

Case Study 4: Run Manufacturing Extension with ERPsim**Table 1: Tasks for running manufacturing company (Extension)**

Simulation Role	Function	Transaction Code
CEO (Team Leader)	Watch financial statement	F.01 (page 2)
	Create GL Post for investment	FB50 (page 3)
	Check price market report	ZMarket (page 5)
	Check summary sales report	ZVC2 (page 6)
Sales & Marketing Manager	Maintain selling prices for finished goods	VK32 (page 7)
	Make marketing expense planning	ZADS (page 7)
	Check sales order report	ZVA05 (page 6)
	Check summary sales report	ZVC2 (page 6)
	Check price market report	ZMarket (page 5)
Production Planning Manager	Create planned indep. requirements	MD61 (page 9)
	Run MRP	MD01 (page 10)
	Collective convert planned orders to production orders	CO41(page 11)
	Modify BOM	ZCS02 (page 12)
	Check production schedule	ZCOOIS (page 13)
	Check finished product cost planning	ZCK11 (page 13)
	Check RM cost per production order	ZKSB1 (page 14)
MM Manager	Automatic generate POs from purchase requisitions	ME59N(page 14)
	Track purchase order	ZME2N (page 15)
	Check MRP results	MD07 (page 16)
	Check individual stock level	MD04 (page 17)
	Check inventory report	ZMB52 (page 17)

Before starting ERPsim simulator, each team may complete the following activities:

1. Invest \$5,000 to reduce production setup time (Must) - FB50
2. Invest to increase production capacity (Optional) – FB50
3. Modify your products to 0.5 KG from 1.0 KG (Optional) – ZCS02
4. Change product price (Must) – VK32
5. Make market expense (Must) – ZADS
6. Create planned indep. Requirement (Must) – MD61
7. Run MRP (Must) – MD01
8. Generate purchase orders from purchase requisitions (Must) – ME59N

1. Check Financial Statement

(Transaction Code F.01)

- Enter your company code: \$\$
- Select ZSIM for “Financial Statement Version”
- Select ALV Tree Control



(ENTER)

Financial Statements			
G/L account selection			
Chart of accounts		to	
G/L account		to	
Company code	xx	to	
Selection using search help			
Search help ID			
Search string			
Search help			
Transaction Figures Selection			
Business area		to	
Currency type			
Ledger			
Further selections Special evaluations Output control			
Financial statement version	SIM1	Language	EN
Reporting year	2010		
Reporting periods	1	to	16
Comparison year	2009		
Comparison periods	1	to	16
Plan version (ledger 00 only)			
List output			
☐ Classical list			
☐ ALV grid control			
☒ ALV Tree Control			



(EXECUTE)

Financial Statements			
Financial Statements - ERPsim			
OL Ledger 10 Currency type Company code currency EUR Amounts in European Euro 2014.01 -2014.16 Reporting periods 2013.01 -2013.16 Comparison periods			
F.S. item/account	Tot.rpt.pr	tot.cmp.pr	Abs. diff.
Balance Sheet	0.00	0.00	0.00
Assets	20,000,000.00	0.00	20,000,000.00
Current assets	3,000,000.00	0.00	3,000,000.00
113300 Bank Cash Account	3,000,000.00	0.00	3,000,000.00
XX Company X	3,000,000.00	0.00	3,000,000.00
Long-term assets	17,000,000.00	0.00	17,000,000.00
001000 Land	2,000,000.00	0.00	2,000,000.00
XX Company X	2,000,000.00	0.00	2,000,000.00
002000 Buildings	10,000,000.00	0.00	10,000,000.00
011000 Machinery and equipment	5,000,000.00	0.00	5,000,000.00
Liabilities and Owners' Equity	20,000,000.00-	0.00	20,000,000.00-
Liabilities	12,000,000.00-	0.00	12,000,000.00-
Current liabilities	12,000,000.00-	0.00	12,000,000.00-
113101 Bank Loan	12,000,000.00-	0.00	12,000,000.00-
Equity	8,000,000.00-	0.00	8,000,000.00-
Shareholders Equity	8,000,000.00-	0.00	8,000,000.00-
070000 Common stock	8,000,000.00-	0.00	8,000,000.00-
Retained Earnings	0.00	0.00	0.00
Net Loss	0.00	0.00	0.00
Calculated profit	0.00	0.00	0.00

2. Create GL Post for Investment

(Transaction Code FB50)

1.) Investment for reducing set-up time

Enter today's date

Enter Doc. Header Text: Lean manufacturing

On the first line: G/L account 113300 (Weizen bank)

D/C: Credit

Amount in doc. currency: your investment amount

On the second line: G/L account 478000 (Lean manufacturing expenses)

D/C: Debit

Amount in doc. currency: your investment amount

Cost center: SS

Enter G/L Account Document: Company Code YY

Tree on Company Code Hold Simulate Park Editing options

Basic data Details

Document Date 2011-12-09 Currency EUR
 Posting Date 2011-12-09
 Reference
 Doc. Header Text Investment for set-up
 Cross-CC no.
 Company Code YY Company Y

Amount Information
 Total deb. 50,000.00 EUR
 Total cred. 50,000.00 EUR

2 items (No entry variant selected)

St	G/L acct	Short Text	D/C	Amount in doc. curr.	Text	Lo	Co	Tradin	Bus	Part	Cost center	Order	Fi	Se
✓	113300	Bank Cash	Credit	50,000.00		✓	YY	Trading partner						
✓	478000	Lean mfg exp	Debit	50,000.00		✓	YY		0001	YY				



(ENTER)

Click on the icon "Simulate"

Document overview Edit Goto Settings System Help

Document Overview

Reset Taxes Park Complete Choose Save

Doc. Type: SA (G/L Account Document) Normal document
 Doc. Number Company Code YY Fiscal Year 2011
 Doc. Date 2011-12-09 Posting Date 2011-12-09 Period 12
 Calculate Tax
 Doc. Currency EUR
 Doc. Hdr Text Investment for set-up

Ita	PK	Account	Account short text	Assignment	Tx	Amount
1	50	113300	Bank Cash			50,000.00
2	40	478000	Lean mfg expenses			50,000.00



(SAVE)

2.) Investment for improvement of production capacity

Enter today's date

Enter Doc. Header Text: Assembly line

On the first line: G/L account 113300 (Weizen bank)

D/C: Credit

Amount in doc. currency: your investment amount

On the second line: G/L account 11000 (Machinery and equipment)

D/C: Debit

Amount in doc. currency: your investment amount

Document Edit Goto Extras Settings Environment System Help

Enter G/L Account Document: Company Code YY

Tree on Company Code Hold Simulate Park Editing options

Basic data Details

Document Date 2011-12-09 Currency EUR
 Posting Date 2011-12-09
 Reference
 Doc. Header Text Assembly Line
 Cross-CC no.
 Company Code YY Company Y

Amount Information
 Total deb.
 10,000.00 EUR
 Total cred.
 10,000.00 EUR
 COO

2 items (No entry variant selected)

St	G/L acct	Short Text	D/C	Amount in doc.curr.	Loc.curr.amount	T	Tax jurisdicn code	W/Assignment no.
✓	113300	Bank Cash	Credit	10,000.00	10,000.00			
✓	11800	Machinery and equip.	Debit	10,000.00	10,000.00			
					0.00			



(ENTER)

Click on the icon "Simulate"

Document overview Edit Goto Settings System Help

Document Overview

Reset Taxes Park Complete Choose Save

Doc. Type : SA (G/L Account Document) Normal document
 Doc. Number Company Code YY Fiscal Year 2011
 Doc. Date 2011-12-09 Posting Date 2011-12-09 Period 12
 Calculate Tax
 Doc. Currency EUR
 Doc. Hdr Text Assembly Line

Ita	PK	Account	Account short text	Assignment	Tx	Amount
1	50	113300	Bank Cash			10,000.00-
2	40	11800	Machinery and equip.			10,000.00



(SAVE)

3. Check Price Market Report (for all company codes) (Transaction Code ZMarket)

SAP

ERPsim: Price Market Report as of Qtr 0 Day 00

Quarter	D	Product	Minimum	Average	Maximum
4	10	Strawberry Muesli 1.0 kg.	5,02	5,02	5,02
		Raisin Muesli 1.0 kg.	3,70	3,70	3,70
		Blueberry Muesli 1.0 kg.	4,80	4,80	4,80
		Mixed Fruit Muesli 1.0 kg.	4,52	4,52	4,52
		Nut Muesli 1.0 kg.	3,90	3,94	4,00
		Original Muesli 1.0 kg.	3,60	3,60	3,60
	12	Mixed Fruit Muesli 1.0 kg.	4,90	4,90	4,90
		Original Muesli 1.0 kg.	4,00	4,00	4,00
		Strawberry Muesli 1.0 kg.	5,10	5,10	5,10
		Blueberry Muesli 1.0 kg.	4,80	4,80	4,80
		Nut Muesli 1.0 kg.	3,95	3,96	4,00
		Raisin Muesli 1.0 kg.	4,00	4,00	4,00
3	10	Original Muesli 1.0 kg.	3,60	3,60	3,60
		Raisin Muesli 1.0 kg.	3,70	3,70	3,70
		Nut Muesli 1.0 kg.	4,00	4,00	4,00
		Strawberry Muesli 1.0 kg.	5,02	5,02	5,02
		Blueberry Muesli 1.0 kg.	4,80	4,80	4,80
		Mixed Fruit Muesli 1.0 kg.	4,52	4,52	4,52
	12	Raisin Muesli 1.0 kg.	4,00	4,00	4,00
		Mixed Fruit Muesli 1.0 kg.	4,90	4,90	4,90

4. Check Summary Sales Report (for your company code)

(Transaction Code ZVC2)

SAP



ERPsim: Summary Sales Report as of Quarter 0 Day 00

Qtr	Day	Material Description	Orders	Qty	Value
2	16	Original Muesli 1.0 kg.	4	3.738	15.008,06
		Strawberry Muesli 1.0 kg.	1	1.231	6.376,58
		Nut Muesli 1.0 kg.	3	2.897	12.646,78
		Mixed Fruit Muesli 1.0 kg.	2	1.916	9.262,25
		Raisin Muesli 1.0 kg.	1	724	3.019,08
	15	Blueberry Muesli 1.0 kg.	2	1.871	9.834,53
		Raisin Muesli 1.0 kg.	1	758	3.160,86
		Original Muesli 1.0 kg.	2	3.060	11.842,20
		Nut Muesli 1.0 kg.	1	736	3.304,64
		Mixed Fruit Muesli 1.0 kg.	2	2.044	9.890,00
	14	Strawberry Muesli 1.0 kg.	1	671	3.643,53
		Nut Muesli 1.0 kg.	4	4.928	21.070,72
		Mixed Fruit Muesli 1.0 kg.	4	3.141	15.399,00
		Raisin Muesli 1.0 kg.	2	1.481	6.175,77
	13	Original Muesli 1.0 kg.	1	712	2.933,44
		Strawberry Muesli 1.0 kg.	3	3.082	16.132,76
		Blueberry Muesli 1.0 kg.	1	1.014	5.252,52
		Mixed Fruit Muesli 1.0 kg.	1	680	3.400,00
		Nut Muesli 1.0 kg.	1	617	2.770,33
12		Raisin Muesli 1.0 kg.	2	2.193	8.772,06
		Nut Muesli 1.0 kg.	2	2.352	10.154,48
		Original Muesli 1.0 kg.	2	2.265	8.934,05
		Blueberry Muesli 1.0 kg.	1	581	3.154,83
		Mixed Fruit Muesli 1.0 kg.	1	1.360	6.460,00
		Strawberry Muesli 1.0 kg.	4	3.067	16.350,06

5. Check Sales Order Report (for your company code)

(Transaction Code ZVA05)

SAP



ERPsim: Sales Order Report as of Qtr 0 Day 00

Qtr	Day	DChl	Area	Material Description	Sold-to party	Price	Qty	Value	AVR Qtr	AVR Day
4	55	10	NORTH	Mixed Fruit Muesli 1.0 kg.	80108	4,52	1.469	6.639,88	5	30
			SOUTH	Mixed Fruit Muesli 1.0 kg.	80104	4,52	1.401	6.332,52	5	30
				Original Muesli 1.0 kg.	80103	3,60	1.967	7.081,20	5	30
		12	WEST	Strawberry Muesli 1.0 kg.	80110	5,02	1.289	6.470,78	5	30
			NORTH	Blueberry Muesli 1.0 kg.	80144	4,90	700	3.430,00	5	16
				Original Muesli 1.0 kg.	80166	4,00	787	3.148,00	5	19
		54	WEST	Strawberry Muesli 1.0 kg.	80147	5,10	562	2.866,20	5	19
			SOUTH	Original Muesli 1.0 kg.	80121	4,00	764	3.056,00	5	17
			WEST	Original Muesli 1.0 kg.	80148	4,00	929	3.716,00	5	19
		12	NORTH	Original Muesli 1.0 kg.	80108	3,60	1.976	7.113,60	5	29
			SOUTH	Original Muesli 1.0 kg.	80106	3,60	1.904	6.854,40	5	29
				Nut Muesli 1.0 kg.	80103	3,90	1.389	5.417,10	5	29
	53	10		Original Muesli 1.0 kg.	80106	3,60	1.833	6.598,80	5	29
			NORTH	Strawberry Muesli 1.0 kg.	80133	5,10	559	2.850,90	5	17
				Raisin Muesli 1.0 kg.	80144	4,00	849	3.396,00	5	16
			SOUTH	Mixed Fruit Muesli 1.0 kg.	80113	4,90	672	3.292,80	5	18
				Original Muesli 1.0 kg.	80112	4,00	899	3.596,00	5	16
		12	WEST	Strawberry Muesli 1.0 kg.	80158	5,10	582	2.968,20	5	18
				Nut Muesli 1.0 kg.	80164	3,95	807	3.187,65	5	16
				Nut Muesli 1.0 kg.	80150	3,95	846	3.341,70	5	16
				Original Muesli 1.0 kg.	80160	4,00	908	3.632,00	5	19
		10	NORTH	Raisin Muesli 1.0 kg.	80105	3,70	1.867	6.907,90	5	28
			SOUTH	Original Muesli 1.0 kg.	80103	3,60	1.887	6.793,20	5	28
				Original Muesli 1.0 kg.	80109	3,60	1.916	6.897,60	5	28
			WEST	Blueberry Muesli 1.0 kg.	80109	4,80	1.485	7.128,00	5	28

6. Make Marketing Expense Planning

(Transaction Code: ZADS)

- Enter your amount in your selected areas (total three) and products (total six)
- (ENTER)

Material	Description	North	South	West
YY-F01	1 Kg Nut Muesli	5		
YY-F02	1 Kg Blueberry Muesli		6	
YY-F03	1 Kg Strawberry Muesli			10
YY-F04	1 Kg Raisin Muesli			
YY-F05	1 Kg Original Muesli	15		
YY-F06	1 Kg Mixed Fruit Muesli			

Clear Daily Total: 80



(ENTER)



(SAVE)

7. Change Selling Prices for Finished Products

(Transaction Code VK32)

- Select Price -> Price List and click on it

Change Condition Records

Prices:

- Material Price
- Price List
- Individual Pric
- Discounts/Surcharge
- Freight
- Taxes
- Conditions

- Enter your company code: \$\$
- Enter distribution channel: 10 – 14 (14 is for 0.5 KG products if you created)
- Condition Type: PR00
- Document Currency: EUR



(ENTER)



Click (EXECUTE)

Program Edit Goto System Help

Price List with Release Status

Sales Organization XX to

Distribution Channel 10 to 14

Price List to

Condition Type PR00 to

Document Currency EUR to

Material to

Release status to

Valid On 2014-10-31

Max. hits per table 500

Change your prices for your products.

Change Condition Records: Overview

Sales Organization XX Sales Org. X
Price List 01 Wholesale

All Fields

S.	Variable key	Amount	Unit	per	UoM	CCon...	Num...	B...	P...	Valid F
	CaTy DChl Curr. Material ReSt									
	PR00 10 EUR XX-F01 1kg ..	5.24	EUR		1ST					2009-
	PR00 10 EUR XX-F02 500g..	6.18	EUR		1ST					2009-
	PR00 10 EUR XX-F03 500g..	6.18	EUR		1ST					2009-
	PR00 10 EUR XX-F04 1kg ..	4.92	EUR		1ST					2009-
	PR00 10 EUR XX-F05 500g..	4.87	EUR		1ST					2009-
	PR00 10 EUR XX-F06 1kg ..	5.75	EUR		1ST					2009-
	PR00 12 EUR XX-F01 1kg ..	5.49	EUR		1ST					2009-
	PR00 12 EUR XX-F02 500g..	6.43	EUR		1ST					2009-
	PR00 12 EUR XX-F03 500g..	6.43	EUR		1ST					2009-
	PR00 12 EUR XX-F04 1kg ..	5.17	EUR		1ST					2009-
	PR00 12 EUR XX-F05 500g..	5.12	EUR		1ST					2009-
	PR00 12 EUR XX-F06 1kg ..	6.00	EUR		1ST					2009-
	PR00 14 EUR XX-F01 1kg ..	5.74	EUR		1ST					2009-
	PR00 14 EUR XX-F02 500g..	6.68	EUR		1ST					2009-
	PR00 14 EUR XX-F03 500g..	6.68	EUR		1ST					2009-
	PR00 14 EUR XX-F04 1kg ..	5.42	EUR		1ST					2009-
	PR00 14 EUR XX-F05 500g..	5.37	EUR		1ST					2009-
	PR00 14 EUR XX-F06 1kg ..	6.25	EUR		1ST					2009-



(ENTER)



(SAVE)

8. Create Planned Independent Requirement

(Transaction Code: MD61)

Enter the following information:

- Product group: \$\$-F
- Plant: \$\$
- Version: 00
- Planned Period: M (month)

Create Planned Independent Requirements: Initial Screen

User Parameters

Planned independent requirements for

☐ Material

☒ Product group

☐ Reqmts Plan

Plant

Define version

Version REQUIREMENTS PLAN

Planning horizon

From 2013-10-29 To 2014-12-03 Planning period Month



(ENTER), Enter your plan for your products in next month.

Plnd Ind. Reqmts Create: Planning Table

Product group YY Product Group Y

Planning start 2011-12-01 Planning End 2013-01-11

Table Items Sched. lines

Material	Plant	V	A	BU	M 12-2011	M 01-2012	M 02-2012	M 03-2012	M
YY-F01	YY	00	☒	ST		100,000			
YY-F02	YY	00	☒	ST		100,000			
YY-F03	YY	00	☒	ST		100,000			
YY-F04	YY	00	☒	ST		100,000			
YY-F05	YY	00	☒	ST		100,000			
YY-F06	YY	00	☒	ST		100,000			



(ENTER)



(SAVE)

9. Run MRP

**Allow the system to plan the availability and requirements for your products.
(Transaction Code MD01)**

Enter the following information:

- Enter plant: \$\$
- Processing key: NEUPL
- Create pur. req.: 1
- Deliv. schedule: 3
- Create MRP list: 1
- Planning mode: 3
- Scheduling: 1

Check “Display material list”.

MRP Run

Scope of planning
Plant: YY

MRP control parameters		
Processing key	NEUPL	Regenerative Planning
Create purchase req.	1	Purchase requisitions
Schedule lines	3	Schedule lines
Create MRP list	1	MRP list
Planning mode	3	Delete and recreate planning data
Scheduling	1	Determination of Basic Dates for Planned
Planning date	2011-12-08	

Process control parameters
☐ Parallel processing
☒ Display material list

User exit: select materials for planning
 User exit key:
 User exit parameter:



(ENTER)

- A warning message appears - please check input parameters



(ENTER) again to confirm and bypass the warning message

- Review results



(EXIT)

10. Collective Convert Planned Orders to Production Orders (Transaction Code CO41)

- Enter planning plant: \$\$
- Enter MRP controller: 101

Planned order list Edit Goto Environment System Help

Collective Conversion of Planned Orders: Initial Screen

Planning plant: YY Factory Y

MRP Area: Muesli Controller

MRP Controller: 101

Production Plant:

Prodn Supervisor:

Material:

Sales Order:

WBS element:

BOM explosion number:

Opening Date:

Select According to Status:

☐ Firmed Planned Orders

☐ Plan Orders with Plan. Capacity

Select According to Availability:

☐ Fully Confirmed

☐ Not Confirmed

☐ Partly Confirmed

☐ Not Checked

Order Type: PP01 Standard production order

Click  (EXECUTE)

Planned order list Edit Goto Environment System Help

Collective Conversion of Planned Orders: List

Planned Orders

Opening	Capacity	Start	End	Material	Description	Order Quantity	Ba	Type	Planned order	Order	Pro	Pr
2012-01-01		2012-01-01	2012-01-01	YY-F01	1 Kg Nut Muesli	50,000	ST	PP01	1933		YY	
2012-01-01		2012-01-01	2012-01-01	YY-F01	1 Kg Nut Muesli	50,000	ST	PP01	1934		YY	
2012-01-01		2012-01-01	2012-01-01	YY-F02	1 Kg Blueberry Muesli	50,000	ST	PP01	1935		YY	
2012-01-01		2012-01-01	2012-01-01	YY-F02	1 Kg Blueberry Muesli	24,842	ST	PP01	1936		YY	
2012-01-01		2012-01-01	2012-01-01	YY-F03	1 Kg Strawberry Muesli	27,444	ST	PP01	1937		YY	
2012-01-01		2012-01-01	2012-01-01	YY-F04	1 Kg Raisin Muesli	50,000	ST	PP01	1938		YY	
2012-01-01		2012-01-01	2012-01-01	YY-F04	1 Kg Raisin Muesli	23,566	ST	PP01	1939		YY	
2012-01-01		2012-01-01	2012-01-01	YY-F05	1 Kg Original Muesli	50,000	ST	PP01	1940		YY	
2012-01-01		2012-01-01	2012-01-01	YY-F05	1 Kg Original Muesli	27,233	ST	PP01	1941		YY	
2012-01-01		2012-01-01	2012-01-01	YY-F06	1 Kg Mixed Fruit Muesli	50,000	ST	PP01	1942		YY	
2012-01-01		2012-01-01	2012-01-01	YY-F06	1 Kg Mixed Fruit Muesli	14,898	ST	PP01	1943		YY	

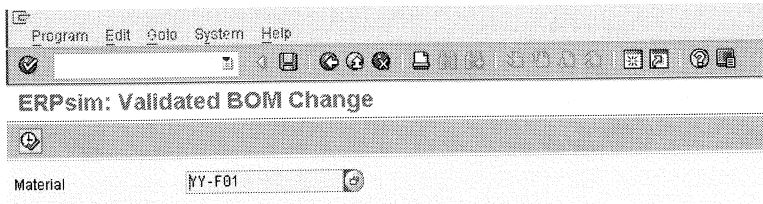
Convert Fields ST/Reqmts MRP

Click on the icon "Convert" to execute.

11. Modify Bill of Materials (BOM)

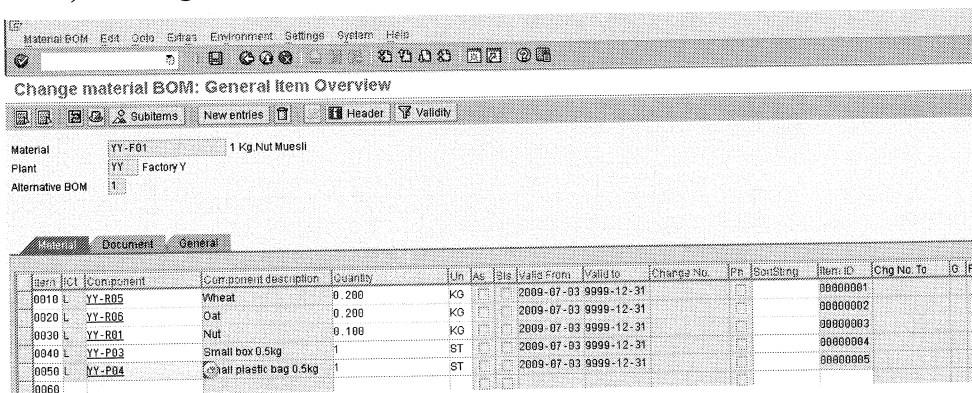
(Transaction Code: ZCS02)

Enter finished product



Click  (EXECUTE)

- 1) Change component's required weight. For example for \$\$-F01, change \$\$-R05 to 0.2 kg from 0.4 kg, \$\$-R06 to 0.2 kg from 0.4 kg, change \$\$-R01 to 0.1 kg from 02 kg.
- 2) Change the box \$\$-P01 to \$\$-P03, and change the plastic bag \$\$-P02 to \$\$-P04.



 (ENTER)

 (SAVE)

Note: You can't change BOM of a product if you still have stock of the product.

12. Check Production Schedule

(Transaction Code ZCOOIS)

Production Schedule Report

Production Schedule Report: Quarter 4 Day 01

Order	Material Description	Start	Finish	Setup	Released	Target	Confirmed	Unit Cost
1000711	1 Kg Original Muesli	3/18	3/19		307	37,421	37,421	1.35
1000710	1 Kg Blueberry Muesli	3/17	3/18			20,322	20,322	1.98
1000709	1 Kg Mixed Fruit Muesli	3/16	3/17		306	37,759	37,759	1.76
1000708	1 Kg Raisin Muesli	3/14	3/16			50,000	50,000	1.38
1000707	1 Kg Raisin Muesli	3/12	3/14			50,000	50,000	1.38
1000706	1 Kg Mixed Fruit Muesli	3/10	3/12			50,000	50,000	1.76
1000705	1 Kg Nut Muesli	3/08	3/10			50,000	50,000	1.53
1000704	1 Kg Nut Muesli	3/06	3/08			50,000	50,000	1.53
1000703	1 Kg Blueberry Muesli	2/23	2/25		2/11	50,000	50,000	1.98
1000702	1 Kg Blueberry Muesli	2/21	2/23			50,000	50,000	1.98
1000701	1 Kg Original Muesli	2/19	2/21		2/08	50,000	50,000	1.36
1000700	1 Kg Original Muesli	2/17	2/19			50,000	50,000	1.36
1000699	1 Kg Raisin Muesli	2/15	2/17		2/06	50,000	50,000	1.38
1000698	1 Kg Raisin Muesli	2/13	2/15			50,000	50,000	1.38
1000697	1 Kg Mixed Fruit Muesli	2/11	2/13		2/01	50,000	50,000	1.76
1000696	1 Kg Strawberry Muesli	2/09	2/11			50,000	50,000	1.97
1000694	1 Kg Mixed Fruit Muesli	2/07	2/09			50,000	50,000	1.76
1000695	1 Kg Nut Muesli	2/05	2/07			50,000	50,000	1.53
1000693	1 Kg Strawberry Muesli	2/03	2/05			50,000	50,000	1.97
1000692	1 Kg Nut Muesli	2/01	2/03			50,000	50,000	1.53
1000690	1 Kg Original Muesli	1/01	1/01		1/01	100,000	100,000	1.36
1000688	1 Kg Nut Muesli	1/01	1/01			100,000	100,000	1.53
1000687	1 Kg Blueberry Muesli	1/01	1/01			100,000	100,000	1.98
1000686	1 Kg Raisin Muesli	1/01	1/01			100,000	100,000	1.38
1000691	1 Kg Mixed Fruit Muesli	1/01	1/01			100,000	100,000	1.76

13. Check Finished Product Cost Planning

(Transaction Code: ZCK11)

Product Cost Planning

Fixed Costs (Daily)		Total Fixed Costs
4,224.00 Labor		26,899.06
2,880.00 Manufacturing Overhead		
2,272.78 Depreciation-Equipment		
2,272.73 Depreciation-Building		
9,280.00 Sales, General & Administrative		
6,069.60 Loan Interest		

Production Capacity: 24,000
 Productivity (%): 75%
 Allocation Basis: = 18,000 /
 Allocated Fixed Costs per Unit: = 1.50 EUR

NOTE: The allocation of fixed costs is entirely dependant on your productivity assumption. The cost analysis here does NOT include marketing, warehousing or any other expenses. Recalculate only takes into account a changed productivity assumption, and is not a full refresh.

Material	Description	Variable	Incl. Fixed	DC10	DC12	DC14
UU-F01	1kg Nut Muesli	1.53	3.03	4.24	4.49	4.74
UU-F02	1kg Blueberry Muesli	1.97	3.47	5.18	5.43	5.68
UU-F03	1kg Strawberry Muesli	1.97	3.47	5.18	5.43	5.68
UU-F04	1kg Raisin Muesli	1.38	2.88	3.92	4.17	4.42
UU-F05	1kg Original Muesli	1.36	2.86	3.87	4.12	4.37
UU-F06	1kg Mixed Fruit Muesli	1.76	3.26	4.75	5.00	5.25

Variable: The cost of raw materials to manufacture the product, based on average historical purchase price.
 Incl. Fixed: Variable cost, plus the allocated fixed costs per unit.
 DC##: The selling price of the product, in each distribution channel, at the time this report was opened.

14. Check Raw Material Cost per Production Order

(Transaction Code: ZKSB1)

Processed Prod Order	Material	Confirmed Qty	Material Cost	Unit Cost
1000466	1 Kg Raisin Muesli	1,000	1,378.00	1.38
1000447	1 Kg Mixed Fruit Muesli	10,000	17,585.00	1.76
1000446	1 Kg Nut Muesli	10,000	15,280.00	1.53
1000428	1 Kg Mixed Fruit Muesli	10,000	17,585.00	1.76
1000417	1 Kg Raisin Muesli	5,000	6,890.00	1.38
1000416	1 Kg Strawberry Muesli	10,000	19,680.00	1.97
1000415	1 Kg Blueberry Muesli	5,000	9,820.00	1.96
1000414	1 Kg Original Muesli	30,000	40,650.00	1.36
1000405	1 Kg Original Muesli	10,000	13,550.00	1.36
1000404	1 Kg Raisin Muesli	10,000	13,780.00	1.38
1000403	1 Kg Strawberry Muesli	10,000	19,680.00	1.97
1000402	1 Kg Blueberry Muesli	10,000	19,640.00	1.96
1000400	1 Kg Nut Muesli	10,000	15,280.00	1.53
1000398	1 Kg Nut Muesli	1,000	1,528.00	1.53
1000378	1 Kg Original Muesli	20,000	27,100.00	1.36
1000364	1 Kg Raisin Muesli	5,000	6,890.00	1.38
1000363	1 Kg Nut Muesli	5,000	7,640.00	1.53
1000361	1 Kg Raisin Muesli	5,000	6,890.00	1.38
1000360	1 Kg Strawberry Muesli	5,000	9,840.00	1.97
1000347	1 Kg Mixed Fruit Muesli	10,000	17,585.00	1.76
1000346	1 Kg Nut Muesli	10,000	15,280.00	1.53
1000333	1 Kg Mixed Fruit Muesli	10,000	17,585.00	1.76
1000331	1 Kg Nut Muesli	10,000	15,280.00	1.53
1000328	1 Kg Mixed Fruit Muesli	5,000	8,792.50	1.76
1000325	1 Kg Raisin Muesli	5,000	6,890.00	1.38

15. Automatically Generate POs from Purchase Requisitions

(Transaction Code: ME59N)

The transaction ME59N automatically creates consolidated purchase orders for each vendor. In other words, if more than one requisition was assigned to the same vendor, only one purchase order with multiple items will be created.

Enter the following information:

➤ Purchasing organization: \$\$

➤ Plant: \$\$

Click  (EXECUTE)

Program Edit Goto System Help

Automatic Creation of Purchase Orders from Requisitions

Purchasing Group: to

Purch. Organization: XX to

Fixed Vendor: to

Contract: to

Plant: XX to

Supplying Plant: to

New Purchase Order

☐ Per Purchasing Group ☐ Per delivery date

☐ Per Plant ☐ Per Vendor Subrange

☐ Per Storage Location ☐ Per Requisition

☐ Per Item Category ☐ Per Requisition Item

☒ Per Company Code ☒ Per Contract

Other Parameters

☐ Generate Schedule Lines

☐ Omit Faulty Items

☐ Test Run

Detailed Log

Set PREqs to "Closed" 1

Material Group: to

Release Date: to

Delivery Date: to

MRP Controller: to

Purchase Requisition: to

Material: to

Req. Tracking Number: to

A report is displayed confirming the conversion of the purchase requisition in consolidated PO.

List Edit Goto System Help

Automatic Creation of Purchase Orders from Requisitions

PO	OTyp	POrg	PGr	Agreement	Item	Purch Req.	Item D	S	Message Text
Vendor V03 Spyro Packaged Goods									
4500000023	NB	YY	800						Purchase order successfully created
					10000032				Requisition successfully converted
					10000033				Requisition successfully converted
					10000034				Requisition successfully converted
					10000035				Requisition successfully converted
					10000036				Requisition successfully converted
					10000037				Requisition successfully converted

Record the PO numbers: _____

16. Track Purchase Order Report (Transaction Code: ZME2N)

Purchase Order Tracking

Purchase Order Tracking - Quarter 1 Day 10

Order	Material	Quantity	Price	Complete	Goods	Payment
4500000022	1L ClearPure	1,000	11.99	X	1/10	1/20
	1L Spritz	1,000	14.99	X		
	1L Lemon Spritz	1,000	16.99	X		
	500mL ClearPure	1,000	16.99	X		
	500mL Spritz	1,000	19.99	X		
	500mL Lemon Spritz	820	22.99	X		

(Transaction Code MD07)

- Enter your company code: \$\$
- Enter MRP Controller: 101

Stock/Requirements List: Initial Screen

Individual access Collective access

Plant: YY Factory: Y

Selection by:

- ☒ MRP controller: 101 Muesli Controller
- ☐ Product group
- ☐ Vendor
- ☐ Production time
- ☐ Class
- ☐ Class type

Restrict Selection:

Material Data Flags

Procurement type: ABC Indicator: MRP Type:

Special procurement: Plant sp.matl status:

☒ Set up lists in background

☐ With Filter

➤  (ENTER)

Stock/Requirements List: Material List

Selected stock/requirements lists Define traffic light Exception groups

Plant: YY Factory: Y
 MRP Controller: 101 Muesli Controller

Light	Material	Material Description	A	Stk	DS	1st R	2nd R	1	2	3	4	5	6	7	8	Plant sto	B	MTyp	PTS	A	MT	Cde	O
	YY-F01	1 Kg Nut Muesli	23.0	23.0	23.0											0	ST	FERT	X		PD	000	
	YY-F05	1 Kg Original Muesli	23.2	23.2	23.2											22,767	ST	FERT	X		PD	000	
	YY-F02	1 Kg Blueberry Muesli	23.3	23.3	23.3											25,158	ST	FERT	X		PD	000	
	YY-F04	1 Kg Raisin Muesli	23.3	23.3	23.3											20,434	ST	FERT	X		PD	000	
	YY-F06	1 Kg Mixed Fruit Muesli	23.4	23.4	23.4											35,182	ST	FERT	X		PD	000	
	YY-F03	1 Kg Strawberry Muesli	23.7	23.7	23.7											72,556	ST	FERT	X		PD	000	
	YY-P01	Large box 1kg	999.9	999.9	999.9											0	ST	ROH	F		PD	001	
	YY-P02	Large plastic bag 1kg	999.9	999.9	999.9											0	ST	ROH	F		PD	001	
	YY-P03	Small box 0.5kg	999.9	999.9	999.9											0	ST	ROH	F		PD	001	
	YY-P04	Small plastic bag 0.5kg	999.9	999.9	999.9											0	ST	ROH	F		PD	001	
	YY-R01	Nut	999.9	999.9	999.9											0	KG	ROH	F		PD	001	
	YY-R02	Blueberry	999.9	999.9	999.9											0	KG	ROH	F		PD	001	
	YY-R03	Strawberry	999.9	999.9	999.9											0	KG	ROH	F		PD	001	
	YY-R04	Raisin	999.9	999.9	999.9											0	KG	ROH	F		PD	001	
	YY-R05	Wheat	999.9	999.9	999.9											0	KG	ROH	F		PD	001	
	YY-R06	Oat	999.9	999.9	999.9											0	KG	ROH	F		PD	001	

Select any finished goods item and click on the icon “Selected stock/requirements lists”.

Stock/Requirements List as of 23:06 hrs

Hide Overview Tree

Material: ZZ-F01 1L ClearPure

Status: Material Description Plant: ZZ MRP type: PD Material Type: FERT Unit: ST

A	Date	MRP e	MRP element data	Reschedul	E	Receipt/Reqmt	Available Qty
	2019.05.29	Stock					0
	2019.06.01	IndReq LSF				1,000-	1,000-

 (EXIT)

18. Check Individual Stock level (Transaction Code MD04)

- Enter your material (either finished product or raw material)
- Enter plant: \$\$

Stock/Requirements List: Initial Screen

Individual access Collective access

Material: AA-F01 1 Kg Nut Muesli
Plant: AA Factory A

☐ With filter

- (ENTER)

Stock/Requirements List as of 10:36 hrs

Hide Overview Tree

Material: AA-F01 1 Kg Nut Muesli
Plant: AA MRP type: PD Material Type: FERT Unit: ST

A	Date	MRP e	MRP element data	Reschedule	E	Receipt/Requirement	Available Qty	S
	2011-12-09	Stock					11,373	
	2011-10-02	PrdOrd	000001000165/PP01		02	20,000	31,373	02
	2011-10-02	PldOrd	0000001190/STCK		02	50,000	81,373	02
	2011-10-02	PldOrd	0000001151/STCK		02	10,527	100,000	02
	2011-10-02	IndReq	LSP			100,000	0	

19. Check Inventory Report (Transaction Code: ZMB52)

Inventory Report

Warehouse Capacity

Category	Value	Unit	Limit
Finished Goods:	182,017	/	Unlimited
Raw Materials:	0	/	Unlimited
Packaging:	0	/	Unlimited

Inventory Report: Quarter 4 Day 01

SLog	Material	Material Description	Stock	Unit
02	YY-F01	1 Kg Nut Muesli	0	ST
	YY-F02	1 Kg Blueberry Muesli	25,158	ST
	YY-F03	1 Kg Strawberry Muesli	72,558	ST
	YY-F04	1 Kg Raisin Muesli	26,434	ST
	YY-F05	1 Kg Original Muesli	22,787	ST
	YY-F06	1 Kg Mixed Fruit Muesli	35,102	ST
88	YY-P01	Large box 1kg	0	ST
	YY-P02	Large plastic bag 1kg	0	ST
	YY-P03	Small box 0.5kg	0	ST
	YY-P04	Small plastic bag 0.5kg	0	ST
	YY-R01	Nut	0	KG
	YY-R02	Blueberry	0	KG
	YY-R03	Strawberry	0	KG
	YY-R04	Raisin	0	KG
	YY-R05	Wheat	0	KG
	YY-R06	Oat	0	KG

General guideline for case 4 analysis

1. Purpose: Extract lessons learned and/or best practices, by routinely and systematically reflecting on your experience of running a business operation, whether it was success and/or failure.
2. Core focus of the analysis effort
 - 2.1 Evaluate whether your strategy worked or not, and answer why or why not.
 - 2.2 Learn from your success and/or mistake/failure
 - 2.3 Broaden and deepen your operation experience by accumulating lessons learned and best practices
3. Analysis procedure and report outline:
 - 3.1 Document your initial operations strategy and every change in your strategy
 - 3.2 Record consequential issues that were irrelevant to your operations strategy but affected your performance, such as miscommunications or system interface problems.
 - 3.2 Upload the business data of the entire market and individual companies.
 - 3.4 Evaluate performance of each operation strategy over time, using graphs, charts and diagrams to highlight performances and identify performance drivers.
 - 3.5 Identify if correlations exist between operations factors (such as pricing vs. marketing)
 - 3.6 Identify if casual effect relationships exist between operations factors.
 - 3.7 Draw lessons learned from this this specific operation run.
 - 3.8 Draw best practices that are applicable to all sorts of operations in general
4. Possible analysis efforts and techniques of use:
 - 4.1 Graphing and clustering techniques
 - Look into daily inventory, such as stock out, the number of days of stock out; how it affects your business objective, and how to compares to other companies.
 - Look into daily sales quantity and value amount for each product in each area; how it affects your business objective, and how it compares to other companies.
 - Look into daily price and price changes for each product; how it affects your business objective, and how it compares to other companies.
 - Look into daily marketing investment for each product in each area; how it affects your business objective; and how it compares to other companies
 - Look at investment for reducing setup time
 - Look at investment for increasing production capacity
 - Look new products (0.5kg) and impact on your revenue and profit
 - Look into purchase orders released in quarter 1, 2, and 3 in your company, including how many POs, dollar amount for each PO, total dollar amount, and how it compares to other companies.
 - Look into production orders, including daily produced quantity of each product, the average daily production capacity utilization rate in Q1, Q2 and Q3. Assume the production capacity is 24,000/day.
 - Look at days without production
 - Look at the details of cost of goods sold.

Cost of Goods Sold	1,503,587.09
Cost of Goods Manufactured	2,326,489.84
211120 Depreciation Expenses: Building	204,545.52
211130 Depreciation Expenses: Machinery	208,636.56
400000 Consumption Raw Materials	1,248,347.76
478100 Warehousing costs	25,600.00
500000 Direct Labor Costs	380,160.00
510000 Factory Overhead Expenses	259,200.00

4.2 Correlation

- Look into whether there exists a correlation between inventory and sales/profits?
- Look into whether there exists a correlation between price and sales/profits? Your comments.
- Look into whether there exists a correlation between market investment and sales/profits? Your comments.

4.3 Regression

- Look into possible causal effect relationships exist between the above factors