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- Bulk supplies are a quarter of the total materials used in Balloon manufacture (770.000GBP) and these materials are used throughout the whole year, starting inventory is bigger than the purchase so this is why this number is significant.
- Inventories are always an asset because company can turn it into cash by selling them.
- Cameron Balloons can have a large quantity of inventory because of many reasons, for example:
 - They can inflate its assets and appear more profitable.
 - Having high inventories improve customer service because demand is satisfied effectively and delivering don't have to wait until materials to arrive.
 - They have less transportation cost because all inventories needed are ready to use in stock because some suppliers offer discounts if a company order a high level of materials.
 - High level inventory may be a consequence of price, for example, a company know that some material's price is always increasing so they decide to buy a high quantity of them to get always a better price.

On the other hand there are many reasons because of inventories may hind a company, for example:

- Having high level of inventories can have a high cost in storage and handling costs because inventories take space to be stored and have to be moved into and out of storage.
- More taxes are paid if end-of-year inventories are high and because of high level of inventory more insurances have to be paid.
- Companies are not used to have high level inventories because they usually need a high quantity of money for buying them and they have to waste a lot of money in maintenance, in fact, many companies are using a method to avoid this, called "Lean production". This method consist in buy as materials as needed to satisfy demand to reduce storage costs.
- In conclusion, Cameron Balloons, has to worry about this high level inventories at the start of the year and the should change the way the buy war and semi-finished materials needed during the production.

Moreover, Cameron Balloons knows his demand so exactly because it hasn't vary too much in last years and they are using a lean manufacturing so they should know how many materials they need to buy for satisfying their demand and minimize the inventory.

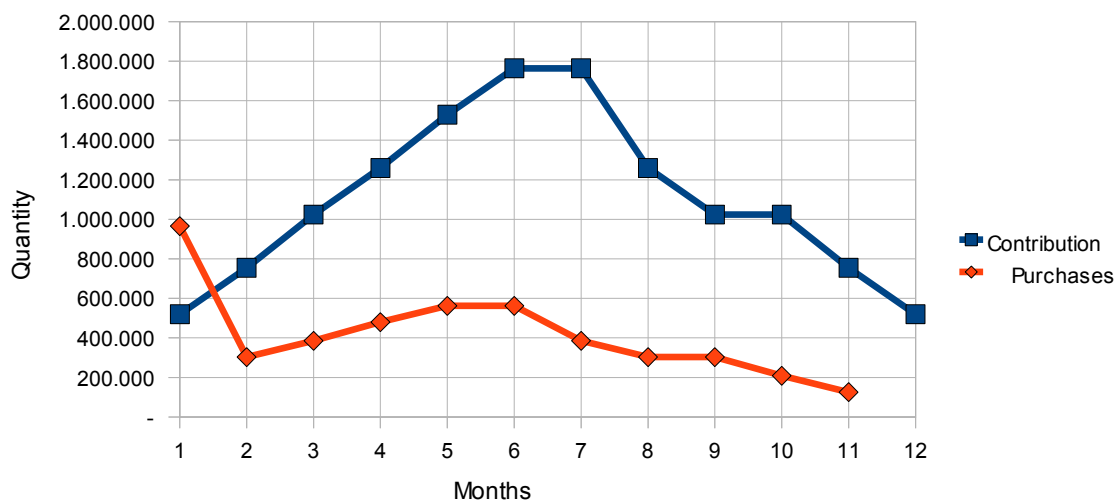
2.-

Cameron Balloons uses different kind of inventories to make his products and satisfy its demand, so 2 different ones can be identified:

- One of them is a big portion of inventory that is used each month to satisfy balloon and medicines demand, this quantities are proportional to purchases, and they may only be predicted estimating the demand of each product, this inventory is called **Cycle inventory**
- Second one is used to avoid customer service problems and hidden costs of unavailable components, moreover this kind of inventories are really important for Cameron Balloons because it's a company very involved with customer services. This inventory includes, service parts and ¿spares? And is called **Safety Stock inventory**.

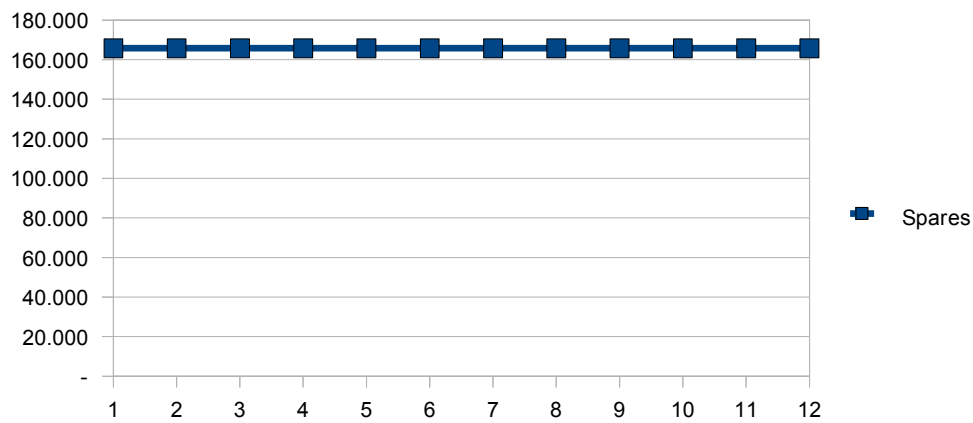
As can be seen in the spreadsheet given with inventory data, some conclusions can be obtained:

- **Cycle inventory** includes raw & semi-finished materials for made balloons, as said, this kind of inventory is bought every month depending of next month expected demand, so that, inventory grows when demand of balloons and medicines get higher. In the next graph we can see the purchases of inventory and the contribution (Total revenues – Total costs) of Cameron Balloons.



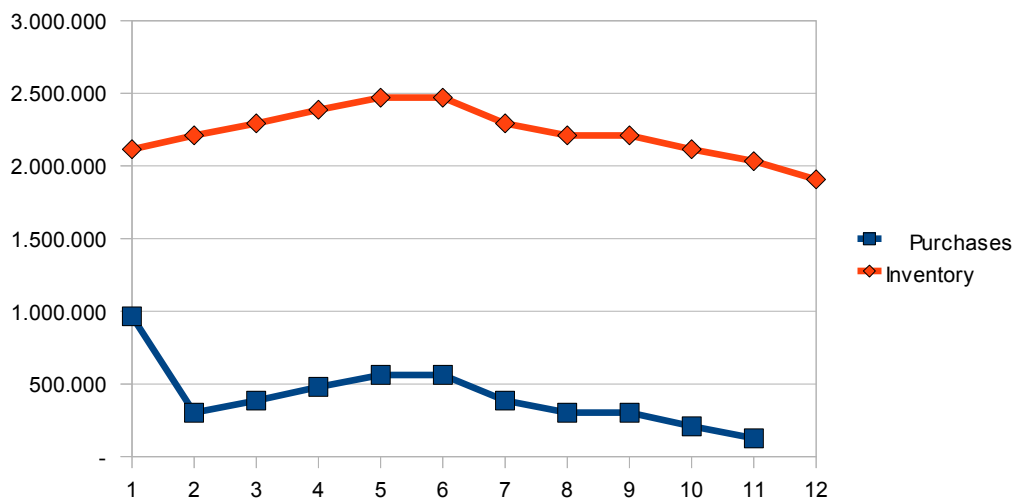
In the graph above, we can see that Cameron Balloons has bought in January the bulk purchases that represents a quarter of the materials used to made balloons, that's why a high level of purchases is made. We can also see that in June and July total revenues grow, that means that more balloons are going to be sold during this months, maybe because of the good weather, and that means that Cameron Balloons needs to hold a high level of inventory to satisfy expected demand, this is why Cameron Balloons purchases grow one month earlier as the high demand.

- ¿The other kind of inventory is **Safety Stock inventory**, Cameron Balloons needs this inventory to afford any customer service problems because this company is very involved with customer services, so that, they always need a similar quantity of spares to satisfy these needs as can be seen in the next graph.?



Moreover, Cameron Balloons is using a lean manufacturing so it tries to buy as materials as needed, for example, inventory for Balloons is always the same because they always buy as many materials as needed to satisfy balloons demand and it keeps a little bit more to satisfy a not expected high demand. This is the same for other inventories like medical materials.

Now we are going to see inventory costs and volume of inventories held together in the next graph to look for any influence



In the graph above, we can see that, regardless january because of the bulk supplies and december because we haven't got enough information about next year, purchases (inventory costs) really influence volume held, because they are using a Lean manufacturing and they buy as needed.