**Car manufacturing and shipping project**

Description :

The automobile is perhaps the most important invention second only to electricity in the 20th century. It has changed life of man in a way unimaginable before its invention. Our experiment on a car manufacture company and proposed a simulation model to get better production and highest resource utility.

The whole model is divided by two part .First part is the car manufacturing process and second part is the transportation process.

In first part:

Chassis arrive with TRIA (.5,1,1.5). After that In axle and tire process axle and tire are fitted to the chassis.

In the next stage, the engine is fitted to the chassis. The engine is the power-producing component of the car. The power produced in the engine is use to propel the car. Engines are mostly of the internal combustion type.

The gearbox is then fitted into the chassis. The gearbox is the component that is used to change the speed supplied to the wheels.

The next stage involves the fitting of the radiator into the engine. The radiator helps in cooling the engine, transmitting the excess heat to the surrounding by conduction.

After arrival of chassis in each process service time is TRIA (.5,1,1.5).All process has same main supervisor , sub supervisor and individual process specialized 2 worker.

After radiator process 70% car go to next process and 30% car go to car decompose station via car route.

Next portion of first part :

The seats are then fitted to the car in the next stage.

The battery is then fitted and electrical connections are carried out. The electrical connections connect the various components of the car to the battery.

The body of the car is then fitted on the chassis.

The windshield, doors, and wipers are fitted to the car along with the bonnet.

The finishing touches are carried out on the car.

The car is then sent for inspection and testing after which it is taken to the parking lot and kept ready for shipping.

After finishing process 80% car go to transportation section using complete car route and 20% car go to rebuild car station.

In this portion each process service time is TRIA (0.5 , 1 , 1.5). All process has same main supervisor and individual process specialized 2 worker.

Now come to the transportation part :

From the manufactured car station at first all the cars are go to parking lot process .

Once the specified number of cars is available, they are loaded on to the trucks as per the capacity of the trucks.

These trucks then transport the vehicles to the specified destination, such as a dock, where all these trucks are then handed over to a distributor.

At the dock, the vehicles are unloaded from the trucks, and then loaded onto a ship.

Once the ship is loaded to its capacity, it is then directed to its destination, which may be other countries, or within the nation, but to different states.

In this portion each process service time is TRIA (0.5 , 1 , 1.5). In loading of cars in truck and loading of truck in ship process have individual two schedule.

Schedule :

Everyone start work at 8 am and ends at 5 pm.

Main supervisor lunch hour break from 1.30 pm to 2.30 pm.

Sub Main supervisor lunch hour break from 2.00 pm to 3.00 pm.

From 1.00 pm to 2.00 pm the workers will have 30 minute break each.

For first truck schedule :

From 10-12 am and 2-4 pm truck service will remain off.

From 9-10 am and 12-2 pm truck service will remain off.

For first shipping schedule :

From 11-1 am and 4-5 pm shipping service will remain off.

From 8-11 am shipping service will remain off.