

MRP

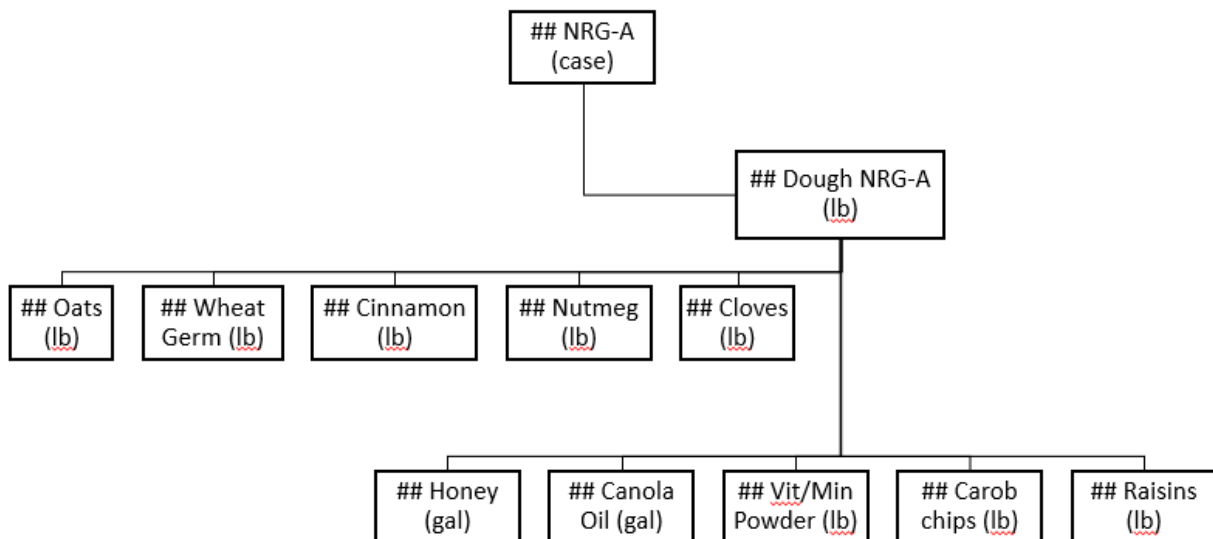
Exercise Introduction

Material resource planning is intended for 3 objectives:

- Ensure materials are available for production and products are available for delivery to customers.
- Maintain the lowest possible material and product levels in store to achieve LEAN processes.
- Plan manufacturing activities, delivery schedules and purchasing activities.

Bill of Material (BOM)

A critical input to the MRP process is the bill of material (BOM), which shows how components and semi-finished products are combined to produce the final product. A graphical representation of the BOM for the NRG-A bar is shown below:



The raw materials (Oats, Wheat Germ, etc.) are combined in a mixer to produce a 500 lb. batch of dough. The dough is then transferred to the baking line, where it is formed into bars, baked and packaged. For simplicity, we have ignored the wrappers, boxes and cases that are needed to produce a complete case of Fitter Snacker bars.

To view the BOMs for Fitter Snacker, follow the menu path:

Logistics > Production > Master Data > Bills of Material > Reporting > BOM Explosion > Material BOM > Multilevel BOM

MRP

Material BOM Edit Goto Extras Settings Environment System Help

Explode BOM: Multi-Level BOM: Initial Screen

Material: 00F100
 Plant: 00PT
 Alternative BOM: ☐
 BOM Application: PP01

Selection
 Valid From: 07/31/2008
 Change Number:
 Required qty:

Enter ##F100 for Material, ##PT for Plant and PP01 for BOM Application, then click on the execute (⏏) icon

Material BOM Edit Goto Extras Settings Environment System Help

Display Multilevel BOM

Material: 00F100
 Plant/Usage/Alt: 00PT / 1 / 01
 Description: 00 NRG-A
 Base Qty (CS): 7.000
 Reqd Qty (CS): 7

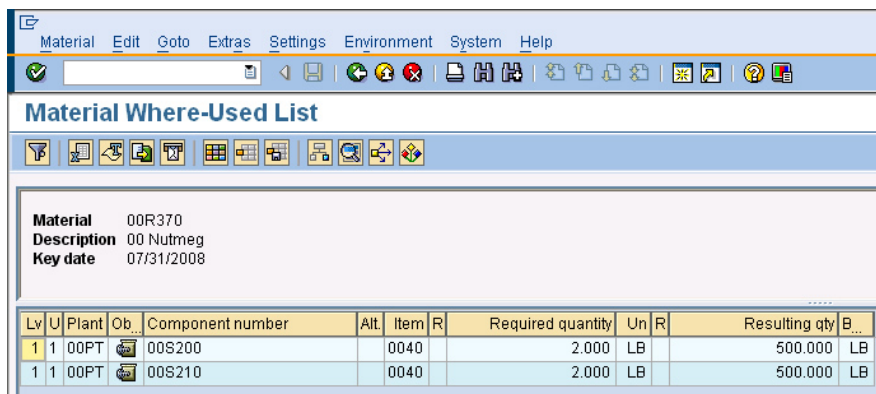
Level no.	Item	Qty	Component	Description	Unit	Reqd Qty	Unit	Unit
..1	0010	00S200						
..2	0010	00R380						
..2	0020	00R420		00 Wheat Germ		50	LB	L
..2	0030	00R320		00 Cinnamon		5	LB	L
..2	0040	00R370		00 Nutmeg		2	LB	L
..2	0050	00R330		00 Cloves		1	LB	L
..2	0060	00R360		00 Honey		10	GAL	L
..2	0070	00R300		00 Canola		7	GAL	L
..2	0080	00R410		00 Vit/Min Powder		5	LB	L
..2	0090	00R310		00 Carob Chips		50	LB	L
..2	0100	00R400		00 Raisins		50	LB	L

This screen shows 7 cases of snack bars requires 500 lbs. of dough, and that to produce 500 lbs. of dough, 300 lbs. of Oats, 50 lbs. of Wheat Germ, etc. are required

This screen shows the recipe required for seven cases of dough. To learn more about any of the materials required to make an NRG-A bar, select the item and click on the detail icon.

With the nutmeg selected, click on the where-used icon (⏏), which will call up the following screen:

MRP



Lv	U	Plant	Ob	Component number	Alt	Item	R	Required quantity	Un	R	Resulting qty	B...
1	1	00PT		00S200		0040		2.000	LB		500.000	LB
1	1	00PT		00S210		0040		2.000	LB		500.000	LB

This screen shows that Nutmeg is used in two products—the dough for NRG-A and NRG-B bars. (You can double click on each line to view the products.) According to help.sap.com, the where-used list can be used to:

- Determine requirements for a specific material
- Select products that are affected by a change to an individual part
- Find assemblies that will be delayed if, for example, there is a delay in the delivery of a raw material
- Calculate the effect on the cost of a product if the price of a raw material rises

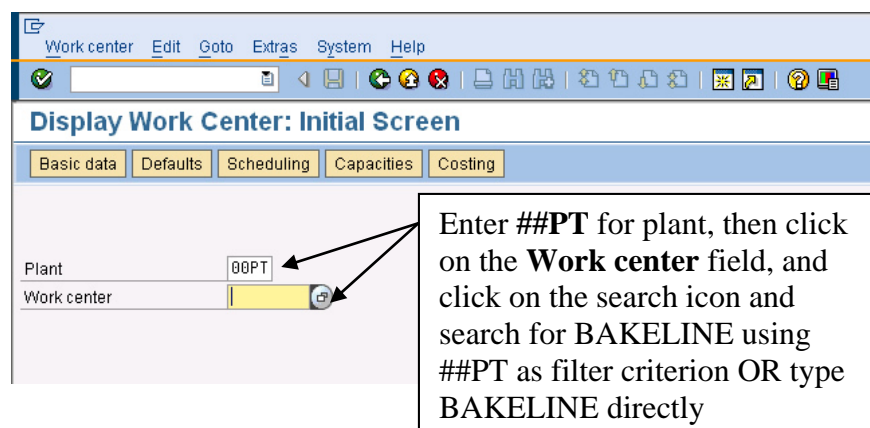
Click on the exit icon (🏠) until you return to the SAP Easy Access screen.

Display Workcenters

Production is carried out at workcenters. In the SAP ERP system, workcenters can represent machines or groups of machines, production lines, assembly lines, employees or groups of employees.

To display the workcenters used for Fitter Snacker's snack bar production, follow the menu path:

Logistics > Production > Master Data > Work Centers > Work Center > Display



Work center Edit Goto Extras System Help

Display Work Center: Initial Screen

Basic data Defaults Scheduling Capacities Costing

Plant 00PT

Work center

Enter ##PT for plant, then click on the **Work center** field, and click on the search icon and search for BAKELINE using ##PT as filter criterion OR type BAKELINE directly