

# **Warehouse Redesign Project**

## **Introduction**

As our local distribution centre's one-third part has been declared unsafe by the Engineering Department of the city. As a result, they have ordered to close the area until it gets repaired. So, we have decided to find a third-party warehouse where we can shift our warehouse one-third workload to the other warehouse. After a research we have secured a warehouse in the same city which fits our requirements and the warehouse authority are also ready to rent out there space for 3 months .

This warehouse has a total area of 300,000 square feet and can fit a total number of 60 trailers for outbound and inbound purpose. Due to this warehouse the management has decided if we succeed in this transfer we can plan for the expansion of distribution centre in future in the same city and can agree on terms with the third-party warehouse management.

Transportation in this new warehouse is easily commutable as it near the 401 highway and can avoid the city traffic.

Right Now, we have a Total work force as follows: -

Operations Manager- 6

Team Leaders - 12

Total no. of associates – 400

QA – 11

Security – 25

Centroid – 80

Reach – 40

Pacer – 40

We have created a excel sheet of our weekly schedule of our total work force.

	Operations Manager		Team Leader		
	Day	Night	Days	Afternoon	Night
Monday	OM1	OM4	TL1/TL2/TL5	TL11	TL6/TL7/TL10
Tuesday	OM1	OM4	TL1/TL2/TL3	TL11/TL12	TL6/TL7/TL8
Wednesday	OM1/OM2/OM3	OM4/OM5/OM6	TL1/TL2/TL3/TL4	TL11/TL12	TL6/TL7/TL8/TL9
Thursday	OM1/OM2/OM3	OM4/OM5/OM6	TL1/TL2/TL3/TL4	TL11/TL12	TL6/TL7/TL8/TL9
Friday	OM2/OM3	OM5/OM6	TL3/TL4/TL5	TL11/TL12	TL8/TL9/TL10
Saturday	OM2/OM3	OM5/OM6	TL4/TL5	TL12	TL9/TL10
Sunday			TL5	CLOSED	TL10

	Associates			Security			QA		
	Days	Afternoons	Night	Day	Afternoon	Night	Day	Afternoon	Night
Monday	80+30	40	80+30	6+2	3	6+2	3	2	3
Tuesday	80	40+40	80	6+2	3	6+2	3	2	3
Wednesday	80+40	40+40	80+40	6+2	3	6+2	3	2+1	3
Thursday	80+40	40+40	80+40	6+2	3+2	6+2	3+1	2+1	3+1
Friday	40+30	40+40	40+30	2	2	2	1	1	1
Saturday	40+30+10	40	40+30+10	2+2	2	2+2	1	1	1
Sunday	30+10		30+10	2	2	2	1	Closed	1

#### Work Force

OM: -	6
TL: -	12
Associates: -	400
QA: -	11
Security: -	25
Total Work Force: -	454
Machinery	
Centroid	80
Reach	40
Pacer	40

So, due to the closure of our one-third part we have decided to transfer our afternoon shift to the third-party warehouse and the entire operation of the afternoon shift will be carried out in the new space acquired. Where it will be divided into 2- Shifts respectively.

Due to this we will be able to tackle the seasonal demand which is on our way and the management don't have to make huge changes in the work schedule.

Currently, Clothing items, household appliances, electronics, some furniture, food, office and school supplies, pet food and pet products, toys, household cleaners, paper products are been in operations in the current warehouse. Whereas the seasonal products such as Christmas trees, decorations and wrapping paper will be added due to the Christmas season.

So the management has decided to transfer the seasonal items and some items from the existing freight such as paper products which will accommodated in the new acquired warehouse .

In this new location we have decided to focus maximum on the cross docking and will convert the inbound freight into pallets and then delivery it to the respective stores. Due to this, the workload of picking can be reduced at some extent and the operations can be managed at minimum obstacles.

Now for the machineries we have decided to transport some of the machineries to the new location through our own fleet .

Following are numbers of machineries that will be transferred to the new location: -

Centroid: - 25

Reach: - 10

Pacer: - 15

In the new location we will be needing more pacers as compared to the reach machines as our maximum focus will be on the cross docking in the new warehouse.

Also, we have requested the stores to manage excess stocks for the Christmas season as we have a huge workload coming on the way.

The new working structure in the new location will be as follows: -

Third Party Location

	Team Leader		Associates		Security		QA	
	Days	Afternoon	Days	Afternoon	Days	Afternoon	Days	Afternoon
Monday	TL11	TL12	40	40	3	2	2	2
Tuesday	TL11	TL12	40	40	3	2	2	2
Wednesday	TL11	TL12	40	40	3	2	2	2
Thursday	TL11	TL12	40	40	3	2	2	2
Friday	TL11	TL12	40	40	3	2	2	2
Saturday	CLOSED							
Sunday								

New Schedule for existing Warehouse

	Operations Manager		Team Leader		Associates		Security		QA	
	Day	Night	Days	Night	Days	Night	Day	Night	Day	Night
Monday	OM1	OM4	TL1/TL2/TL5	TL6/TL7/TL10	80+30	80+30	6+2	6+2	3	2
Tuesday	OM1	OM4	TL1/TL2/TL3	TL6/TL7/TL8	80	80	6+2	6+2	3	2
Wednesday	OM1/OM2/OM3	OM4/OM5/OM6	TL1/TL2/TL3/TL4	TL6/TL7/TL8/TL9	80+40	80+40	6+2	6+2	3	2
Thursday	OM1/OM2/OM3	OM4/OM5/OM6	TL1/TL2/TL3/TL4	TL6/TL7/TL8/TL9	80+40	80+40	6+2	6+2	3+	2+1
Friday	OM2/OM3	OM5/OM6	TL3/TL4/TL5	TL8/TL9/TL10	40+30	40+30	2	2	1	1
Saturday	OM2/OM3	OM5/OM6	TL4/TL5	TL9/TL10	40+30+10	40+30+10	2+2	2+2	1	1
Sunday			TL5	TL10	30+10	30+10	2	2	1	1

Here, the new warehouse has a 5-day shift and it will be closed on Saturday and Sunday. Also, to keep the workers satisfied and for co-operating with the new schedule we have decided to give them a bonus for their valuable support to the company. We have transferred a QA associate from night shift in the new warehouse to cover the workload on existing associates.

Any maintenance needed for the machineries will be provided on-site by the vendors.