

SAP TERM PROJECT

Submitted By: Meru Bhatnagar

RUID: 180009382

Plant: PT01

Abstract:

This term project gives a detailed frameworks so as to implement procurement, production, sales and accounting activities of the fictitious Fitter Snacker (FS) Company in ECC system. For better understanding of organisation with different roles, I would be executing this project as production planner, buyer, production controller, salesperson, and accountant. Out of the two products that FS has, only NRG-A bars "Advance Energy" would be used for End to End Supply Chain Solution.

The complete project is implemented in stepwise way starting with production planner.

1. Production Planner

a. MRP Creation Production Plan:

Based on the historical data on hand, the customer demand forecasted for the NRG-A bar in December 2017 would be 200 units, while the demand in January 2018 would be 180 units.

Production Plan for individual product 01-NRG-A has been created as mentioned in PP LAB Handout 1 for creating Sales and Operation Plan.

Logistics-> Production -> Production Planning -> Demand Management -> Planned Independent Requirements -> Change

Here the production plan is 200 units for December and 180 units for January.

b. Create Planned Orders with MRP :

To meet the demand that is predicted by the Sales and order planning process, the MRP process will create planned orders. These planned orders can be converted into

- Production orders (for internally manufactured materials)
- Purchase requisitions (for externally procured materials).

To do this, we will repeat the MRP process as we did before. To run MRP,

Logistics -> Production -> MRP -> Planning -> Single Item, Multi-Level Planning

After completing this step, we notice that in stock evaluation ,SAP has created production orders of 7 cases (the fixed lot size for NRG-A bars, defined in material's master data, MRP1 view) to meet the demand.

The SAP system has created a planned order for semi-finished product 01 Dough NRG-A, the lot size is 500 lb(fixed lot size for Dough NRG-A bars, defined in material's master data, MRP1 view). It is observed that MRP decomposed the BOM of 01 NRG-A, and determines how many semi-finished products we should produce, and how many raw materials we need to purchase

2. Create Routing:

Before procuring the raw materials for the production, the routing is set for 01S200 (Dough NRG-A) and 01F100 (NRG-A) as per PP lab V.

Routing basically defines the sequence of operations and the consumption of resources, including materials, machines and labors.

a. Create 01 NRG-A Routing

Logistics -> Production -> Master Data -> Routings -> Standard Routings -> Create

b. Create 01 Dough NRG-A Routing (Semi Finished Product)

Logistics -> Production -> Master Data -> Routings -> Standard Routings -> Create

3. Purchase Requisitions MRP :

To procure raw materials for production, the following steps are done:

a. Purchase Requisitions using MRP

After planned independent requirements for finished products 01F100, run MRP to generate the procurement plan for raw materials.

Logistics-> Production -> MRP -> Planning -> Multi-Level Single Item Planning

Based on the plan for the finished product, MRP calculates the needed raw materials and generate purchase requisitions automatically.

b. Assign source for purchase requisitions

Since the purchase requisitions automatically generated by MRP does not contain any vendors (source of supply) information. We need to manually assign source of supply for these purchase requisitions.

Logistics -> Materials Management -> Purchasing -> Purchase Requisition -> Follow-On Functions -> Assign

Vendors Assigned: 100301(Battle Creek) and 100001(Climax Cereals)

c. Create purchase orders

Create Purchase orders based on purchase requisitions generated by MRP.

Purchase orders for those purchase requisitions and assigned vendors are generated.

Logistics -> Materials Management -> Purchasing ->Purchase Order ->Create -> Vendor/Supplying Plant Known

We need to create the purchase order for the products by both the vendors.

Thus we will have two purchase orders created by end of this step. (4500000069 & 4500000074)

d. Create a Goods Receipt (PP Exercise 2 Lab 5)

We need to create the goods receipt for the two purchase orders we just created. To create a goods receipt:

Logistics-> Materials Management -> Inventory Management -> Goods Movement -> Goods Receipt -> For Purchase Order -> GR for Purchase Order (MIGO)

4. Production Orders:

a. Change the planned order into production order:

Logistics-> Production -> MRP-> Evaluation-> Stock/Requirement List

Production order created is 000001000046.

b. Create Production Order for 01 Dough NRG-A

To complete the production order for 01 Dough NRG-A, we need to get the raw materials (oats, wheat germ, honey, etc.) from storage location 100 that are mixed to produce the dough. This is done using a goods issue to the production order.

Logistics-> Production-> Shop Floor Control-> Goods Movement-> Goods Issue

c. Enter Confirmation of Production

With the raw materials issued, we can mix them together to produce 01 Dough NRG-A. When the dough is mixed, we need to give the confirmation to SAP that it is done. Confirmation is mainly to confirm the actual resource consumptions, including setup, material and labour/machine consumptions. To do this, follow the menu path:

Logistics-> Production-> Shop Floor Control-> Confirmation-> Enter-> For order

d. Enter Goods Receipt of Production

We will do goods receipt to acknowledge the receipt of the items which are physically received in the warehouse.

Logistics-> Production-> Shop Floor Control-> Goods Movements-> Goods Receipt

e. Steps 4a-4d are repeated for 01NRG-A bars

- Change the planned order into a production order.
- Perform goods issue: 01 Dough NRG-A, 500 lb., from Storage Location 200
- Enter confirmation of production of 7 cases
- Enter goods receipt for production of 7 cases, into storage location 300

5. Pay the Vendors (100001 and 100301):

a. Create an Invoice Receipt:

After sending us the goods, the vendors 100001 and 100301 will send us an invoice. To manually record the receipt of this invoice, follow the menu path:

Logistics-> Materials Management-> Logistics Invoice Verification-> Document Entry-> Enter Invoice

We have created invoice receipts for \$9400 and \$18,095 respectively for vendors 100001 and 100301.

b. Post Outgoing Payment:

Accounting-> Financial Accounting-> Accounts Payable->Document Entry->Outgoing Payment -> Post

We have posted the outgoing payment from the account 100000 and noticed that the not assigned value comes out be \$0.

6. Cater orders for Sales Distribution:

To cater to the order of 5 NRG-A bars of 01 West Hills Athletic Club, following steps were followed

a. Create an Inquiry

A non-binding price quotation to 01 West Hills Athletic Club that tells the price of a specific quantity 01 NRG-A bars 01 West Hills Athletic Club. Here ECC calculates the prices according to the pricing procedure. ECC incorporated Condition Type, such as discount, surcharge, rebate, tax etc. The condition type was defined in the pricing master data, based on which ECC calculated the final prices.

The standard price is \$1200 for 5 cases of NRG-A bars, the discount received by 01 West Hills Athletic club was 5% as the order cost exceeded over \$1000, this inquiry includes a discount of \$60. Thus, ECC calculated the total price $\$1200 - \$60 = \$1140$.

Logistics-> Sales and Distribution-> Sales-> Inquiry-> Create

Material = 01-NRG-A

Order Quantity = 5

Standard Price = \$1200

Discount = \$60

Final Price = $\$1200 - \$60 = \$1140$

Inquiry number create Is 10000029.

b. Create a Sales Order from an Inquiry

In real world scenarios, if the customer wants to place an order after receiving the inquiry, we create a sales order. We assume that 01 West Hills Athletic Club wants to place an order, we create a sales order from the inquiry we just created. This prevents us from re-entering the basic data. We could direct extract the same from the inquiry we just created .We used "Create with Reference" and select "Inquiry".

Logistics -> Sales and Distribution -> Sales -> Order -> Create-> Create with reference-> Inquiry

c. Create a Delivery for the Sales Order

Delivery is a status that allows the warehouse to pick, pack and ship the order. While creating the delivery the Shipping Point is specified.

Steps:

Logistics-> Sales and Distribution-> Shipping and Transportation-> Outbound Delivery-> Create-> Single Document-> With reference to Sales Order

d. Picking the order

With the delivery created, the order can be picked, packed and shipped. We manually enter the quantity picked i.e. 5 for this scenario. The Storage location 300 for the pickup is specified in this step.

Logistics-> Sales and Distribution-> Shipping and Transportation-> Outbound Delivery-> Change-> Single Document

This step updates about cases of snack bars that have been picked off the warehouse shelf in preparation for shipping.

e. Post Goods Issue

The goods are issued from inventory to the customer 01 West Hills Athletic Club. The change in stock level and financial position of the company as a result of sending the goods on their way is also recorded in this step. Physically the items leave the warehouse after this step.

Logistics-> Sales and Distribution-> Shipping and Transportation-> Outbound Delivery-> Change-> Single Document

Posting the goods issue has removes the Delivery from the Stock/Requirements list and reduce the available inventory level by 5. New available inventory is 2.

f. Invoice the Customer

Invoice is end product for the customer without which Fitter Snackers aren't likely to be paid. The invoice is created for the customer with information about the prices and discounts. Three accounts are affected by the invoice:

- 01 West Hills Athletic Club's account - 02
- Sales Revenue account - 600000
- Sales Discount account - 610000

Amount = 1200

Discount = 60

Final Amount = 1140

Logistics-> Sales and Distribution-> Billing-> Billing Document-> Process Billing Due List

g. Receive payment from the Customer

After receiving the payment from the customer 01 West Hills Athletic Club the customer payment is posted.

Account Number: 100000

Amount: 1140

Accounting -> Financial Accounting -> Accounts Receivable -> Document Entry -> Incoming Payments

This completes the sales order process.

SCREENSHOTS:

- The final Stock /requirement of finished product

Stock/Requirements List as of 14:30 hrs

Material: 01 F100, Plant: 01 PT, MRP type: FD, Material Type: FERT, Unit: CS

A...	Date	MRP ...	MRP element data	Reschedul...	E...	Receipt/Reqmt	Available Qty
	12/16/2017	Stock					2
	12/01/2017	IndReq	VSF			195-	193-
	12/16/2017	PdOrd	0000011633/STCK	12/01/2017	30	7	166-
	12/16/2017	PdOrd	0000011634/STCK	12/01/2017	30	7	179-
	12/16/2017	PdOrd	0000011635/STCK	12/01/2017	30	7	172-
	12/16/2017	PdOrd	0000011636/STCK	12/01/2017	30	7	165-
	12/16/2017	PdOrd	0000011637/STCK	12/01/2017	30	7	158-
	12/16/2017	PdOrd	0000011638/STCK	12/01/2017	30	7	151-
	12/16/2017	PdOrd	0000011639/STCK	12/01/2017	30	7	144-
	12/16/2017	PdOrd	0000011640/STCK	12/01/2017	30	7	137-
	12/16/2017	PdOrd	0000011641/STCK	12/01/2017	30	7	130-
	12/16/2017	PdOrd	0000011642/STCK	12/01/2017	30	7	123-
	12/16/2017	PdOrd	0000011643/STCK	12/01/2017	30	7	116-
	12/16/2017	PdOrd	0000011644/STCK	12/01/2017	30	7	109-
	12/16/2017	PdOrd	0000011645/STCK	12/01/2017	30	7	102-
	12/16/2017	PdOrd	0000011646/STCK	12/01/2017	30	7	95-

Screenshot1: The final Stock/Requirements List of finished product 01 NRG-A

- The final bank account of account number 100000

Accounting > Financial Accounting > General Ledger > Account-> Display Balances
Enter the account number 100000 to get the following screen.

Balance Display: G/L Accounts For the Ledger FS

Account Number: 100000, Company Code: 01 FS, Fiscal Year: 2017, Project Bank: 01 Fitter Snacker

Display More Chars: All Documents in Currency =, Display Currency: USD, Company code currency: USD

Period	Debit	Credit	Balance	Cumulative balance
Bal.Carryfor.				
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12	1,140.00	27,495.00	26,355.00-	26,355.00-
13				
Total	1,140.00	27,495.00	26,355.00-	26,355.00-

Screenshot2: The final account balance of your bank account 100000 in G/L After the payment to vendors: 100001 and 100301