

SAP

# SAP PORTFOLIO PROJECT

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## Table of Contents

Overview.....	3
Task #1-Create an Inquiry.....	3
Task #2- The Procurement Cycle.....	5
Task #3-Total Owing to Grand Rapids in Fiscal Year 2023.....	11
Task #4- Complete Customer Order.....	12
Task #5-Displaying BOM.....	18
Task #6-Displaying Routings.....	18
Task #7- Product Groups.....	20
Task 8-Sales Forecast.....	21
Task #9-Rough Cut Plan.....	21
Task #10-Disaggregate Rough Cut Plan.....	22
Task #11- Stock/Requirements List.....	23
Task 12- Running MRP.....	24
Task 13-Updated Stock/Requirements List.....	25
Task 14-Stock/Requirements List for Dough.....	26
Task 15-Stock/Requirements List for Raw Material Protein Powder.....	27
Task 16-Recieve Customer Payment.....	28
Task 17-The Production Process.....	29
Conclusion.....	35

## Overview

This report is a presentation based on the skills and knowledge collected in the Durham Colleges SAP course COMP 2115 with Professor Jackie Shemko. Here we will be able to see the overall knowledge collected throughout the semester by Danaca Marier in Fall 2023 through a final project on the Fitter Snacker business. Fitter Snacker is an imaginary energy bar company set and engaged with over the semester to teach students skills with SAP software in a real-life business example. Fitter Snacker has three product categories raw goods, semi-finished goods, and finished goods. The two finished goods include NRG-A bars and NRG-B bars, their semi-finished goods include the dough to make the finished good and the raw goods include a wide range of raw materials. This report will be using given tasks to complete that are based around and look at SAP steps such as creating inquiries, the procurement process, the bill of materials, and other important tasks completed in SAP software.

## Task #1-Create an Inquiry

In this task, we had a customer in the wholesale distribution channel come to Fitter Snacker asking for 25 cases of our NRG-A bars. For us to let the customer know if we have the stock and how much it will cost, we will need to create an inquiry. In the first screenshot, we can see the screen for creating our inquiry, we have inputted the item they are requesting using the material code under "Material" and the quantity under "Order Quantity". The customer is inputted under "Sold-To-Party" and their customer reference number is inserted in the "Cust. Reference" slot. The "Valid From" is the date the inquiry was made and the "Valid To" is one month after the inquiry was made and is the time in which we will honor the price. After the "Valid To" date we can no longer honor the inquiry price and the customer will need to make a new inquiry or purchase the product at the price the product is currently selling for. Here we can also see the net value of the order inquiry.

The screenshot displays the SAP 'Create Inquiry: Overview' interface. Key elements include:

- Header:** SAP logo and 'Create Inquiry: Overview' title.
- Fields:** Inquiry (empty), Sold-To Party (28W200), Ship-To Party (28W200), Cust. Reference (WH128), and Net Value (5,750.00 USD).
- Address:** 28 Meijer, Inc. / 2929 Walker Ave. / Grand Rapids MI 49544.
- Valid Dates:** Valid From: 12/04/2023, Valid To: 01/04/2024.
- Expect.Ord.Val.:** 1,725.00 USD.
- Table:** A table with columns: Item, Material, Req. Segment, Order Quantity, \$U, Altitm, Item Description. One row is visible: Item 1028F100, Order Quantity 25 CV, Item Description 28 NRG-A.
- Buttons:** Save, Cancel.

In this screenshot, we are further looking into the conditions of the inquiry for our customer Meijer of 25 cases of NRG-A bars. Under the conditions tab, we can see further information such as the net value per case, the internal

price per case, and the profit per case. We can also see any discounts the customers may be getting on an order, in this case, we can see they will not be getting a discount. The net price will be \$5,750 with a net value of \$230 per case. The internal price is \$201.60 per case with a profit of \$28.40 per case.

**Conditions**

Quantity: 25 CV      Net: 5,750.00 USD      Tax: 0.00

**Pricing Elements**

I...	CnTy	Name	Amount	Crcy	per	Uo...	Condition Value	Curr.	Status	NumCCo	ATO/MTS Component
		Net Value for Item	230.00	USD		1CV	5,750.00	USD		1	
		Net Value 2	230.00	USD		1CV	5,750.00	USD		1	
		Total	230.00	USD		1CV	5,750.00	USD		1	
<input type="checkbox"/>	SKTO	Cash Discount	0.000				0.00	USD		0	
<input type="checkbox"/>	VPRS	Internal price	201.60	USD		1CV	5,040.00	USD		1	
		Standard - USA /With	28.40	USD		1CV	710.00	USD		1	

This screenshot shows us the available quantity of our NRG-A bars, we currently have 959 cases of bars meaning we are available to promise Meijer 25 cases.

**Availability Overview**

Material: 28F100 (28 NRG-A)      Plant: 28PT      Avail. check: 02      Checkrule: A

MRP Area: 28PT      With reqmts qrys:       Base Unit: CV

**Totals display**

Receipts: 959      Issues: 0      Confmrd issues: 0

**ATP situation**

Date	MRP el...	Stock Segment	MRP element data	Rec./reqd qty	Confirmed	Cum. ATP qty
<input type="checkbox"/> 12/04/2023	Stock				959	
<input type="checkbox"/> 12/04/2023	SLocSt		300		959	

Current page / Total: 1 / 1

Now that we have confirmed the inquiry with our stock and have overlooked all the information needed for this customer, we can process the inquiry. SAP lets us know the inquiry has been saved with a notification at the bottom of our screen.

**Create Inquiry: Overview**

Inquiry:  Net Value:

Sold-To Party:

Ship-To Party:

Cust. Reference:  Cust. Ref. Date:

Valid From:  Valid To:

\*Req. Deliv.Date:  Expect.Ord.Val.:

**All Items**

Item	Material	Req. Segment	Order Quantity	SU	AltItm	Item Description

Inquiry 10000438 has been saved. Save Cancel

## Task #2- The Procurement Cycle

In this task, we have been asked to order 5000 pounds of our raw material Wheat Germ from supplier Grand Rapids Grains. This first screenshot looks at the original stock/requirements list before we ordered the product, currently, we have 1,950 available quantity.

**Stock/Requirements List as of 21:57 hrs**

Material: **28R420**  
Description: **28 Wheat Germ**

MRP Area: **28PT** 28 Fitter Snacker Plant Ex. manuf.:

Plant: **28PT** MRP type: **PD** Material type: **ROH** Unit: **LB**

A...	Date	MRP el...	MRP element data	Rescheduling... E...	Receipt/Reqmt	Available Qty
	12/04/2023	Stock				1,950

The first step in the procurement cycle and ordering product is purchase requisition this is where we request to buy the product. This this screenshot we are creating a purchase requisition, we have filled out all the needed information including the material, quantity needed, delivery date, and storage location, and the system auto-fills in the material group. Once we have confirmed the inputted information we can click “save” to save the purchase requisition.

Stat.	Item	A	I	Material	Short Text	Quantity	Unit	C	Delivery Date	Material Group	Plant	Stor. Location
	10			28R420	28 Wheat Germ	5,000	LB	D	12/25/2023	Raw & Semifi...	28 Fitter Snack...	Raw Materials 28
											28 Fitter Snack...	
											28 Fitter Snack...	
											28 Fitter Snack...	
											28 Fitter Snack...	
											28 Fitter Snack...	
											28 Fitter Snack...	
											28 Fitter Snack...	
											28 Fitter Snack...	
											28 Fitter Snack...	

At the bottom of the screen, there are buttons for "Save" and "Cancel".

The system will let us know the purchased requisition has been saved with a notification at the bottom of the screen.

Purchase requisition number 0010000400 created

The next step in the procurement process is to create a purchase order, this is the official order of the product. In this screenshot, we are looking at the order form, we can see the vendor Grand Rapids Grains, material 28R420 which is the code for Wheat Germ, quantity of 5,000, and a gross price of \$0.30, with a net value of \$1,500. This page also shows us our delivery date. Once we have confirmed the information is all correct we can save the purchase order to SAP.

The screenshot displays the SAP 'Create Purchase Order' interface. At the top, the document type is 'Standard PO' and the vendor is '28B100 28 Grand Rapids Grains'. The document date is '12/04/2023'. The main table lists the material '28R420' (Wheat Germ) with a quantity of 5,000 LB and a net price of 0.30 USD. The delivery date is '12/25/2023'. Below the table, the 'Conditions' tab is active, showing a quantity of 5,000 LB and a net value of 1,500.00 USD. The 'Pricing Elements' table shows a gross price of 0.30 USD, resulting in a condition value of 1,500.00 USD. The interface includes various navigation and action buttons like 'Save' and 'Cancel'.

We know the purchase order has been saved by the notification SAP gives us in the bottom of our screen.

A dark blue notification banner with a green checkmark icon on the left and the text 'Standard PO created under the number 4500000423' in white.

The next step in the procurement process is the receipt of the goods, the product has now been shipped and arrived at our warehouse, so we need to complete the goods receipt that confirms the product has made it in full. On this screenshot, we can see all the important information on the order such as the quantity, order number, location, and material. Once we have confirmed all the product has made it to our warehouse, we can select “OK” which confirms it is here and post the goods receipt to trigger the next step in the procurement process and notify SAP.

Goods Receipt Purchase Order 4500000423 - FS-28

Hide Overview More Find Exit

Goods Receipt Purchase Order 4500000423 GR goods receipt

My Documents

- Purchase Orders
  - 4500000423
  - 4500000323
  - 4500000244
  - 4500000156
  - 4500000029
- Reservations
  - Blank
- Material Documents
  - 5000000360
  - 4900000482
  - 5000000345
  - 4900000466
  - 5000000315
  - 5000000160
  - 5000000035
- Held Data
  - Blank

General Vendor

Document Date: 12/04/2023 Delivery Note: Vendor: 28 Grand Rapids Grains

Posting Date: 12/04/2023 Bill of Lading: HeaderText:

Individual Slip

Line	Mat. Short Text	OK	Qty in UnE	EUn	Sloc	Stock Segment
1	28 Wheat Germ	<input checked="" type="checkbox"/>	5,000	LB	Raw Materials	

Delete Contents

Material Quantity Where Purchase Order Data Partner

Post Cancel Restart Hold Check

SAP will let us know if the goods receipt has been saved by giving us a notification at the bottom of our screen.

Material document 5000000592 posted [View details](#)

The next step in the procurement process is the invoice receipt, this is where we can see the amount, we owe the vendor. On this screen, we can see the incoming invoice, from this, we know we owe the vendor Grand Rapids Grains \$1,500 for our ordered 5000 lb of quantity. Once we have confirmed all the information on this page we will post it to finalize the invoice and trigger SAP to start the accounting process of paying the vendor.

Enter Incoming Invoice: Company Code 28FS

Invoice date: 12/04/2023  
 Posting Date: 12/04/2023  
 Amount: 1,500.00 USD  
 Tax Amount:   
 Text:   
 Paymt terms: Due immediately  
 Baseline Date: 12/04/2023

Vendor 28B100  
 Company: 28 Grand Rapids Grains  
 1335 Sherman St.  
 Grand Rapids MI 49506

Item	Amount	Quantity	Or...	Purchase ord...	Item	PO Text	Tax Code
✓	1,500.00	5,000 LB		4500000423	10	28 Wheat Germ	XI (Input

Post Cancel Hold

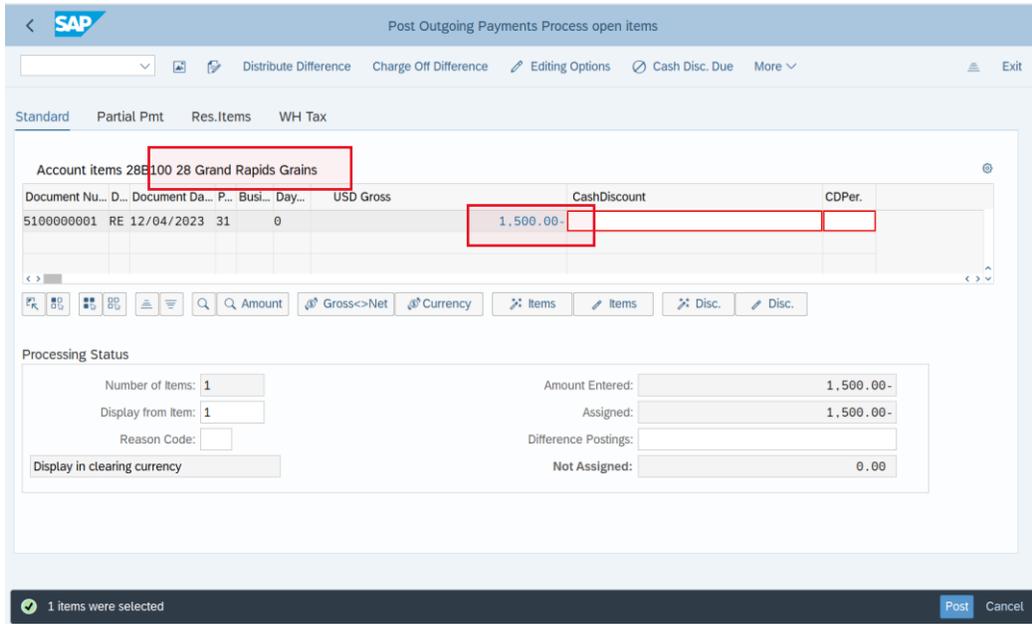
In this next screenshot, we are looking at the balance for Grand Rapids Grains, at the top of the screen it shows us the vendor we are looking at for easy identification. The table below shows how much we owe the vendor, for this specific vendor, we can see we owe the vendor \$1,500 from looking at the balance. We have purchased the product on accounts payable which is shown with the amount being under the “credit” column.

Vendor Balance Display

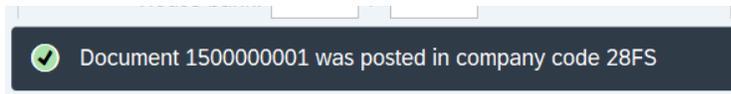
Vendor: 28B100 28 Grand Rapids Grains  
 Company Code: 28FS 28 Filter Snacker  
 Fiscal Year: 2023  
 Display crncy: USD

Period	Debit	Credit	Balance	Cumulative Balance	Sales/Purchases
Balance Carry...					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12		1,500.00	1,500.00-	1,500.00-	1,500.00-

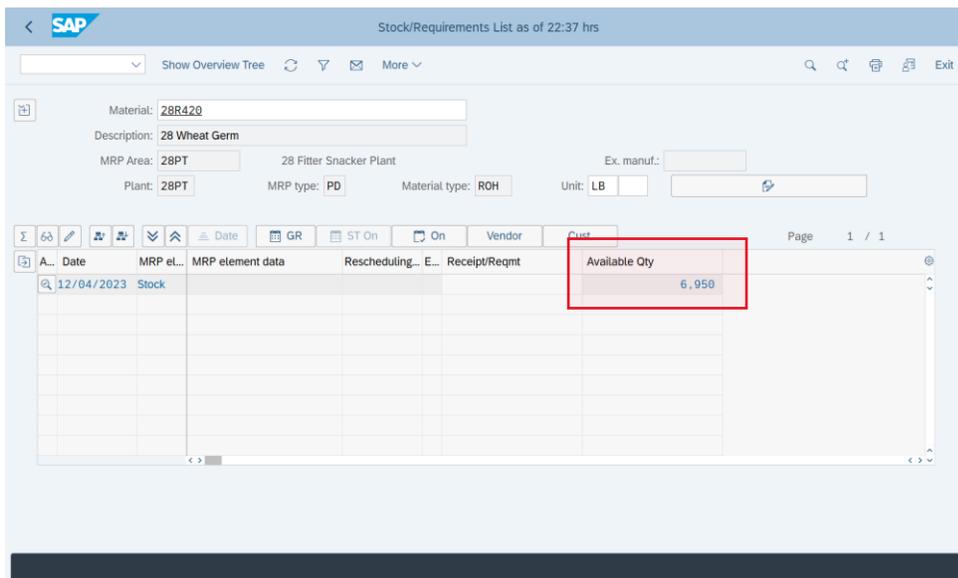
The next step in the procurement process is paying. In this screenshot, we are setting up an outgoing payment to pay our vendor for the raw materials purchased, you can see important information such as the selected vendor and payment amount. Once we have confirmed all the information we can select “post” which triggers SAP to pay our vendor.



We can see that the outgoing payment has been posted by the notification SAP sends us at the bottom of the screen, the next step is for accounting to record our journal.



Finally, now that we have purchased our product and have paid our vendor, we have completed the procurement process. In this screenshot, we are looking at the updated stock/requirement list for our raw material Wheat Germ, here we can see that the stock has increased by the ordered 5000.



### Task #3-Total Owing to Grand Rapids in Fiscal Year 2023

In the next two screenshots, we are looking at the vendor balance display, this is where we can see the total owing to our vendor Grand Rapids Grains. Here we can see that our balance shows nothing which lets us know we don't owe our vendor anything currently. We can see a credit of \$1,500 which shows our previous ordered stock payment and was paid with a debit of \$1,500.

Vendor: 28B100      28 Grand Rapids Grains  
 Company Code: 28FS      28 Fitter Snacker  
 Fiscal Year: 2023  
 Display crmncy: USD

Bals      Special G/L

Period	Debit	Credit	Balance	Cumulative Balance	Sales/Purchases
Balance Carry..					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					

Vendor: 28B100      28 Grand Rapids Grains  
 Company Code: 28FS      28 Fitter Snacker  
 Fiscal Year: 2023  
 Display crmncy: USD

Bals      Special G/L

Period	Debit	Credit	Balance	Cumulative Balance	Sales/Purchases
Balance Carry..					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12	1,500.00	1,500.00			1,500.00-
13					
14					
15					
16					
<b>Total</b>	<b>1,500.00</b>	<b>1,500.00</b>			<b>1,500.00-</b>

## Task #4- Complete Customer Order

In this task, we had a previous customer with an inquiry call back and ask to buy the stock from the inquiry. To do this we need to start by creating a standard order from an inquiry, on this screenshot we have the page open and filled out to create an order, all the information was saved from the original inquiry including the information of the customer, originally communicated price, product, and quantity. Once we have reviewed the information with the customer we are good to “save” the order to trigger the next step in SAP.

Standard Order:  Net Value: 5.750.00 USD

Sold-To Party: 28W200 28 Meijer, Inc. / 2929 Walker Ave. / Grand Rapids MI 49544

Ship-To Party: 28W200 28 Meijer, Inc. / 2929 Walker Ave. / Grand Rapids MI 49544

Cust. Reference: 28-BARS Cust. Ref. Date:

Req. Deliv.Date: D 12/04/2023 Deliver.Plant:

Complete Dlv.:  Total Weight: 1.975 LB

Delivery Block:  Volume: 0.000

Billing Block:  Pricing Date: 12/04/2023

Pyt Terms: 0001 Pay immediately w/o deduction

Inco. Version:

Incoterms: FOB

Inco. Location1: Receiving Dock

Item	Material	Req. Segment	Order Quantity	Un	S	Item Description
<input type="checkbox"/>	1028F100		25	CV	<input checked="" type="checkbox"/>	28 NRG-A

Save Cancel

We know the order has been created and saved by the notification SAP leaves us at the bottom of our screen indicating so.



We can now look at the document flow which shows us the updated progress of a customer order. From this screenshot we can see that the inquiry has been completed and we are now in an open status of our order.

Document	Quantity	Unit	Ref. Value	Currency	On	Time	Status
▼ Inquiry 0010000438 / 10	25	CV	5,750.00	USD	12/04/2023	21:45:53	Completed
→ Standard Order 0000000435 / 10	25	CV	5,750.00	USD	12/04/2023	23:14:32	Open

The next step is to create an outbound delivery for our customer's order, in this screen, we are inputting the shipping information for our customer, we have inputted the material and quantity as well as the ship-to-party. We can now save the document to trigger the next step and send the outbound delivery to the warehouse to be packaged.

Outbound Deliv.:  Document Date: 12/04/2023

Ship-to party: 28W200 28 Meijer, Inc. / 2929 Walker Ave. / Grand Rapids MI 49544

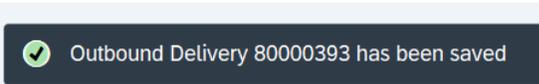
Planned GI: 12/05/2023 00:00 Total Weight: 1,975 LB

Actual GI Date:  00:00 No. of Packages:

Item	Material	Deliv. Qty	Un	Description	Req. Segn
10	28F100	25	CV	28 NRG-A	

Buttons: Save Cancel

We can see it has been saved from the SAP notification.



Now we can reflect on the document flow and see the standard order has been completed and has opened the outbound delivery from completing a step and moved on to the next in the customer order process.

The screenshot shows the SAP Document Flow interface. At the top, it says "Document Flow" and "Business Partner 28W200 28 Meijer, Inc. Material 28F100 28 NRG-A". Below this is a table with columns: Document, Quantity, Unit, Ref. Value, Currency, On, Time, and Status. Three rows are highlighted with a red border:

Document	Quantity	Unit	Ref. Value	Currency	On	Time	Status
Inquiry 0010000438 / 10	25	CV	5,750.00	USD	12/04/2023	21:45:53	Completed
Standard Order 0000000435 / 10	25	CV	5,750.00	USD	12/04/2023	23:14:32	Completed
Outbound Delivery 0080000393 / 10	25	CV			12/04/2023	23:23:47	Open

In this stage, our outbound delivery has made it to the warehouse, we now need to “pick” the order to remove them from the warehouse and package them for delivery. In the SAP screen, we can see the quantity needed input the amount that has been picked in the “Pick Qty” location and fill out the warehouse location under SLoc. Once we have packed the order, we can save our progress to SAP.

The screenshot shows the SAP "Outbound Delivery 80000393 Change: Overview" screen. It includes fields for "Outbound Deliv.: 80000393", "Document Date: 12/04/2023", and "Ship-to party: 28W200". Below these are tabs for "Item Overview", "Picking", "Loading", "Shipment", "Status Overview", and "Goods Movement Data". The "Picking" tab is active, showing "Pick Date/Time: 12/05/2023 00:00" and "Warehouse No.:". A table titled "All Items" is shown below:

Item	Material	Plnt	SLoc	Req. Segment	Deliv. Qty	Un	Picked Qty	Un	Ba
10	28F100	28PT	300		25	CV	25	CV	

At the bottom right, there are "Save" and "Cancel" buttons.

The updated document flow will now show us that the picking request has been completed, but the outbound delivery is still open as Fitter Snacker still has ownership of the product and the delivery process is not complete.

Document	On	Time	Status
▼ Inquiry 0010000438	12/04/2023	21:45:53	Completed
▼ Standard Order 0000000435	12/04/2023	23:14:32	Completed
▼ → Outbound Delivery 0080000393	12/04/2023	23:23:47	In Process
▶ Picking Request 20231204	12/04/2023	23:28:44	Completed

The last step in the delivery process is to “Post goods issue”, by doing this you are turning ownership over from Fitter Snacker your company to the customer. The stock of this product will now be updated to the new available quantity and sends the physical product to the customer from your warehouse.

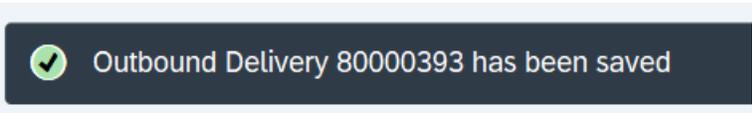
Change Outbound Delivery

Outbound Delivery:

Post Goods Issue

Continue

We can now see that the outbound delivery has been saved by the notification given by SAP.



Another step of document flow is now complete, but the delivery process is not complete as we have not received our payment from the customer.

The screenshot shows the SAP Document Flow interface for Business Partner 28W200 28 Meijer, Inc. The table below lists the document flow steps:

Document	On	Time	Status
Inquiry 0010000438	12/04/2023	21:45:53	Completed
Standard Order 0000000435	12/04/2023	23:14:32	Completed
→ Outbound Delivery 0080000393	12/04/2023	23:23:47	In Process
Picking Request 20231204	12/04/2023	23:28:44	Completed
GD goods issue:delvy 490000064	12/04/2023	23:32:03	Complete

In this screen we are completing the next step of sending the invoice to the customer through the billing due list. Once selected the correct bill and reviewing it is all correct, we can send it to the customer.

S	BL	SOrg	Billing Date	Sold-To	BllIT	DstC	Document	DChI	Dv	Doc.C	Addre.	Sold-To Party	Sold-to locat.	Sort Te.	Items re.	Count	ShPt	POD Stat.	Net Ve
X	L	28FS	12/05/2023	28W200	F2	US	80000393	WH	SB	J	26032	28 Meijer, Inc.	Grand Rapids				28SP		5.750

We can now see on the document flow that the invoice and the delivery step have been completed, the last step in this process is to complete a journal entry for our customer payment. By instruction of the task, we will be stopping here and leaving the journal entry “not cleared”.

Document	On	Time	Status
Inquiry 0010000438	12/04/2023	21:45:53	Completed
Standard Order 0000000435	12/04/2023	23:14:32	Completed
Outbound Delivery 0080000393	12/04/2023	23:23:47	Completed
Picking Request 20231204	12/04/2023	23:28:44	Completed
GD goods issue/delvy 490000064	12/04/2023	23:32:03	Complete
Invoice 0090000334	12/04/2023	23:41:27	Completed
Journal Entry 0090000003	12/04/2023	23:41:27	Not Cleared

## Task #5-Displaying BOM

In this screenshot and task, we are looking at a multilevel BOM for our finished product NRG-B bars. A BOM is a bill of material, and it is made up of all the information of ingredients needed in the making of a product. Here we can see the product selected for easy identification and all the raw and semi-finished products. We can also see the base product which is the set amount of a product we can make, for this example its 7.

The screenshot shows the SAP 'Display Multilevel BOM' interface. A red box highlights the material details: Material 28F110, Plant/Usage/Alt. 28PT / 1 / 01, Description 28 NRG-B, Base Qty (CV) 7,000, and Req'd Qty (CV) 7. Below this, a table lists the components of the BOM.

Explosion level	Item	Obj.	Component number	Object description	Ovfl	Comp. Qty (CU)	UoM	Ict	Ex.	Requirement Segment	Stock
.1	0010		28S210	28 Dough NRG-B		500	LB	L			
.2	0010		28R380	28 Oats		250	LB	L			
.2	0020		28R420	28 Wheat Germ		50	LB	L			
.2	0030		28R320	28 Cinnamon		5	LB	L			
.2	0040		28R370	28 Nutmeg		2	LB	L			
.2	0050		28R330	28 Cloves		1	LB	L			
.2	0060		28R360	28 Honey		10	GAL	L			
.2	0070		28R300	28 Canola		7	GAL	L			
.2	0080		28R410	28 Vit/Min Powder		5	LB	L			
.2	0090		28R390	28 Protein Powder		50	LB	L			
.2	0100		28R350	28 Hazelnuts		30	LB	L			
.2	0110		28R340	28 Dates		70	LB	L			

## Task #6-Displaying Routings

In this task, we are displaying routings for our finished product NRG-B bars and semi-finished product NRG-B dough. Routing is the location of work centers that are needed to manufacture a product, for NRG-B bars the work center is BAKELINE.

The screenshot shows the SAP 'Display Routing: Operation Overview' interface. A red box highlights the material details: Group 28, Group Counter 2, and Material 28F110. Below this, a table shows the routing operations.

Ope...	SOp	Work center	Plant	Con...	Standard ...	Description	Lo...	PRT	CL...	Ob...	Pe...	Cu...	Su...	Base Quantity	Un...	S
<input type="checkbox"/>	0010	BAKELINE	28PT	BAKE		Bake Dough								7	CV	3€

We can see more on our product routing if we go into the details tab. In the details, we see further information such as production setup time and machine time. This can be important when it comes to forecasting and planning for products. The production and setup is 30 minutes for NRG-B bars.

Group: 28      Group Counter: 2      28 NRG-B  
 Material: 28F110      28 NRG-B

Operation

Activity: 0010      Suboperation:   
 Control key: BAKE      Routing/Ref. op. set - internal proc.  
 Plant: 28PT  
 Work center: BAKELINE      Baking Line Workcenter  
 Standard Text Key:      Bake Dough  
 Long Text Exists:

Standard Values

Base Quantity: 7  
 Operation unit: CV  
 Break Time: 0.000

Conversion of Units of Measure

Header	Unit	Operat.	Un
1	CV	<=>	1 CV

Std Value	Un	Act. Type	Efficiency
Setup: 30	MIN		
Machine: 30	MIN		
Labor: 0.000			

The next screenshot is for the semi-finished product NRG-B dough, from this we can see the work center is MIXERS and has a base quantity of 500.

Group: 28      Group Counter: 4      28 Dough NRG-B  
 Material: 28S210      28 Dough NRG-B

Operation Overview

Op...	SOp	Work center	Plant	Con...	Standard ...	Description	Lo...	PRT	CL...	Ob...	Pe...	Cu...	Su...	Base Quantity	Un...	S
0010		MIXERS	28PT	MIX		Mix Dough								500	LB	3€

Entry: 1      of: 1

More details on NRG-B dough show that the setup and production are 30 minutes and the work center is MIXERS.

The screenshot shows the 'Display Routing: Operation Details' window in SAP. The 'Group' is 28 and 'Group Counter' is 4. The material is 28S210. The operation is '28 Dough NRG-B'. Key parameters are highlighted with red boxes: 'Work center: MIXERS', 'Setup: 30 MIN', and 'Machine: 30 MIN'. The 'Standard Values' section shows 'Base Quantity: 500' and 'Operation unit: LB'. The 'Conversion of Units of Measure' table shows a 1:1 ratio between 'Header' and 'Operat.' units of 'LB'.

## Task #7- Product Groups

In this task, it was asked to change the product group proportion for our product group for NRG-A bars and NRG-B bars. Product groups are groups of data of one or more products decided by the individual using SAP, they make for easy accessibility and a structured form for planning and forecasting. In this situation, we made the proportion 65% for NRG-A bars and 35% for NRG-B bars.

The screenshot shows the 'Change Product Group: Maintain Members (Materials)' window. The product group is '28 NRG GROUP' and the plant is '28PT: 28 Fitter Snacker Plant'. A table lists the members with their proportions highlighted in red boxes.

Member number	Plnt	Unit conv.	Aggr.fact.	Proportion	Uo... V M F	Short Text
28F100	28PT	1	1	65	CV	28 NRG-A
28F110	28PT	1	1	35	CV	28 NRG-B

## Task 8-Sales Forecast

In this task we obtained valuable information from a SOP meeting on our forecast for the next couple months. The forecast is predicted to be 30 cases in January, 40 in February, and 50 in March, it has been decided to create a production plan that is synchronous with sales. Synchronous with sales means that the information will constantly be updated. The "IndReq" will be calculated using the prediction that 65% of our sales will come from NRG-A bars and 35% of our sales will come from NRG-B bars, SAP will do the work to calculate the percentage for example for January its predicted to sell 30 cases that will be 10.5 cases of NRG-B bars and 19.5 cases of NRG-A bars.

## Task #9-Rough Cut Plan

This task asked to create a rough-cut plan from the information on forecasting in Task 8 which was obtained through a SOP meeting. A rough-cut plan is a form of planning that is used to solve for future demand. In this screenshot, we are looking at the page to create a rough-cut plan, we needed to input the information from the previous task into the correct sections to create our plan. From this screenshot we can see that we have inputted for our sales to be 30 cases in January, 40 in February, and 50 in March. SAP has responded by creating a plan to have enough stock and responding to what we need for production.

Product group: 28 NRG GROUP 28 NRG-A and NRG-B Group  
Plant: 28PT  
Version: 528 Version 528 New, inactive

SOP: plan individual product group

Planning Table	Un	M 12/2023	M 01/2024	M 02/2024	M 03/2024	M 04/2024	M 05/2024	M 06/2024	M 07/2024
Sales	CV		30	40	50				
Production	CV		30	40	50				
Stock level	CV								
Target stock level	CV								
Range of Coverage	●●●								
Target days' supply	●●●								

Save Cancel

Once we have reviewed our information we can save it to trigger the plan, SAP will give us a notification at the bottom of our screen to acknowledge the saved document.

Plan saved under version number 528

## Task #10-Disaggregate Rough Cut Plan

In this task we were asked to disaggregate and transfer the planning for the NRG group to the individual products. This means we are looking at the individual raw material to further look into the rough-cut plan. In this screenshot we have changed the required group and have been given an error log to notify us of the change.

The screenshot shows the SAP Error Log interface. At the top, it says "Error Log" and "Message log created on 12/07/2023". Below this, there is a summary of message counts:

- Number of Messages: 2
- Information Messag: 0
- Warning Messages: 2
- Error Messages: 0

The main part of the screenshot is a table with the following columns: MT, Ar, Numb, Message-Text, Material, MRP Ar, Plant, Req. DV, and ReqmtsPl. Two rows of error messages are visible, both with a severity of 'W' (Warning) and a number of '6P'. The message text for both is "Requirement existed in deleted state, and was changed". The first row is for Material 28F100, and the second is for Material 28F110. Both are associated with MRP Ar 28PT and Plant 28PT, and the Req. DV is VSF AG.

MT	Ar	Numb	Message-Text	Material	MRP Ar	Plant	Req. DV	ReqmtsPl
W	6P	513	Requirement existed in deleted state, and was changed	28F100	28PT	28PT	VSF AG	
W	6P	513	Requirement existed in deleted state, and was changed	28F110	28PT	28PT	VSF AG	

## Task #11- Stock/Requirements List

In this task we were asked to look at the stock/requirements list after creating our rough-cut plan for the three months. Here we can see that the stock is getting impacted by a "IndReq" which represents the forecasted needed for finished goods. The "IndReq" is for the month and amount assigned.

Material: 28F110  
Description: 28 NRG-B  
MRP Area: 28PT 28 Fitter Snacker Plant  
Plant: 28PT MRP type: PD Material type: FERT Unit: CV

A...	Date	MRP el...	MRP element data	Rescheduling... E...	Receipt/Reqmt	Available Qty
	12/07/2023	Stock				7
	01/01/2024	IndReq	VSF		11-	4-
	02/01/2024	IndReq	VSF		14-	18-
	03/01/2024	IndReq	VSF		18-	36-

Material: 28F100  
Description: 28 NRG-A  
MRP Area: 28PT 28 Fitter Snacker Plant  
Plant: 28PT MRP type: PD Material type: FERT Unit: CV

A...	Date	MRP el...	MRP element data	Rescheduling... E...	Receipt/Reqmt	Available Qty
	12/07/2023	Stock				934
	01/01/2024	IndReq	VSF		20-	914
	02/01/2024	IndReq	VSF		26-	888
	03/01/2024	IndReq	VSF		33-	855

## Task 12- Running MRP

In this task we were asked to run MRP, MRP is a system that is used to calculate the future forecasted need of products. In the background MRP is looking at all the products needed to create the finished products and the amounts, it is making more stock as we need it and creating a forecasted plan.

The image displays two screenshots of the SAP MRP Run interface. The top screenshot shows the 'Statistics' and 'Parameters' sections, while the bottom screenshot shows 'Database Statistics', 'Runtime Statistics', and a 'Ranking List of Materials with Highest CPU Times' table.

**Statistics**

Materials planned	17
Materials with New Exceptions	2
Materials with Termination MRP List	

**Parameters**

Scope of Planning	
Plnt	28PT
Processing Key	NEUPL
Create Purchase Requisition	2
SA Schedule Line	3
Create MRP List	1
Planning Mode	1
Scheduling	1
MRP Date	12/07/2023

**Database Statistics**

Planned orders created	12
Dependent requirements created	72

**Runtime Statistics**

Start of Planning Run	16:14:15
End of Planning Run	16:14:16
Runtime	00:00:01
CPU Time Read-In	00:00:01
.. Read In Preread Mat. Package	00:00:01

**Ranking List of Materials with Highest CPU Times (in ms)**

Material	MRP Area		Plnt
Runtime	Read	Net Calc.	Update
28S210		28PT	28PT

SAP MRP Run

More ▾

Material	Runtime	Read	Net Calc.	MRP Area		Plnt
				BOM	LdTmeSched	Update
28S210				28PT		28PT
	132	64	2	15	0	50
28F110				28PT		28PT
	76	1	18	23	0	34
28S200				28PT		28PT
	72	66	0	0	0	6
28F100				28PT		28PT
	24	4	1	0	0	17
28R300				28PT		28PT
	10	2	1	0	0	6
28R360				28PT		28PT
	9	1	0	0	0	6
28R380				28PT		28PT
	8	2	0	0	0	6
28R370				28PT		28PT
	8	2	0	0	0	6
28R340				28PT		28PT
	8	1	0	0	0	5
28R320				28PT		28PT

## Task 13-Updated Stock/Requirements List

In this task we were asked to look at our updated stock/requirements list after running MRP. In this screenshot we can see that nothing has happened to our stock for NRG-A bars as we have enough available stock for the order or do not need the product for the current order. We can see the same "IndReq" that is taking stock for the order from the available stock.

SAP Stock/Requirements List as of 16:21 hrs

Show Overview Tree

Material: 28F100  
 Description: 28 NRG-A  
 MRP Area: 28PT 28 Fitter Snacker Plant  
 Plant: 28PT MRP type: PD Material type: FERT Unit: CV

A...	Date	MRP el...	MRP element data	Rescheduling... E...	Receipt/Reqmt	Available Qty
	12/07/2023	Stock				934
	01/01/2024	IndReq	VSF		20-	914
	02/01/2024	IndReq	VSF		26-	888
	03/01/2024	IndReq	VSF		33-	855

In this screenshot we can see lots more happening, we can see “PldOrd” which means planned order that MRP has suggested we plan to make to meet the order amount as we don’t have enough stock and the same “IndReq” which is what we need for the order.

Material: 28F110  
Description: 28 NRG-B  
MRP Area: 28PT 28 Fitter Snacker Plant  
Plant: 28PT MRP type: PD Material type: FERT Unit: CV

A...	Date	MRP el...	MRP element data	Rescheduling...	E...	Receipt/Reqmt	Available Qty	Pr...
	12/07/2023	Stock					7	
	01/01/2024	PldOrd	0000007497/STCK			7	14 000	
	01/01/2024	IndReq	VSF			11-	3	
	02/01/2024	PldOrd	0000007498/STCK			7	10 000	
	02/01/2024	PldOrd	0000007499/STCK			7	17 000	
	02/01/2024	IndReq	VSF			14-	3	
	03/01/2024	PldOrd	0000007500/STCK			7	10 000	
	03/01/2024	PldOrd	0000007501/STCK			7	17 000	
	03/01/2024	PldOrd	0000007502/STCK			7	24 000	

## Task 14-Stock/Requirements List for Dough

In this screenshot we can see the stock/requirements list for our semi-finished product NRG-B dough, here we can see another “PldOrd” created by the MRP system suggesting to us to make for product of dough to meet the required “DeqReq” which represents dependant requirement. The lot size for dough to be make in is 500, which is why there is multiple “DeqReq”.

Material: 28S210  
Description: 28 Dough NRG-B  
MRP Area: 28PT 28 Fitter Snacker Plant  
Plant: 28PT MRP type: PD Material type: HALB Unit: LB

A...	Date	MRP el...	MRP element data	Rescheduling...	E...	Receipt/Reqmt	Available Qty	Pr...
	12/07/2023	Stock					0	
	12/31/2023	PldOrd	0000007503/STCK			500	500 000	
	12/31/2023	DepReq	28F110			500-	0	
	01/31/2024	PldOrd	0000007504/STCK			500	500 000	
	01/31/2024	PldOrd	0000007505/STCK			500	1,000 000	
	01/31/2024	DepReq	28F110			500-	500	
	01/31/2024	DepReq	28F110			500-	0	
	02/29/2024	PldOrd	0000007506/STCK			500	500 000	
	02/29/2024	PldOrd	0000007507/STCK			500	1,000 000	

## Task 15-Stock/Requirements List for Raw Material Protein Powder

This screenshot is the stock/requirements list for one of our raw products. Due to the fact we already have enough stock to meet the requirements of the order we do not need a "PldOrd" instead we can just see the "DepReq's" that are needed for the order.

The screenshot displays the SAP Stock/Requirements List for Material 28R390. The material is described as "28 Protein Powder" and is associated with the plant "28 Fitter Snacker Plant". The MRP type is "PD" and the material type is "ROH". The unit is "LB".

The table below shows the requirements and available quantities for the material:

A...	Date	MRP el...	MRP element data	Rescheduling...	E...	Receipt/Reqmt	Available Qty
	12/07/2023	Stock					1,950
	12/30/2023	DepReq	28S210			50-	1,900
	01/30/2024	DepReq	28S210			50-	1,850
	01/30/2024	DepReq	28S210			50-	1,800
	02/28/2024	DepReq	28S210			50-	1,750
	02/28/2024	DepReq	28S210			50-	1,700
	02/28/2024	DepReq	28S210			50-	1,650

## Task 16-Recieve Customer Payment

In this task we are receiving payment from our customer, we need to post an incoming payment to notify SAP of the payment. We insert all the required information and click post to allow SAP to process the payment for the right account.

The screenshot shows the SAP 'Post Incoming Payments: Header Data' screen. The interface includes a top navigation bar with the SAP logo and the title 'Post Incoming Payments: Header Data'. Below the navigation bar, there are several input fields and buttons. The 'Document Date' and 'Posting Date' are both set to 12/07/2023. The 'Type' is 'DZ' and the 'Period' is '12'. The 'Company Code' is '28FS' and the 'Currency/Rate' is 'USD'. The 'Account' is '100000' and the 'Amount' is '5750'. The 'Open item selection' section shows 'Account: 28W200' and 'Account type: D'. The 'Additional selections' section has 'None' selected. A 'Post' button is visible at the bottom right.

We know SAP has processed the payment by the notification at the bottom of our screen.

The screenshot shows the same SAP 'Post Incoming Payments: Header Data' screen, but now with a notification at the bottom. The notification reads: 'Document 140000001 was posted in company code 28FS'. The 'Post' button is still visible at the bottom right.

Our document flow now shows that the journal entry of the payment has been cleared and the procurement process has been complete.

**Business Partner** 28W200 28 Meijer, Inc.  
**Material** 28F100 28 NRG-A

Document	Quantity	Unit	Ref. Value	Currency	On	Time	Status
Inquiry 0010000438 / 10	25	CV	5,750.00	USD	12/04/2023	21:45:53	Completed
Standard Order 0000000435 / 10	25	CV	5,750.00	USD	12/04/2023	23:14:32	Completed
Outbound Delivery 0080000393 / 10	25	CV			12/04/2023	23:23:47	Completed
Picking Request 20231204 / 10	25	CV			12/04/2023	23:28:44	Completed
GD goods issue:delvly 4900000643 /	25	CV	5,040.00	USD	12/04/2023	23:32:03	Complete
Invoice 0090000334 / 10	25	CV	5,750.00		12/04/2023	23:41:27	Completed
Journal Entry 0090000003	25	CV			12/04/2023	23:41:27	Cleared

## Task 17-The Production Process

In this task we have been asked to carry out the production of 7 cases of NRG-B bars. In this first screenshot we are looking at the stock/requirements list, here we can see we have available quantity of 7 for NRG-B bars. To make NRG-B bars we need to have dough and raw materials, this process will need to make more dough as we have 0 stock of dough.

**Plant:** 28PT 28 Fitter Snacker Plant  
**MRP Controller:** 028 FS Controller

Light	Valid from date	Material	MRP Area	Material description	A Stock	1st RDS	2nd RDS	1	2	3	4	5	6	7	8	Plant stock	BU	Un	Re	MTyp	PT
		28S210	28PT	28 Dough NRG-B	23.0	999.9	999.9									0	LB	0	0	HALB	X
		28F110	28PT	28 NRG-B	24.6	999.9	999.9									7	CV	0	0	FERT	E
		28F100	28PT	28 NRG-A	999.9	999.9	999.9									934	CV	0	0	FERT	E
		28R300	28PT	28 Canola	999.9	999.9	999.9									993	GAL	0	0	OROH	F
		28R310	28PT	28 Carob Chips	999.9	999.9	999.9									1,000	LB	0	0	OROH	F
		28R320	28PT	28 Cinnamon	999.9	999.9	999.9									495	LB	0	0	OROH	F
		28R330	28PT	28 Cloves	999.9	999.9	999.9									499	LB	0	0	OROH	F
		28R340	28PT	28 Dates	999.9	999.9	999.9									930	LB	0	0	OROH	F
		28R350	28PT	28 Hazelnuts	999.9	999.9	999.9									970	LB	0	0	OROH	F
		28R360	28PT	28 Honey	999.9	999.9	999.9									690	GAL	0	0	OROH	F
		28R370	28PT	28 Nutmeg	999.9	999.9	999.9									498	LB	0	0	OROH	F
		28R380	28PT	28 Oats	999.9	999.9	999.9									43,750	LB	0	0	OROH	F
		28R390	28PT	28 Protein Powder	999.9	999.9	999.9									1,950	LB	0	0	OROH	F

17 materials were selected

In this screenshot we are accepting the "PldOrd" for 500 LB of NRG-B dough as we need dough to make the bars.

Material: 28S210  
Description: 28 Dough NRG-B  
MRP Area: 28PT 28 Fitter Snacker Plant  
Plant: 28PT MRP type: PD Material type: HALB Unit: LB

A...	Date	MRP el...	MRP element data	Rescheduling... E...	Receipt/Reqmt	Available Qty	Pr...
	12/07/2023	Stock				0	
	12/31/2023	PldOrd	0000007503/STCK		500	500	000
	12/31/2023	DepReq	28F110		500-	0	

Additional Data for MRP Element

Plnd Order: 0000007503 Make-to-stock Order End Date: 12/31/2023 GR pr.time: 0  
Order Qty: 500 LB Order Start: 12/30/2023 Proc. type: E  
Scrap: 0 Opening Date: 12/29/2023 Order Type: LA

-> Prod.Ord. -> PartConvProdOrder -> Proc.Ord. -> SubProcOrd -> Pur.Req. ★ ✕

In this screenshot we are creating a production order for our 500 Lb of NRG-B dough to confirm the production amount.

Order: %00000000001  
Material: 28S210 28 Dough NRG-B  
Status: REL MANC SETC  
Type: PP01  
Plant: 28PT

General Assignment Goods Receipt Control Dates/Qties Master Data Long Text Administration Items Fast Entry

Quantities

Total Qty: 500 LB Scrap Portion: 0.00 %  
Delivered: 0 Short/Exc. Rcpt: 0

Dates/Times

Basic Dates	Scheduled	Confirmed
End: 12/31/2023 00:00	12/29/2023 24:00	
Start: 12/28/2023 00:00	12/29/2023 23:00	00:00
Release:	12/28/2023	12/07/2023

Release carried out Save Cancel

In this screenshot we are checking back in with the stock/requirements list for NRG-B bars so acknowledge that the “PldOrd” has been turned into “PrdOrd” which represents production order and now the stock is ready to be made and the available quantity will be 500.

Material: 28S210  
Description: 28 Dough NRG-B  
MRP Area: 28PT 28 Fitter Snacker Plant  
Plant: 28PT MRP type: PD Material type: HALB Unit: LB

A...	Date	MRP el...	MRP element data	Rescheduling... E...	Receipt/Reqmt	Available Qty	Pr...
	12/07/2023	Stock					0
	12/31/2023	PrdOrd	000001000281/PP01/Re			500	500 000
	12/31/2023	DepReq	28F110			500-	0
	01/31/2024	PldOrd	0000007504/STCK			500	500 000
	01/31/2024	PldOrd	0000007505/STCK			500	1,000 000
	01/31/2024	DepReq	28F110			500-	500
	01/31/2024	DepReq	28F110			500-	0
	02/29/2024	PldOrd	0000007506/STCK			500	500 000
	02/29/2024	PldOrd	0000007507/STCK			500	1,000 000

The list was created at 21:11 hours [View details](#)

In this screenshot we are looking at the goods issue order which will show us all the materials needed for production of the dough.

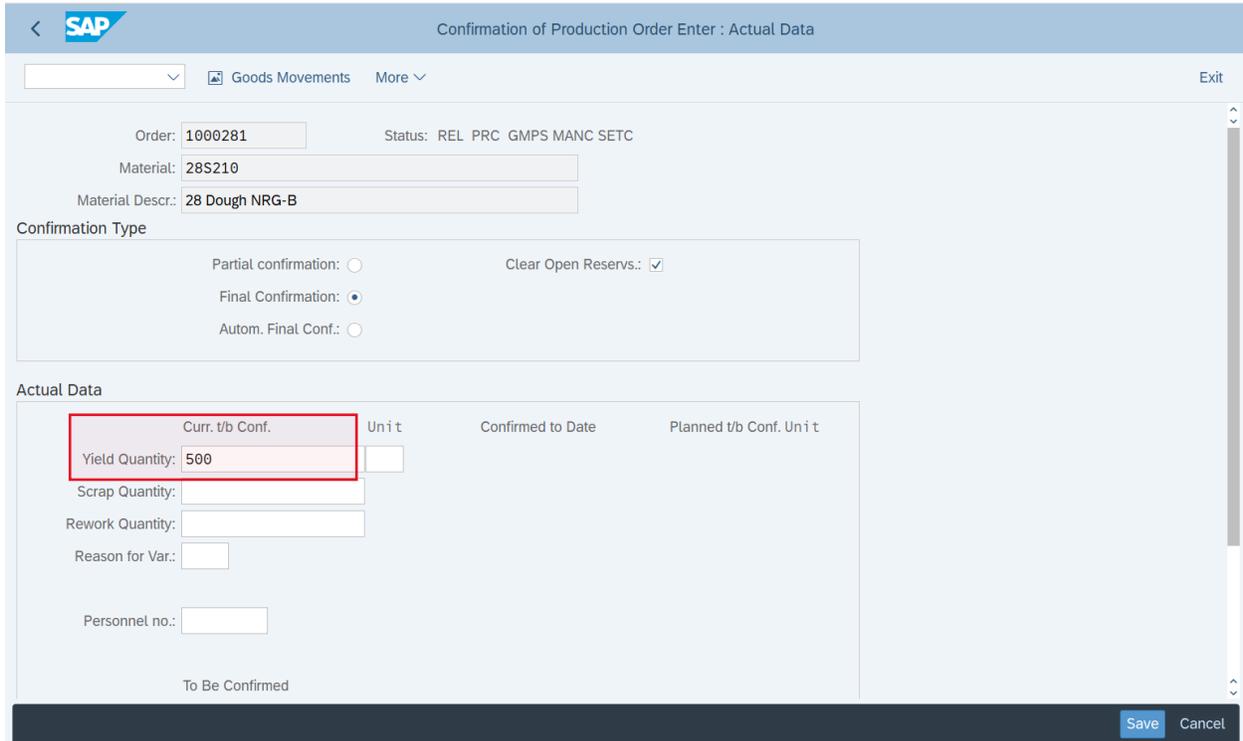
Goods Issue Order 1000281 - FS-28

Document Date: 12/07/2023  
Posting Date: 12/07/2023  
Material Slip:   
Doc.Header Text:

Line	Mat. Short Text	W OK	Qty in UnE	EUn	Sloc	Order
1	28 Oats	<input checked="" type="checkbox"/>	250	LB	Raw Materials	1000281
2	28 Wheat Germ	<input checked="" type="checkbox"/>	50	LB	Raw Materials	1000281
3	28 Cinnamon	<input checked="" type="checkbox"/>	5	LB	Raw Materials	1000281
4	28 Nutmeg	<input checked="" type="checkbox"/>	2	LB	Raw Materials	1000281

Buttons: Post Cancel Restart Hold Check

In this screenshot we are confirming the production of the dough as SAP will not do it until a employee confirms its suggestion.



The screenshot shows the SAP interface for confirming a production order. The title bar reads "Confirmation of Production Order Enter : Actual Data". The header includes a navigation menu with "Goods Movements" and "More", and an "Exit" button. The main form contains the following fields:

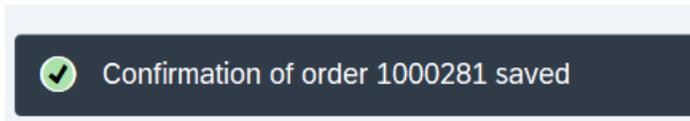
- Order: 1000281
- Status: REL PRC GMPS MANC SETC
- Material: 28S210
- Material Descr.: 28 Dough NRG-B

The "Confirmation Type" section has three radio buttons: "Partial confirmation:" (unselected), "Final Confirmation:" (selected), and "Autom. Final Conf.:" (unselected). There is also a checked checkbox for "Clear Open Reservs.:". Below this is the "Actual Data" section with a table:

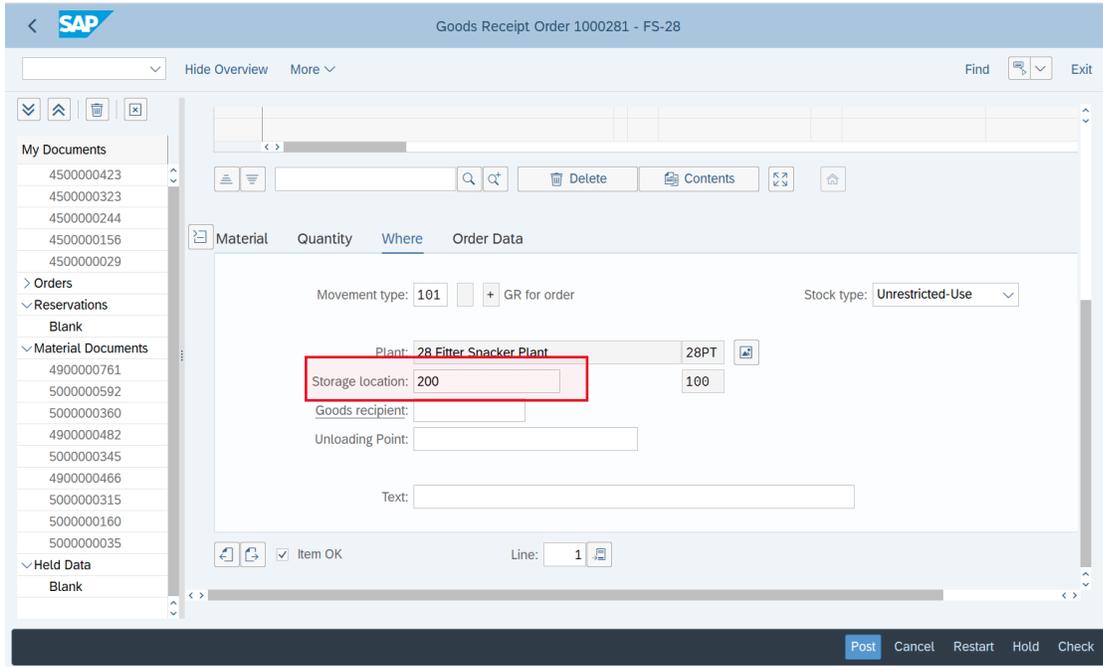
	Curr. t/b Conf.	Un i t	Confirmed to Date	Planned t/b Conf. Un i t
Yield Quantity:	500			
Scrap Quantity:				
Rework Quantity:				
Reason for Var.:				
Personnel no.:				

At the bottom of the form, there is a "To Be Confirmed" label and a dark blue bar with "Save" and "Cancel" buttons.

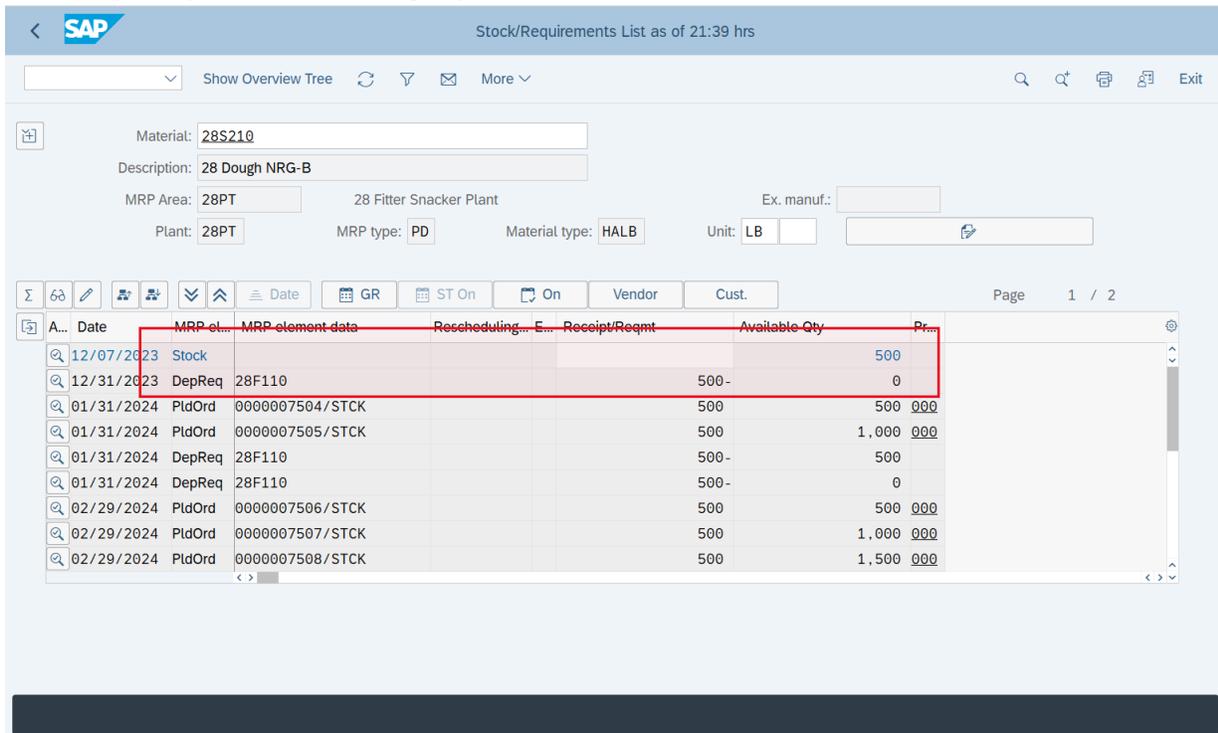
We know the confirmation has been saved by the notification SAP returns us.



In this screenshot we are changing the location of the raw materials to the production line. This triggers the warehouse to transport the products where needed.



Now we can see on the stock/requirements list that the production order has been cleared and we have 500 available quantity with no outstanding requirements for that order.



Now that we have enough dough SAP will start the process all over again but with the finished product NRG-B bars.

Goods Receipt Order 1000282 - FS-28

Document Date: 12/07/2023  
Posting Date: 12/07/2023

Individual Slip

Line	Mat. Short Text	W OK	Qty in UnE	EUn	SLoc	Stock Segment
1	28 NRG-B	<input checked="" type="checkbox"/>	7	CV	Finished Goods	

Material    Quantity    Where    Order Data

Post    Cancel    Restart    Hold    Check

In this screenshot we have changed the "PldOrd" again for the bars to trigger SAP to make the product.

Stock/Requirements List as of 21:42 hrs

Material: 28F110  
Description: 28 NRG-B  
MRP Area: 28PT    28 Fitter Snacker Plant  
Plant: 28PT    MRP type: PD    Material type: FERT    Unit: CV

A...	Date	MRP e...	MRP element data	Rescheduling... E...	Receipt/Reqmt	Available Qty	Pr...
	12/07/2023	Stock				7	
	01/01/2024	PrdOrd	000001000282/PP01/Re		7	14	000
	01/01/2024	IndReq	VSF		11-	3	
	02/01/2024	PldOrd	0000007498/STCK		7	10	000
	02/01/2024	PldOrd	0000007499/STCK		7	17	000
	02/01/2024	IndReq	VSF		14-	3	
	03/01/2024	PldOrd	0000007500/STCK		7	10	000
	03/01/2024	PldOrd	0000007501/STCK		7	17	000
	03/01/2024	PldOrd	0000007502/STCK		7	24	000

Page 1 / 2

The finished stock requirement list shows that we now have 7 more available quantity from the original stock/requirement list it now equals 14.

Material: 28F110  
 Description: 28 NRG-B  
 MRP Area: 28PT 28 Fitter Snacker Plant  
 Plant: 28PT MRP type: PD Material type: FERT Unit: CV

A...	Date	MRP el...	MRP element data	Rescheduling... E...	Receipt/Reqmt	Available Qty	Pr...
	12/07/2023	Stock				14	
	01/01/2024	IndReq	VSF			11-	3
	02/01/2024	PldOrd	0000007498/STCK			7	10 000
	02/01/2024	PldOrd	0000007499/STCK			7	17 000
	02/01/2024	IndReq	VSF			14-	3
	03/01/2024	PldOrd	0000007500/STCK			7	10 000
	03/01/2024	PldOrd	0000007501/STCK			7	17 000
	03/01/2024	PldOrd	0000007502/STCK			7	24 000
	03/01/2024	IndReq	VSF			18-	6

## Conclusion

This class has been so helpful in me learning my way around SAP and learning valuable skills. I feel more confident in the supply chain industry as I have knowledge on this software. I now know how to complete tasks that are based around and look at SAP steps such as creating inquiries, the procurement process, the bill of materials, and other important tasks completed in SAP software.