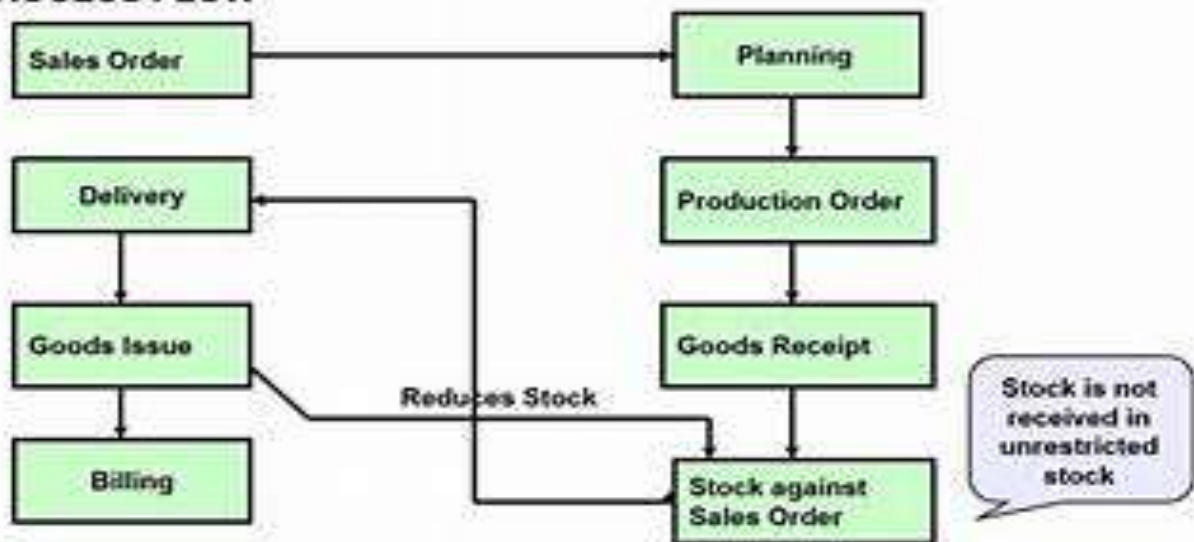# Make to Order (MTO)

In this scenario without customer or sales order we cannot start the production activities.

The product is not manufactured in advance, but produced once the customer order is received, as with high-end cars - BMW, ODDI, Land lover, motorcycles, textile products etc.

There is no forecasting involved.

Make to order products are specialized products which may be costly or highly customized, such that the manufacturer should not freeze capital by making and storing the goods in advance of the customer's order.

In the make to order production process, a sales order initiates the demand for production. The production department creates a bill of material to produce the required quantity and runs MRP. Requirements for components manufactured in-house are sent to the respective department and if any component needs to be purchased, a purchase requisition is raised and sent to the procurement department. Once the make to order production

process is completed, finished good are transferred to a storage location as "special stock". Finally, the finished goods are delivered and invoicing is carried out.

The produced quantity for individual sales order cannot be changed. Each quantity is maintained for the specific individual customer.

We will walk through the following steps in the below sections:

1. Update Material Master
2. Create Sales Order
3. Check Production Order
4. Execute Delivery
5. Generate Billing

For MTO scenario we can use planning strategy 20.

Planning strategy 20:

It is also called as pure make to order strategy.

In this strategy – 20 product is specially manufactured for customer order or sales order there is no forecasting involved.
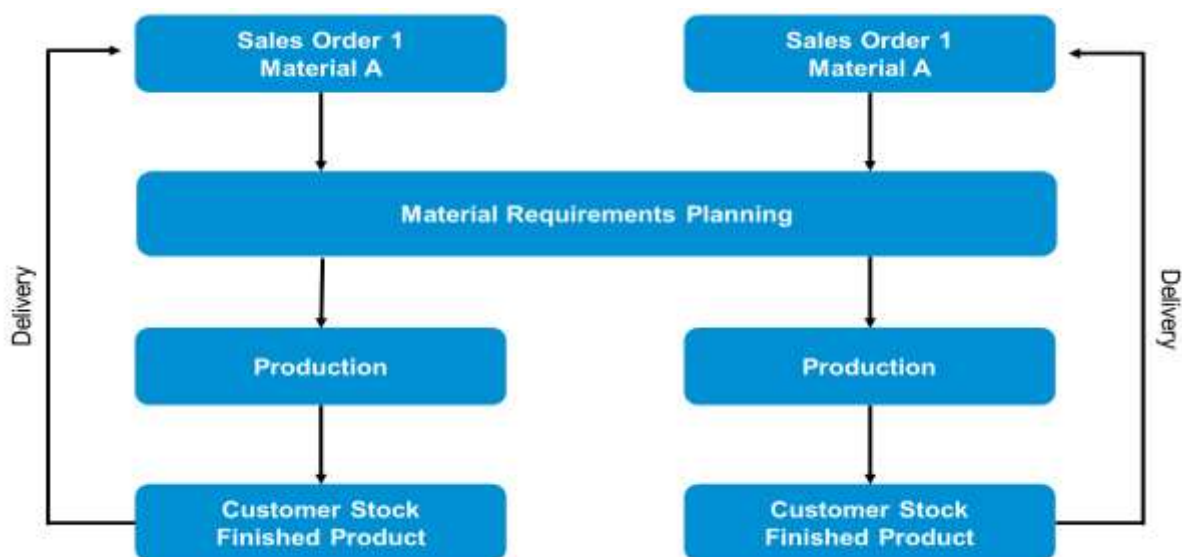
In this strategy – 20 without sales or customer order we cannot start the manufacturing activities, until and unless we receive the

sales order then we will start the actual production for Header and down-level material.

In this we consider only sales order specific stock in our plant.

Sale order or customer order will be the trigger point for production.

In this strategy – 20 available stocks consider and **PIR** getting consumed **by the sales order**. Suppose company receives 2 sales orders. With planning strategy 20, each sales order is planned separately. The system does not perform a net requirements calculation between individual sales orders or with the make-to-stock warehouse stock.
We can assign strategy group in **MRP – 2** views

In make-to-order production, lot-for-lot order quantity is used as the default lot-sizing procedure, independent from the setting in the material master.

The produced product for one sales order cannot be exchanged or used for another sales order. Each sales order has its own separate stock, which is managed directly within the corresponding sales order.

The sales order stock and the requirement are reduced by a goods issue to the sales order.

Configuration path of planning strategy – 20

SPRO – SAP REF IMG

Production
Production Planning
Demand Management
Planned Independent Requirements
Planning Strategy
Define Strategy
Define Strategy Group
Assign MRP Group to Strategy Group
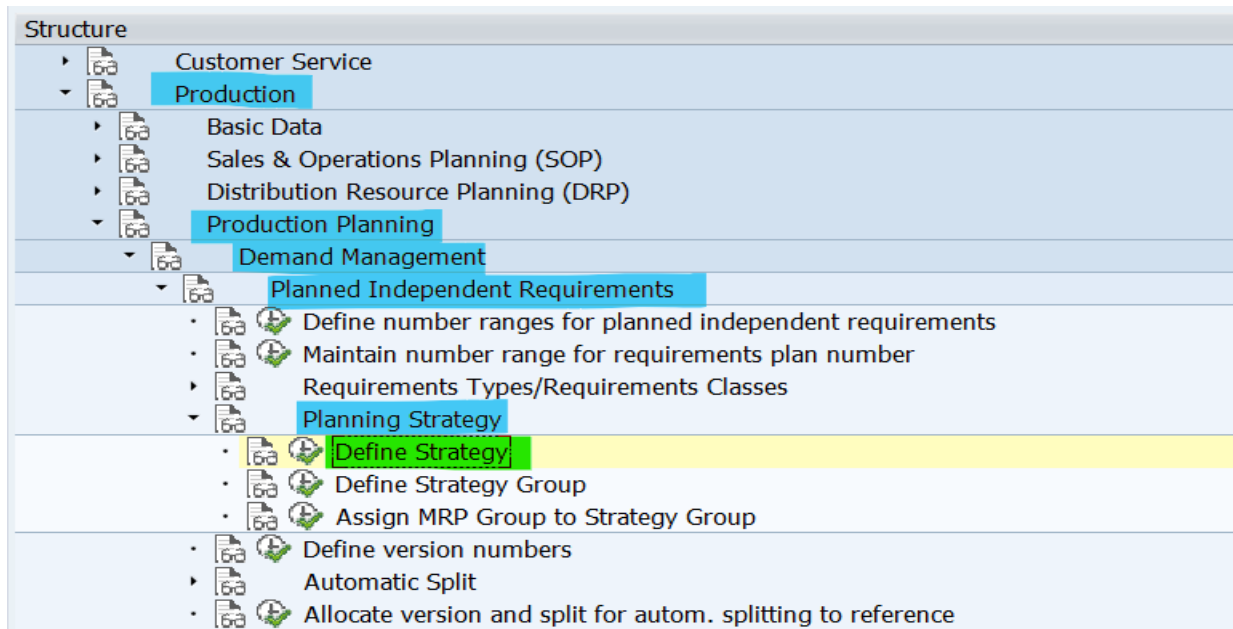
For practically run the Make to order scenario we need to maintain following views and parameters in material master.

Steps:

1. Create material master

    FG – Cylinder 3169 – using Strategy Group – 20
    ROH – Pump 5198 – using General scenario

    Using Sales 1, 2, 3 Views with all required data.

2. Create Bill of material

3. Create Work center

4. Create Routing

5. Create Sales Order using Customer reference

6. MRP run against Sales Order

7. Check stock requirement list

8. Check ROH stock
9. Convert Planned order to production order
10. Conform production order.

Practically creation process

Basic data 1

Sales 1 view – Maintain Tax data.

Maintain Sales 2 view – General and Item category group.

Maintain Sales 3 View – Transportation and loading group.

Accounting 1 view – Maintain MTO valuation class

Create Bill of material

Create Work center and Create Routing Using general procedure.

Create Sales Order using (Customer reference)

Check stock requirement list for FG material and see order 307 is generated with planning strategy 20.

MRP Run against the sales order using T Code MD50
Here system automatically capture Material and plant key.

Again, check stock requirement list for FG material and see planned order is generated against sales order 307.

Stock/Requirements List as of 16:32 hrs

Show Overview Tree

Material	3169	Q	Cylinder			
Plant	0001	MRP Type	PD	Material Type	FERS	Unit	PC

A..	Date	MRP e...	MRP element data	R...	E..	Receipt/Req...	Available Qty
	08.04.2024	Stock					0
	08.04.2024	CustSt	0000000306/000020				0
	08.04.2024	CusOrd	0000000306/000020/0001			5-	5-
	08.04.2024	CustSt	0000000307/000020				0
	08.04.2024	CusOrd	0000000307/000020/0001			10-	10-

Check stock requirement list for ROH material and convert PR to PO and increase the ROH stock.

Stock/Requirements List as of 16:56 hrs

Show Overview Tree

Material	5198	Q	Pump			
Plant	0001	MRP Type	PD	Material Type	ROHS	Unit	PC

A..	Date	MRP e...	MRP element data	R...	E..	Receipt/Req...	Available Qty	Sto...
	08.04.2024	Stock					0	
	08.04.2024	CustSt	0000000306/000020				0	
	08.04.2024	DepReq	3169			5-	5-	FG01
	09.04.2024	PurRqs	0010000095/00010			5	0	RM01
	08.04.2024	CustSt	0000000307/000020				0	
	08.04.2024	DepReq	3169			10-	10-	FG01
	09.04.2024	PurRqs	0010000094/00010			10	0	RM01

Again, check stock requirement list for ROH material and see **PO** is generated.

Stock/Requirements List as of 17:15 hrs

Show Overview Tree

| Material | 5198 | Pump |
| Plant | 0001 | MRP Type | PD | Material Type | ROHS | Unit | PC |

A..	Date	MRP e...	MRP element data	Re...	E..	Receipt/Reqmt	Available Qty	Sto...
	08.04.2024	Stock					0	
	08.04.2024	CustSt	0000000306/000020				0	
	08.04.2024	DepReq	3169			5-	5-	FG01
	09.04.2024	PurRqs	0010000095/00010			5	0	RM01
	08.04.2024	CustSt	0000000307/000020				0	
	08.04.2024	DepReq	3169			10-	10-	FG01
	09.04.2024	POitem	4500000395/00010			10	0	RM01

Also check PO document for ROH 5198

Standard PO 4500000395 Created by AJAY.SN

Document Overview On   Print Preview   Messages   Personal Setting   Save As Tem

| NB Standard PO | ▼ | 4500000395 | Vendor | 60000037 Vendor 01 | Doc. d |

Header

S..	Itm	A	I	Material	Short T...	PO Quantity	OUn	C	Deliv. Date	Net Price	Curr...	Per	O...
	10	E		5198	Pump	10	PC	D	09.04.2024	70.00	INR	1	PC
											INR		
											INR		
											INR		
											INR		
											INR		
											INR		
											INR		
											INR		
											INR		
											INR		

Default Values   Add

Then MIGO for GRN of ROH material.

Then Check stock requirement list for ROH.
Here checks stock is generated against sales order 307, means this stock we can use only against sales order 307, **we cannot use this stock to other sales order** this is also known as **sales order specific stock.**

Now for FG - 3169 Material converts planned order to production order from MD04 screen.

Now production order is created.

Also check **individual customer stock** indicator on Production order screen (In component).

Now check MD04 production order is generated.

Then conform the production order 1000102. And also check E – sales order specific stock indicator and Customer name.

Then MIGO for GRN of FG - 3169 Material.

Then lastly check the Finished material stock against the Sales order – **307** and quantity - **10** using MD04 T code.

Please check here our stock is generated against the sales order - **307** for FG Material this is nothing but customer order specific stock this is also called as **MTO** process.

And due to this reason, our stock is not generated against the Available Qty.

Note:

When this stock is dispatched using the outbound delivery by dispatch team against the sales order to a customer then this stock will be consumed.

In this MTO scenario planning has been done according to the sales order. Now our **MTO** process is Done.

Thank You….