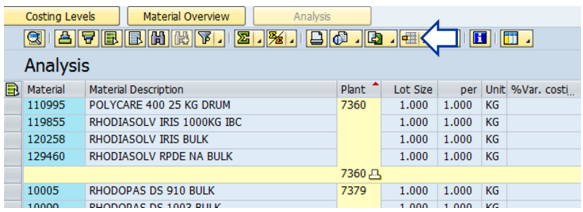
When errors are corrected and warning messages checked , costing analysis can begin. Click on





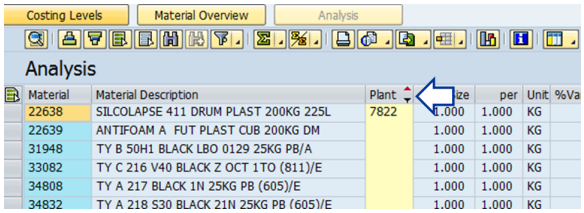
STEP 6

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



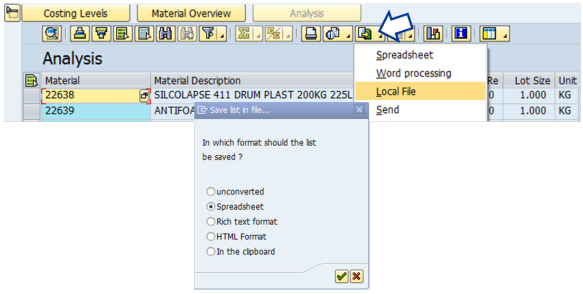
STEP 7

Filter the plant you are responsible for



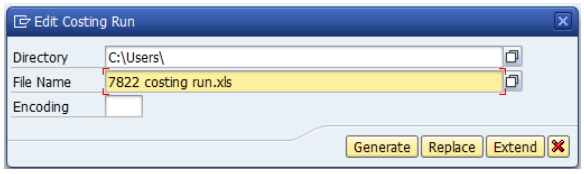
STEP 8

Save in excel : local file => spreadsheet



STEP 9

Enter the directory & the file name and generate the file



STEP 10

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

- Unit cost variance %
- Inventory revaluation value.

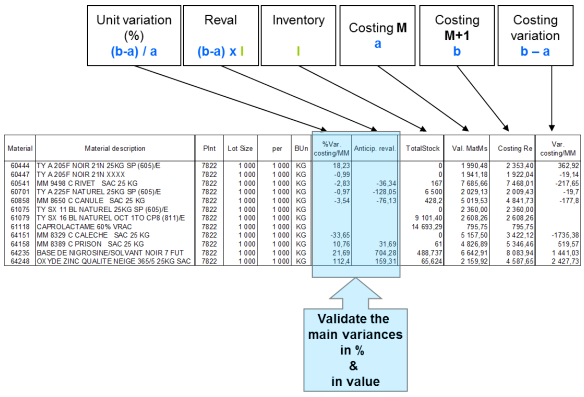
If the threshold is above +/- 10% at unit cost level or +/- 50 k€ at item inventory revaluation level should be authorized by RCOM.

Open the file

If:

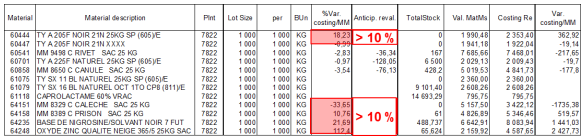
- the unit variation is > 10% (or local threshold)
- or Anticipated reval is > 50 kEUR (or local threshold),

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€

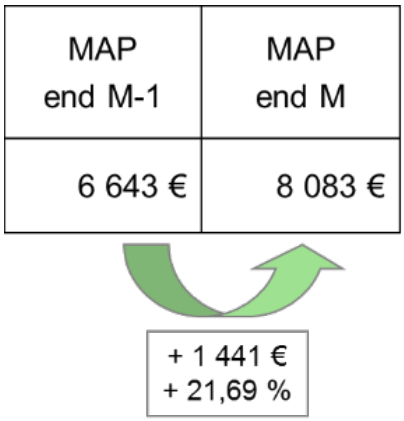


STEP 1

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.

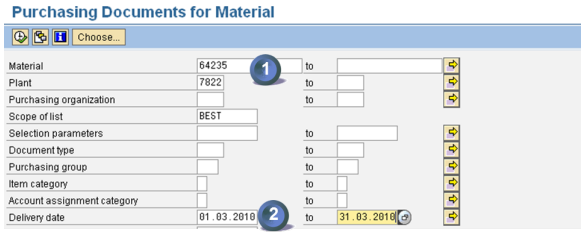


STEP 2

Display purchase orders with the transaction **ME2M**

Enter

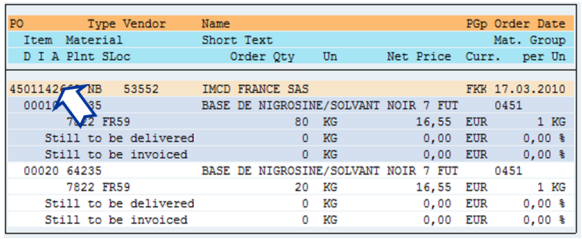
1. the material code & the plant
2. the period



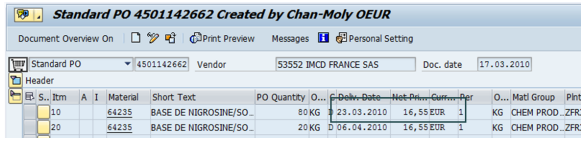
STEP 3

There is one purchase order to check.

=> Double-click on it



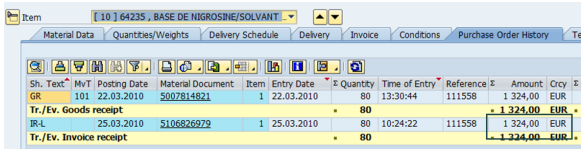
In march, the purchase price is 16,55 € / KG



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.

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

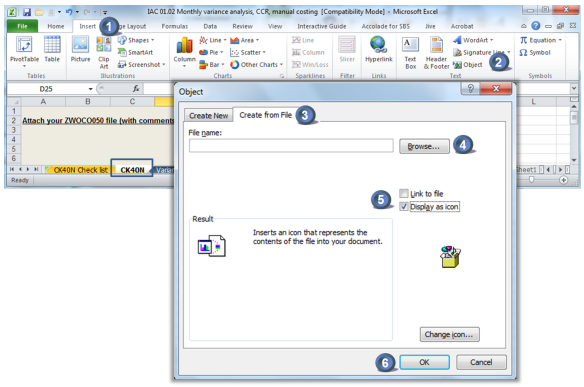
This view shows the 5 most recent entries. The complete workflow log is available from the 'Document Activity' menu item.

Jun 13, 2016	Actor	Type	Activity	Version
Published	Sylvain Michel Alexandre Pingont	State	changed state to Published at 2:02 pm (Space Initialization)	v6
Draft	Sylvain Michel Alexandre Pingont	State	gave *Approvers* approval at 2:02 pm	
		State	changed state to Draft at 2:02 pm	v6
From Nov 20, 2015 to Feb 29, 2016				
	Alexandra Lepercq and ROLLIER, Charlotte	Edit	multiple updates from Alexandra Lepercq and ROLLI ER, Charlotte	
	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 Published at 9:32 am	v19
Draft	GONCALO, Ana Catarina	State	gave *Approvers* approval at 9:32 am	
		State	changed state to Draft at 9:32 am	v19
Jun 13, 2016				
Published	Sylvain Michel Alexandre Pingont	State	changed state to Published at 2:02 pm (Space Initialization)	v18
Draft	Sylvain Michel Alexandre Pingont	State	gave *Approvers* approval at 2:02 pm	
		State	changed state to Draft at 2:02 pm	v18
From Nov 20, 2015 to Apr 05, 2016				
	Alexandra Lepercq and ROLLIER, Charlotte	Edit	multiple updates from Alexandra Lepercq and ROLLIE R, Charlotte	

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

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

Site	
FRA's name	
Date	
Period	

SOLVAY

Standard Cost Calculation Check-List / FRA
IAC 01.02

N°	Control description	Done ? Yes	Done ? N/A	Comments (compulsory for No and N/A)	Control Evidence (optional)
1	**Messages analysis**				
1a	Errors messages in CK40N are checked and corrected (red squares)	No			
1b	Warning messages are 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	**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.

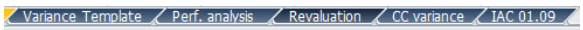
May 18, 2016	Actor	Type	Activity	Version
Published	Sylvain Michel Alexandre Pingont	State	changed state to Published at 3:33 am (Space Initialization)	v4
Draft	Sylvain Michel Alexandre Pingont	State	gave *To be approved* approval at 3:33 am	
		State	changed state to Draft at 3:33 am	v4
From Nov 25, 2015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

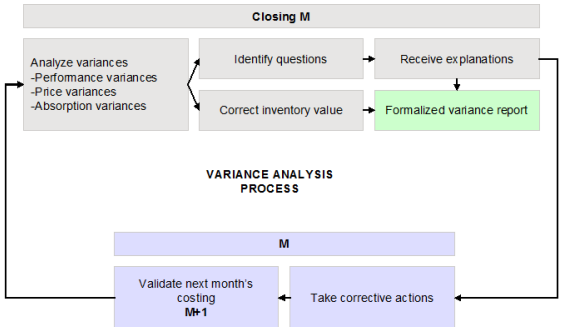
The variance is the difference between the expected standard cost and the actual cost incurred. Variance analysis involves breaking down the total variance to explain how much of it is caused by usage of resources being different from the standard and how much of it is caused by the price of resources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

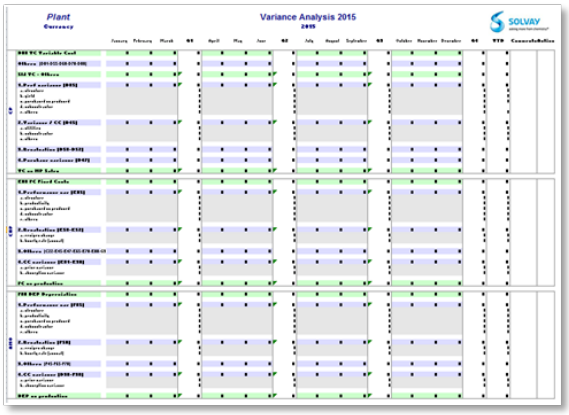
- Understand the reasons
- Initiate corrective actions
- If needed adjust the inventory value and change the semi-standard way of calculation, depending on the origin of the variance.

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 :





Open the sheet "Variance Template"

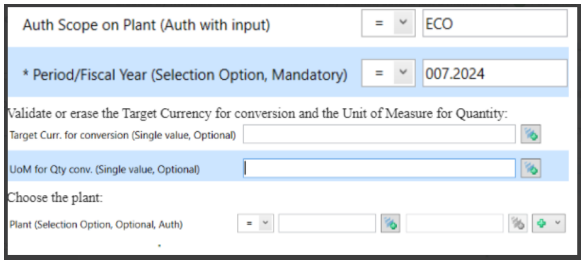


STEP 1

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.	PrdVer	Pr.Vr.
2084855	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
20848				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
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 PocessO 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	Mater.	Material description	Origin	Origin Description	Actual Qty	Tgt Qt.	Item	FC Var.	DEP Var.	PrdVers PO	Pr.Vr.
2090988	64712	PA 66 MOLTEN POLYMER	7822-1304 AMO	ATY Z006/7822-1304/AMO	96,000	84,261	H	0,00	264,50	PC41	PC41
	64712	PA 66 MOLTEN POLYMER	7822-1304 CNP	ATY Z006/7822-1304/CNP	96,000	84,261	H	1 666,32	0,00	PC41	PC41
	64712	PA 66 MOLTEN POLYMER	7822-1304 MANHO	ATY Z006/7822-1304/MANHO	96,000	84,261	H	497,75	0,00	PC41	PC41
20909					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	4 075,03	84,26	42,45	3 576,73	498,30
CNP	96,00	141,95	13 626,91	84,26	141,95	11 960,60	1 666,32
E05 FC ProcessO Var			**17 701,94**			**15 537,32**	**2 164,62**
AMO	96,00	22,55	2 164,84	84,26	22,55	1 900,12	264,72
F05 DEP PocessO 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 splited into CP / CNP / AMO*

Order	Mater.	Material description	Origin	Origin Description	Actual Qty	Tgt Qt 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 Z006/7822-1008/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 Z006/7822-1180/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 Z006/7822-1180/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 Z006/7822-1180/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
20845					0,000	16,008-	H	6 127,89	59,65

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

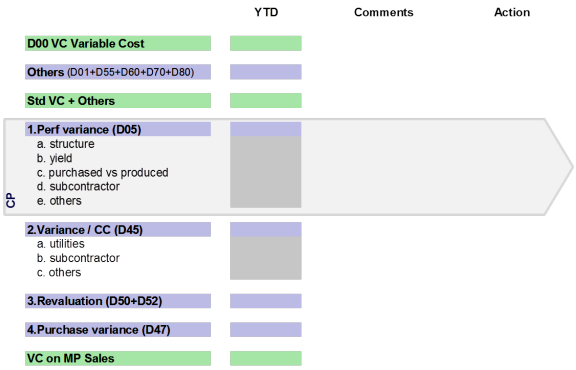
How to read this variance ?

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

e. others: to be commented

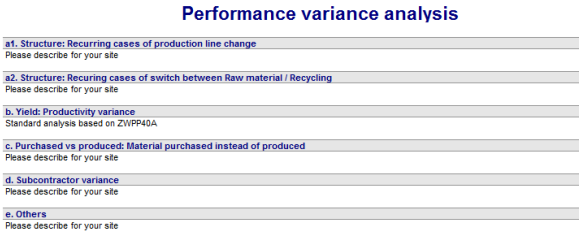
STEP 5

Fill in those information in « variance template » tab



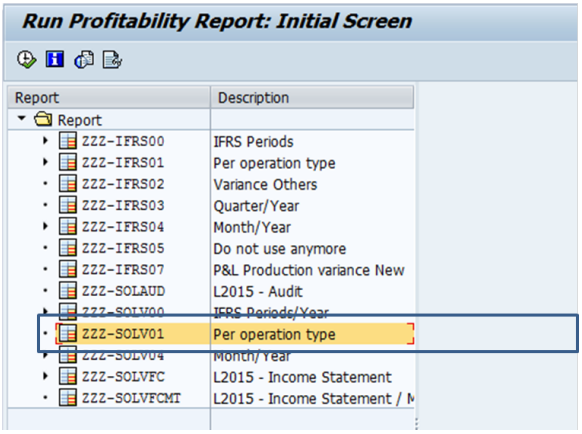
STEP 6

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



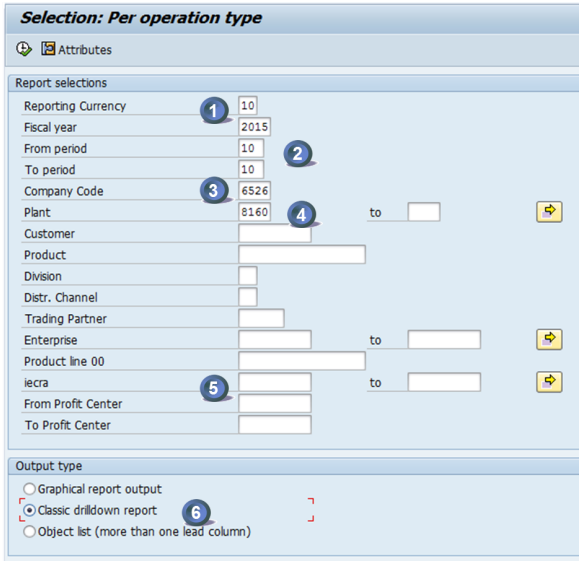
STEP 1

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



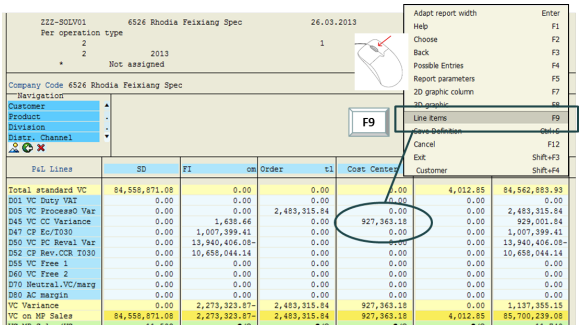
Enter

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"



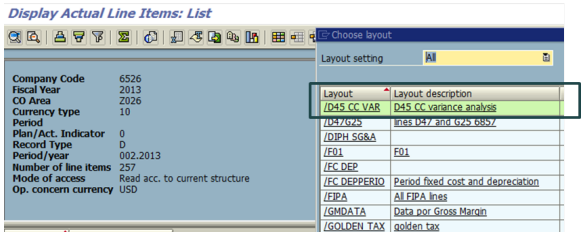
STEP 2

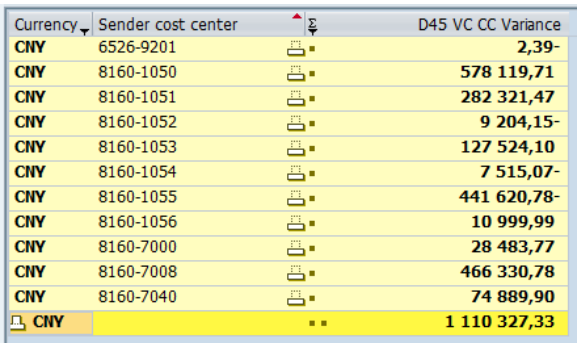
To have the detail of the value field D45 VC CC Variance => click on the amount, right click and select "Line items" or click F9



STEP 3

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





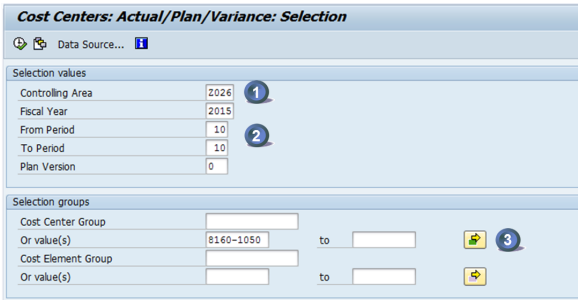
Currency	Sender cost center	D45 VC CC Variance
CNY	6526-9201	2,39-
CNY	8160-1050	578 119,71
CNY	8160-1051	282 321,47
CNY	8160-1052	9 204,15-
CNY	8160-1053	127 524,10
CNY	8160-1054	7 515,07-
CNY	8160-1055	441 620,78-
CNY	8160-1056	10 999,99
CNY	8160-7000	28 483,77
CNY	8160-7008	466 330,78
CNY	8160-7040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

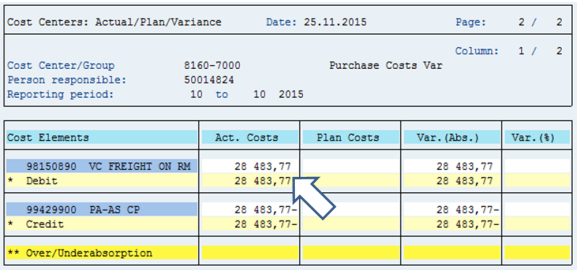
Enter :

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

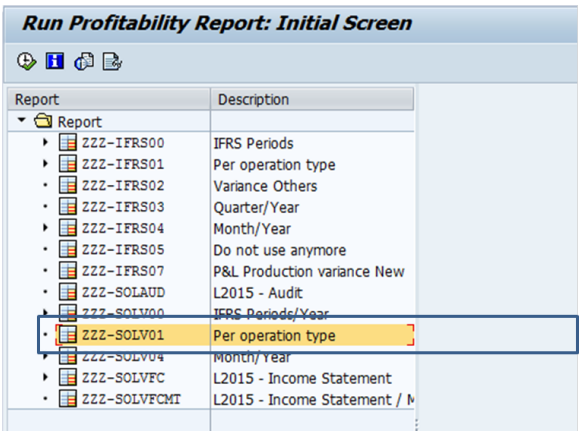


STEP 6

Fill you the variance template with your analysis

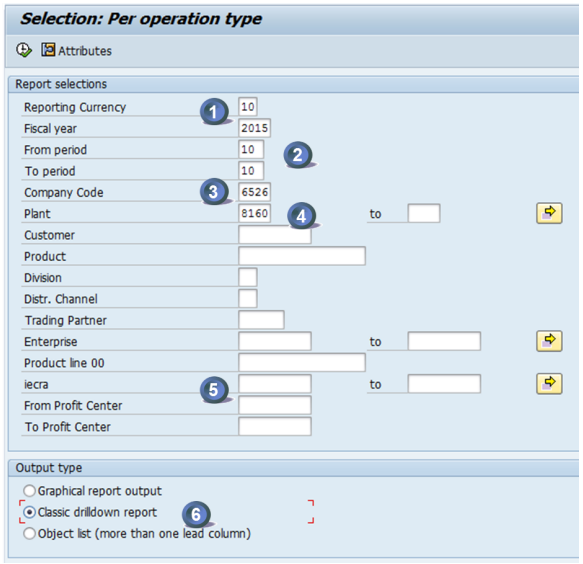
STEP 1

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



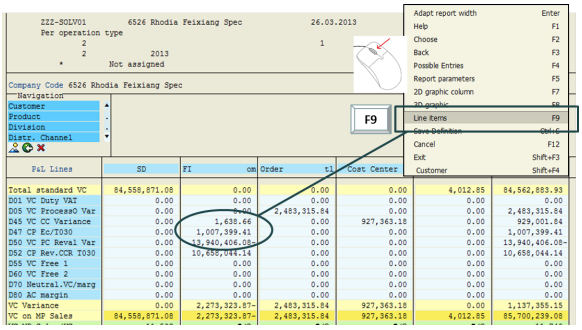
Enter

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"



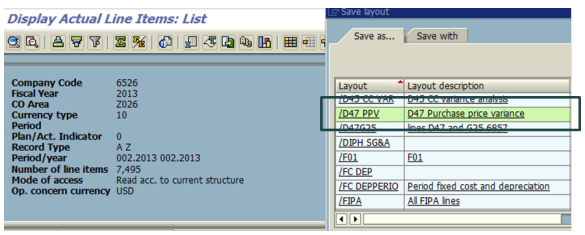
STEP 2

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

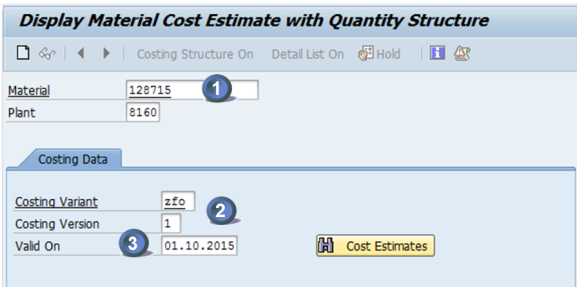
STEP 4

Explain the main variances

Display the standard costing of the material with CK13N.

Enter :

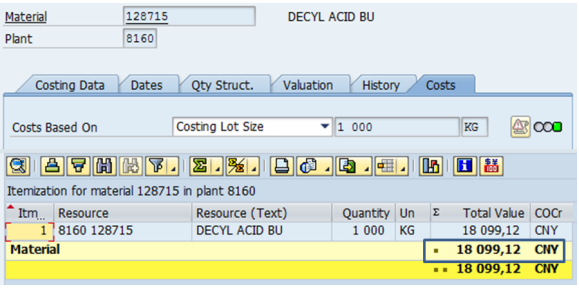
1. The material & plant code
2. The costing variant
3. The validity date



and 

The standard cost of the material code 128715 is

18 099,12 CNY / 1 000 kg

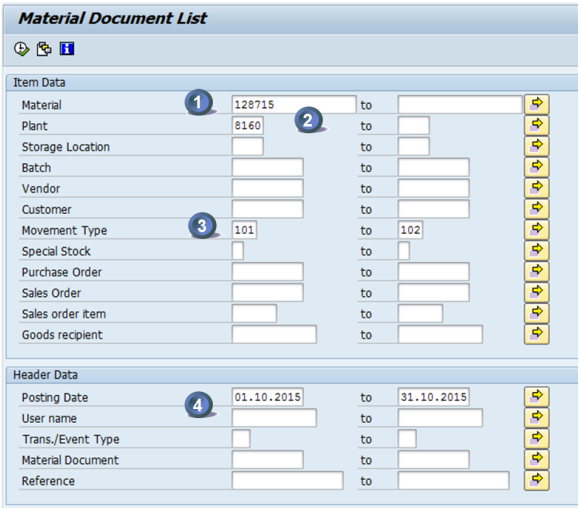


STEP 5

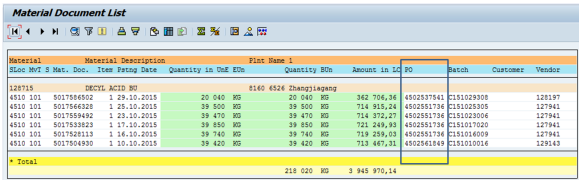
Display the actual purchase price of the same material with the transaction MB51.

Enter:

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

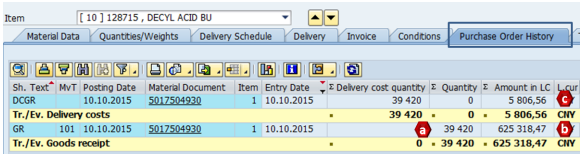


The list of purchase orders to be analysed is displayed



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)

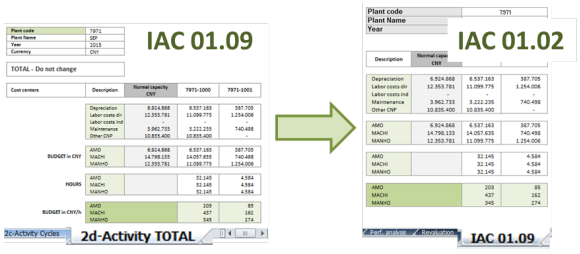
There is a revaluation of fixed costs when:

- 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.

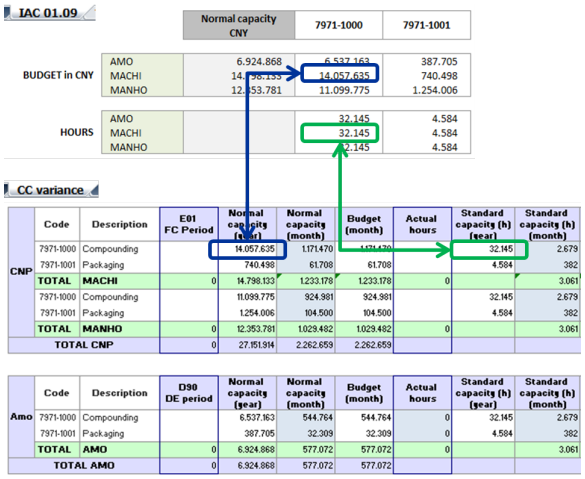
- Copy the result of the sheet "2d-Activity TOTAL" and paste the result in the tab "IAC 01.09"



STEP 2

Update the sheet "CC variance" and enter:

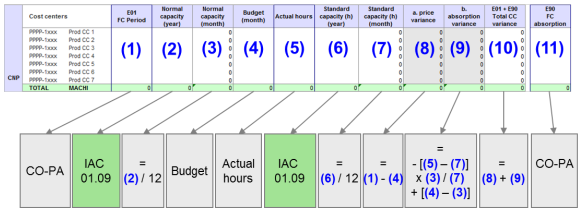
- the list of production cost centers
- the column "normal capacity (year)"
- the column "Budget (month)" - usually it is equal to the column "Normal capacity (month)"
- the column "standard capacity (h) (year)"



STEP 3

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

The price variance & the absorption variance will be automatically calculated

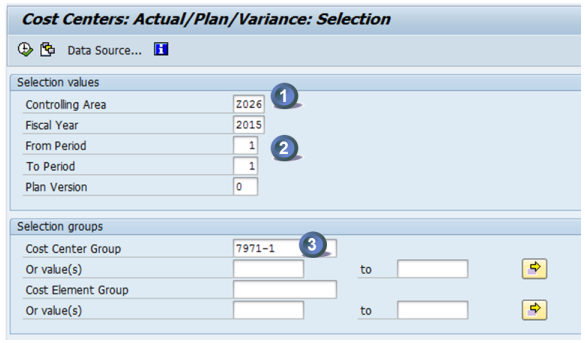


STEP 4

For the monthly update use the transaction S_ALR_87013611

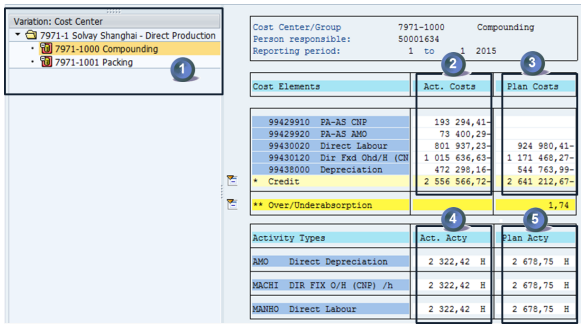
Enter

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



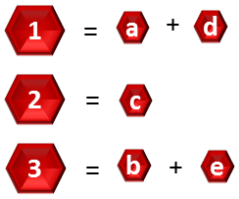
STEP 5

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)



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 (C	d	1 015 636,63-
99438000 Depreciation	e	472 298,16-
* Credit		2 556 566,72-
** Over/Underabsorption		

	Code	Description	E01 FC Period
CNP	7971-1000	Compounding (1)	1.208.931
	7971-1001	Packaging	
	TOTAL	MACHI	1.208.931
	7971-1000	Compounding (2)	801.937
	7971-1001	Packaging	
	TOTAL	MANHO	801.937
TOTAL CNP			2.010.868

	Code	Description	D90 DE period
Amo	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
CNP	7971-1000	Compounding (b)	2.322
	7971-1001	Packaging	
	TOTAL	MACHI	2.322
	7971-1000	Compounding (c)	2.322
	7971-1001	Packaging	
	TOTAL	MANHO	2.322
TOTAL CNP			

	Code	Description	Actual hours
Amo	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	-146.798	2.948	-143.850
	TOTAL	MACHI	-109.337	158.782	49.445
	7971-1000	Compounding	-123.044	123.045	1
	7971-1001	Packaging	-5.992	4.992	-1
	TOTAL	MANHO	-129.036	129.037	2
TOTAL CNP			-237.373	286.819	49.446

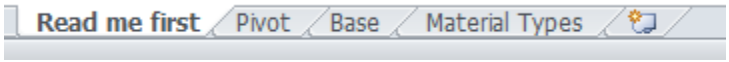
	Code	Description	a. price variance	b. absorption variance	D90 + F90 Total CC variance
Amo	7971-1000	Compounding	935	72.467	73.402
	7971-1001	Packaging	3.337	1.544	4.881
	TOTAL	AMO	4.272	74.010	78.282
TOTAL AMO			4.272	74.010	78.282

January

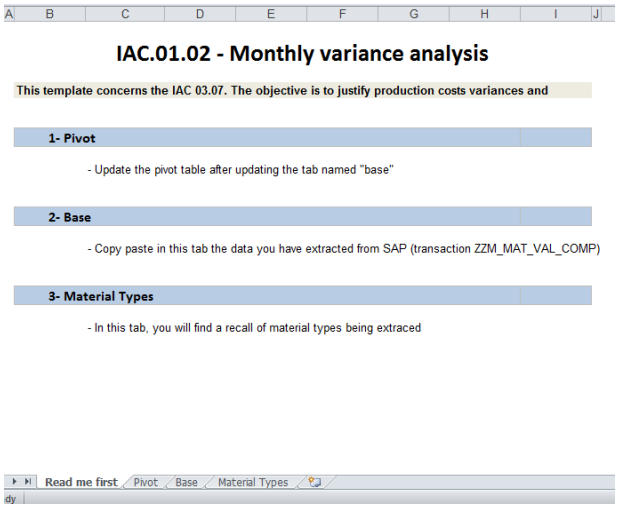
CNP	E00 FC Fixed Costs	2.025.287
	4.CC variance (E01-E90)	49.446
	a. price variance	-237.373
	b. absorption variance	286.819
	FC on production	2.074.733
AMO	F00 DEP Depreciation	581.344
	4.CC variance (D90-F90)	78.282
	a. price variance	4.272
	b. absorption variance	74.010
	DEP on production	659.627

Download the file IAC 01.02 template PF2.xlsx

There are 4 sheets in the file :



Overview of the 1st sheet: Read me first



A B C D E F G H I J

IAC.01.02 - Monthly variance analysis

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

1- Pivot

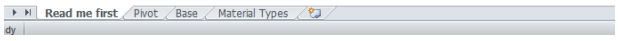
- Update the pivot table after updating the tab named "base"

2- Base

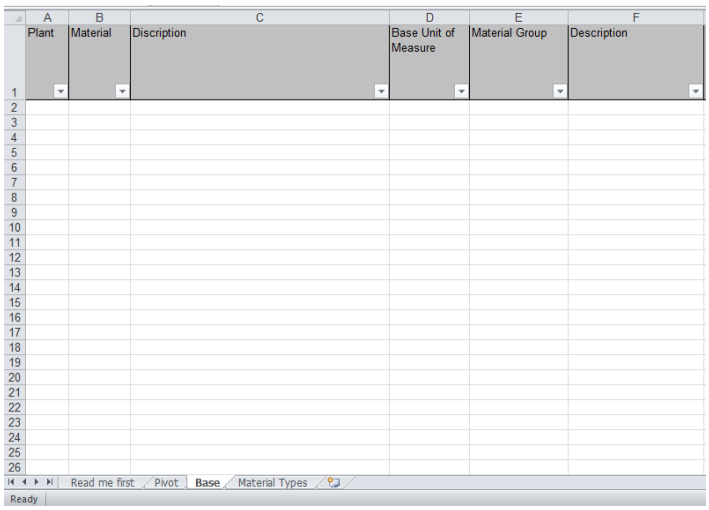
- Copy paste in this tab the data you have extracted from SAP (transaction ZZM_MAT_VAL_COMP)

3- Material Types

- In this tab, you will find a recall of material types being extraced



Overview of the 2nd sheet: Base

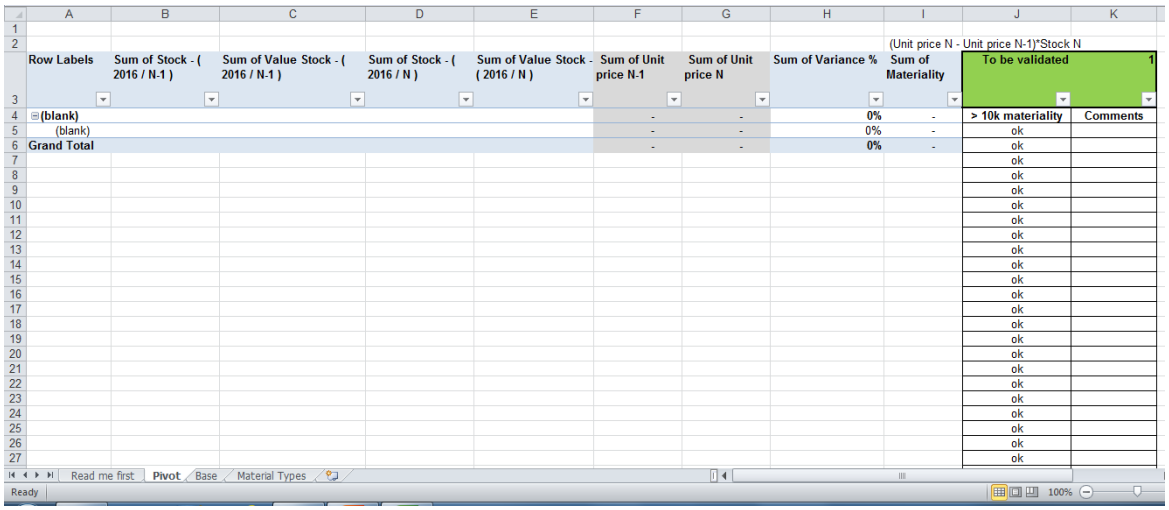


Plant	Material	Discription	Base Unit of Measure	Material Group	Description

Read me first | Pivot | Base | Material Types

Ready

Overview of the 3rd sheet: Pivot



(Unit price N - Unit price N-1)*Stock N

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	To be validated	1
									> 10k materiality	Comments
(blank)					-	-	0%	-		
(blank)					-	-	0%	-	ok	
Grand Total					-	-	0%	-	ok	

Read me first | Pivot | Base | Material Types

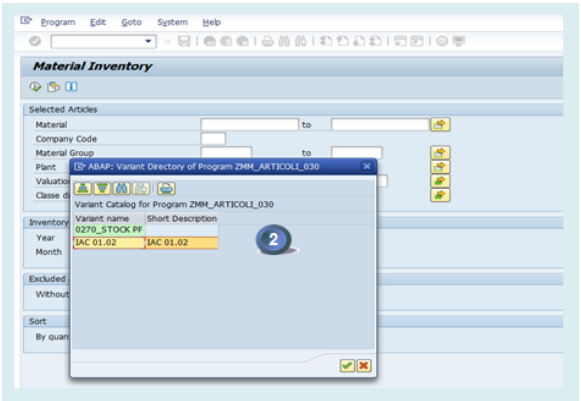
Ready

100%

STEP 1

Start the transaction **ZZM_MAT_VAL_COMP** and select the layout

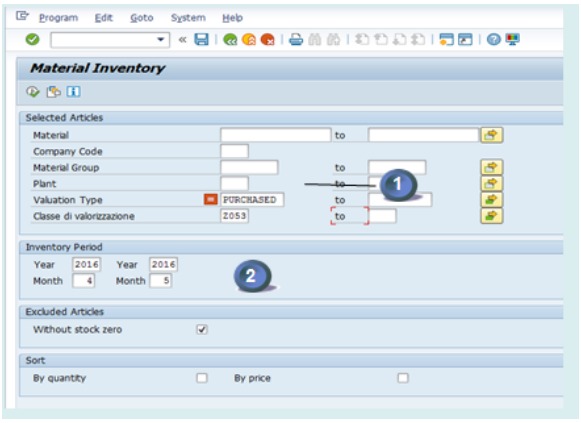
1. Select layout by clicking on 
2. Click on **IAC 01.02**



STEP 2

1. Enter a plant or a list of plants

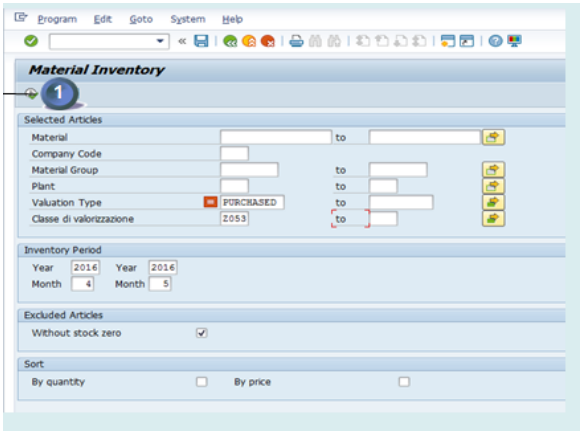
2. Enter the periods (N-1 and N)



STEP 3

Execute 

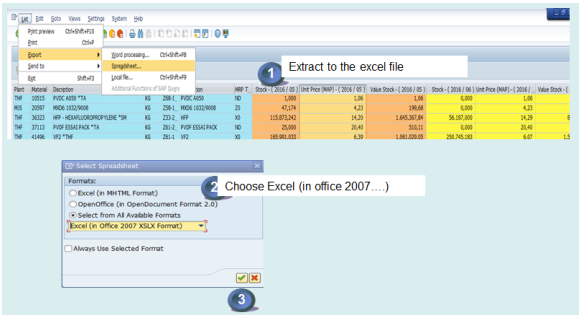
> It may result in a long run time.



STEP 4

Download the file to excel

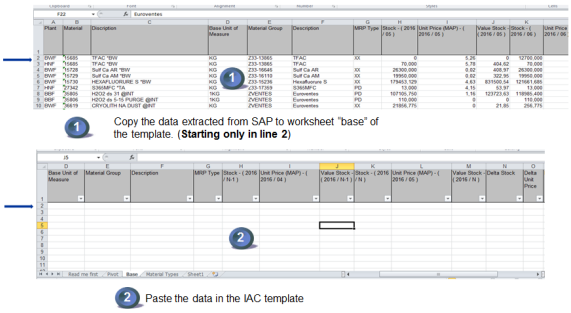
1. Extract the file through "export -> Spreadsheet"
2. Choose Excel (in office 2007...)
3. Execute 



STEP 5

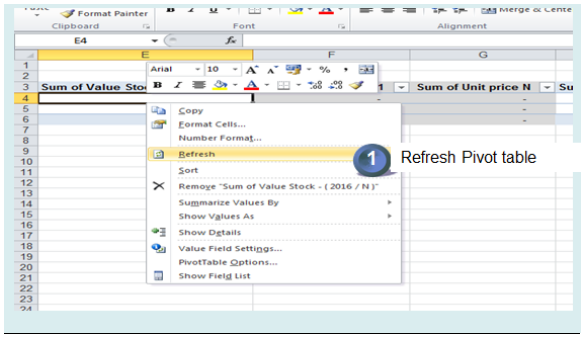
Update the template with the data retrieved in **STEP 4**

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"**