

COSTING OF KNIT GARMENTS

During the consumption it is good practice to use measurement of middle size for calculation or the size which have most of the quantity. For example, If the style has 6 sizes then better to use size number 04 for consumption. Here we will consider the size: "L" for calculate the consumption.

1. Body length of the garments in cm. Say it is - 73 cm
2. Sleeve length of the garments in cm. Say it is - 19.5 cm
3. Approximate sewing allowance at body hem, shoulder joint, sleeve hem & armhole joint (in cm). Say it is - 10 cm
4. Chest width (1/2) in cm. Say it is - 52 cm
5. Approximate sewing allowance at both side seam (in cm). Say it is - 4 cm
6. Fabric GSM (finish). Say it is - 160 gsm
7. Approximate fabric wastage in various stage. Say it is - 10%

In this regard, fabric wastage depends on how many additional elements the garments have, which may change in any time. If the garments have rotary print, enzyme stone wash etc. than the fabric wastage will be more than normal wastage.

Knit Garments Costing Formula

Rules:

$$\{(B/\text{length}+S/\text{length}+\text{Sewing Allowance})\times(1/2\text{Chest}+\text{Sewing Allowance})\}\times 2\times\text{GSM}\times 12/10000000+\text{Wastage}$$

$$= \{(73 + 19.5 + 10) \times (52 + 4)\} \times 2 \times 160 \times 12 / 10000000 + 10\%$$

$$= (102.5 \times 56) \times 2 \times 160 \times 12 / 10000000 + 10\%$$

$$= 5740 \times 2 \times 160 \times 12 / 10000000 + 10\%$$

$$= 22041600 / 10000000 + 10\%$$

$$= 2.20416 + 10 \%$$

$$= 2.424576$$

$$= 2.43 \text{ kg per dozen. (Consumption)}$$

What need to know or do before start costing:

Fabrication: Take clear idea regarding the fabrication before taking the order from the buyer / buying house. After then, you must ensure that, you have strong source of the followings fabric.

Size spec: Make sure that, you have got the correct/latest size spec with the measurement of all the sizes, which will be ordered. Many time we see that, PO sheet has come with new bigger size which was not included during costing.

Fabric color: Try to know that, how many colors the style has & also try to know that, color wise order quantity ratio.

Quantity: Take information regarding approximate order quantity.

Shipment date: Asked buyer for the shipment date & check with your production department that, they have enough space for shipped out the followings qty within the require ship date or tell your possible date.

Test requirement: Let you know that, the order has any test or not.

L/C payments term: Take a previous L/C copy from them & discuss with your commercial people regarding all the terms along with payment terms.

Inspection: Get a confirmation from the buyer that, who will inspect the goods. If third party then who will pay their charges.

GSP: Confirm that, buyer has need the GSP or not.

Calculating Fabric Consumption

Body Consumption: Calculate the body fabric consumption at first. If possible calculate it after making the pattern. Be confirmed regarding the dia. Calculate the consumption with adding + 5 gsm extra which fabric is sells in kg (s/j, pique, rib etc.). Or reduce 2" (in width) from the both side which are in yards (tricot, taffeta etc.). Moreover, if the garments are wash garments then make sure that, the pattern has the wash allowance.

Rib: Calculate the rib consumption carefully because sometimes the garments have rib at cuff opening & bottom hem. Some people mistakenly do the consumption considering one cuff.

Neck tape: Calculate the consumption of neck tape.

Applique & others fabric: Make sure that, you are not missing any appliqué & any other fabric.

Estimate the wastage: Normally we add 9% wastage for the knit items. However, it's may vary depends on how many process the garments have. If it is with only front chest print then 9% is ok but if with all-over /rotary print, with heavy wash etc. then you must increase the wastage. Moreover, if the garments with pigments dye then add minimum 25 to 30% wastage because in this pigment dye garments reject percentage is very high.

Others item

Print: If the garments have print then make sure that, you have a clear art work of it. Check that there clearly mentioned the print quality, dimension & placement. Send the art work to your printers for a better price idea. Also let you know from your printers regarding the difficulties of the followings print. Many times, we found that, buyer has asked for so many type/kind prints in same body which is so difficult for production. Such as, if buyer asked for Flock + discharge & foil print in at the same artwork then it is not possible for production.

Embroidery: Discuss with your embroidery supplier regarding the embroidery & take price quotation.

Wash: Take the wash price quotation from washing factory.

Test: Confirm the charges of test from the testing company.

Accessories & trims

Sewing thread: Confirm that, which thread you need 100% cotton, spun polyester or filaments. Then ensure the count 50/2 or 40/2 or any other denier. It's may vary on fabrications. Regarding the pigment dye garments, we normally used cotton grey color cotton thread. Calculate the sewing thread consumption part by part & add require wastage percentage.

Labels: Take the quotation from your supplier for the entire woven & satin/paper label.

Tape: Calculate the consumption of tape if it has, such as Velvet, herringbone or canvas etc. Elastic: Make sure which denier & width it need. Then take the quotation from supplier.

Zipper: If the garments have zippers then confirm that, from where you will purchase that. Many time the logo zipper need to import the mold from abroad. Make sure the zipper quality, such metal or nylon zipper. Check the zipper measurement from your production department and get prices from your zipper supplier.

Button: Take the button price from your supplier if the garments have it.

Inter lining: Calculate the inter lignin price if the garments need.

Patch or badge: Calculate the patch or badge or others metal item if the garments have.

Finishing item: Tissue paper, silica gel, hang tag, barcode sticker, back board, h/tag string, scotch tape, security tag calculates the prices of these item.

Hanger: Take the quotation of hanger.

Poly: Make the measurement of poly. Confirm the quality & with adhesive or not.

Carton: Find out the carton measurement & take the prices from carton supplier along with top, bottom & divider.

PP belt: Take the price quotation of pp belt if buyer asked it.

Commercial cost

Normally we add 3% of total purchase (Fabric cost+ other item cost + Accessories cost) as commercial cost if the L/C payments terms is as sight. If the L/C is 60 days deferred then you can add 7.5% additional cost of total price and it will be 15% for 90 days deferred.

CM (Cost of making)

Calculate the CM after finalize CPM of the factory. It's vary depends on Product SMV & Efficiency.

CPM (Cost Per Minutes) = (Direct Labor Cost + Operational Cost) of the month/ Usage Minutes (Available Minutes) of the month.

CM= (SMV × CPM)/ Expected Efficiency%

Price Break Down of Polo Shirt

Description: 100% cotton pique polo shirt with two buttons at front placket w/o any pocket. At first, we will calculate the consumption of body fabric from Size spec which we have got from the buyer.

Suppose,

i) The body fabric consumption is 4.05 kg / dozen

So, total yarn consumption will be = 4.05 + 9%

$$= 4.05 + 0.3645$$

$$= 4.41 \text{ kg / dozen}$$

ii) The current yarn price is \$4.00/kg

iii) The current Pique knitting cost is \$0.20/kg (Knitted by circular knit S/J M/c)

iv) Average color dyeing cost is \$1.21 / kg

v) Normally Collar & cuff consumption is 60 gram/body (1 pc collar & 2 pcs cuff)

So, for 12 pcs it will be $0.06 \times 12 + 9\% = 0.78 \text{ kg / dozen}$

vi) Collar & cuff Knitting cost is \$0.05 (knitted by flat knitting m/c)

1st step

Body fabric cost calculation:

$$\text{Yarn price / kg} = \$4.00$$

$$\text{Knitting cost /kg} = \$0.20$$

$$\text{Dyeing cost / kg} = \$1.21$$

$$\text{Finished fabric cost} = \$5.41$$

2nd Step

Collar & cuff cost calculation:

$$\text{Yarn cost/Doz} = 0.78 \times \$4.00 = \$3.12$$

$$\text{Knitting cost/Doz} = \$0.05 \times 12 = \$0.60$$

$$\text{Dyeing cost} = 0.78 \times \$1.21 = \$0.94$$

$$\text{Collar \& Cuff cost / Doz} = \$4.66$$

3rd Step

Total production cost:

$$\text{Body fabric cost (4.41 kg X \$5.41)}$$

$$= \$23.86 / \text{Doz}$$

$$\text{Collar \& Cuff cost} = \$4.66 / \text{Doz}$$

$$\text{CM} = \$6.00 / \text{Doz}$$

$$\text{Accessories Cost} = \$3.00 / \text{Doz}$$

$$\text{Total production cost:} = \$37.52 / \text{doz}$$

Final Step

Fob pricing of per piece polo shirt:

$$\text{Total production cost:} = \$37.52 / \text{doz Commercial cost will be (3\%)} = \$0.95 / \text{doz (Except CM)}$$

$$\text{Profit will (20\% of CM)} = \$1.20 / \text{doz}$$

$$\text{Total FOB price (doz)} = \$39.67 / \text{doz}$$

Fob price per piece will be = \$3.3058 / pc

Final quoted price for buyer = \$3.31 / pc (FOB)

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Tag:

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Knit Garments Costing

How to do costing of Knit Garments