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PRODUCTS MADE IN OUR MANUFACTURING DEPARTMENT

CAVEATS

This guide has been produced in good faith. Customers should perform their own tests and product mock ups to make sure measurements provided to us, meet the requirement of their products, and that the packaging is fit for their purpose. Please also think about the properties of the film or bags you are ordering. For example, tell us if they are going on automated lines, whether you require slip levels in certain ranges, or other key issues you have. This makes a difference to the products we make and additives we may have to add to give you what you need.

When we receive orders, we will make to the sizes and thickness ordered, and cannot be held accountable for customer measurement mistakes or information not provided.

1.   ROLL BASED PRODUCTS

• What is the diameter D of the roll?
• Will it fit on your machinery?
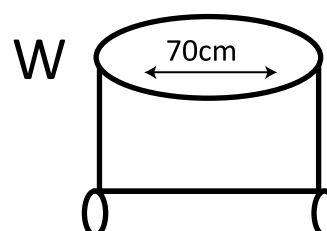• What weight can you staff lift?

FIG. 1.0
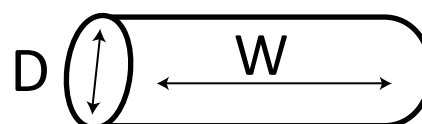
2.   MEASURING THE WIDTH OF TUBING

2.1   Non Gusseted Tubing
Lay flat or wound width will be as shown for the tube, which in this example, has no gussets.
The maximum open width is the same W 70cm

2.2   Gusseted Tubing
Gusseted tubing has a fold inserted during the extrusion process, thus creating a box shape prior to winding the film onto a roll.

In the example shown, tubing will be wound on a roll 70cm wide which is called the "Lay Flat Width" (or wound width).The roll, rather than being the same diameter across, will have raised ridges where the gussets are folded in at each side, being narrower in the centre where there are no gussets.

If you were to pull these gussets open and then flatten the tube (hence removing the side gusset) this becomes what is called the "Maximum Open Width". This is the width of film we have to blow before we insert the gussets (i.e. prior to winding to produce the narrower "Lay Flat" or "wound width"). Gussets create a greater volume in the bag.

The gusset dimension is hence added to the width to produce the maximum open width and would be shown as 70cm x 90cm in the example shown. **W = 70cm x 90cm**

FIG. 2.1
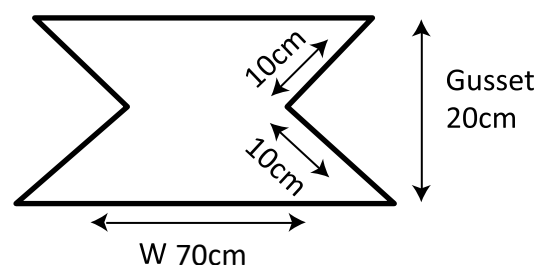
W

70cm

FIG. 2.2

10cm

10cm

Gusset 20cm

W 70cm

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3. MEASURING THE DIMENSIONS OF A BOTTOM WELD BAG

3.1 In the case of a plain bag with no gussets, this would be
shown as: **W x L 30cm x 50cm**

3.2 In the case of a bag with side gussets, this would be
shown as: the layflat (wound) width x the maximum open
width (i.e. width + gusset) x length
30cm x 40cm x 50cm

FIG. 3.2

FIG. 3.1

L 50cm

W 30cm

Gusset 10cm

L 50cm

W 30cm
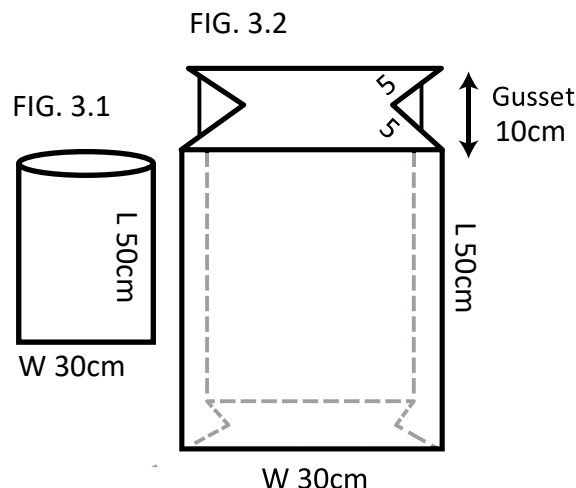
4. MEASURING THE DIMENSION OF A SIDE WELD BAG

4.1 In the case of a bag with no bottom gusset, this would be
shown as: **W x L   30cm x 50cm**

4.2 In the case of a bag with a bottom gusset, this would
Be shown as: **W x L x Bottom Gusset** 30cm x 50cm x 10cm(20cm)
i.e. bottom gusset is 10cm opening out to 20cm

4.3 In the case of a bag with a bottom gusset and a top lip or flap for
folding over , this would be shown as:
W x L x Bottom Gusset + Lip
30cm x 50cm x 10cm (20cm) + 3cm

FIG. 4.1

FIG. 4.2

L 50cm

L 50cm

W 30cm

W 30cm

10cm

FIG. 4.3

3cm

L 50cm

10cm

W 30cm
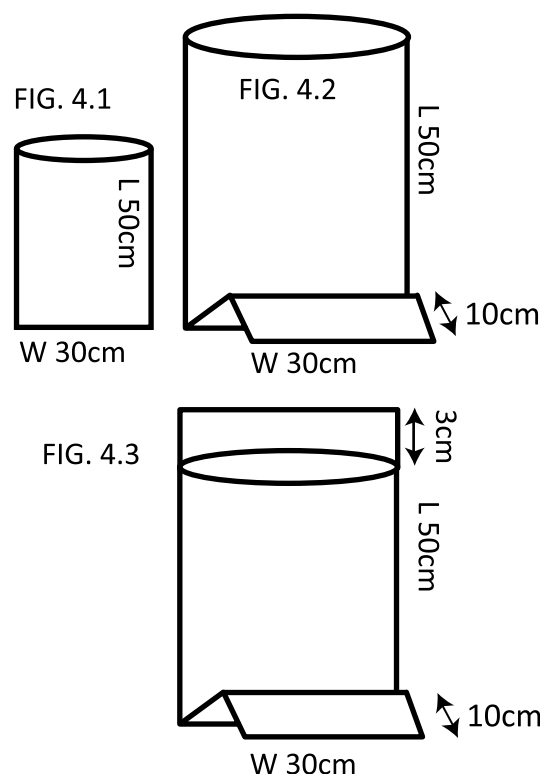
5. MEASURING THE DIMENSIONS OF A POUCH

5.1 A pouch is formed by welding 2 sheets together. The weld is usually wide and is on
3 sides. Weld widths are different for each type of product: Moisture barrier bags
may be 8mm, vacuum pouches may be 5mm, each product is unique.

Dimensions are usually quoted internally and externally. I have converted to mm to avoid
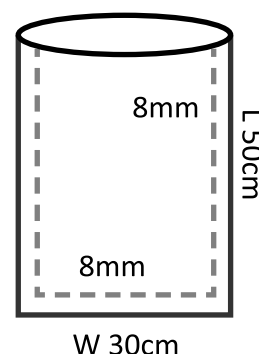fractions in this example with an 8mm weld.

External - 300mm W x 500mm L
Internal - (300mm – 8mm – 8mm) W x (500mm – 8mm) L
Internal - 284mm W x 492mm L

You need to make sure your products fit into the internal dimension. As there is no gusset
to add volume, remember to allow for more internal width to fit the depth of your product
i.e think of the dimension of your product.

FIG. 5.1

8mm

L 50cm

8mm

W 30cm

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6.   MEASURING THE DIMENSIONS OF A PALLET TO WORK OUT THE GUSSETED SHRINK COVER REQUIRED

6.0   Gussetted Cover (Shrink) To Suit Above Load

Face Width = 1219mm + 100mm (Note 1) = 1319mm   **i.e wound width**

Maximum Open Width = 1219mm + 1016mm +150mm (Note 2) = 2385mm   **i.e gusseted dimension**

Length = $\dfrac{(1016mm)}{2}$ + 1065mm(915+150)+100mm(Note 1) = 1673mm

i.e. the film length has to cover ½ the depth across the top plus the height of the object plus the pallet height plus an amount for shrinkage.

**Cover size** = **1319mm x 2385mm x 1673mm**

Standard Variables (Notes 1& 2 above) to add to your pallet size:
Note 1: Add approx. 100mm to allow for fit, shrinking and to give a good appearance
Note 2: Add approx. 150mm to allow for fit, shrinking and to give a good appearance
(this has nothing to do with the pallet height and is just a coincidence).

Change the other dimensions to match your pallet size,
but keep the above standard variables the same.

FIG. 6.0

508mm
915mm
1065mm
150mm
1016mm
1219mm
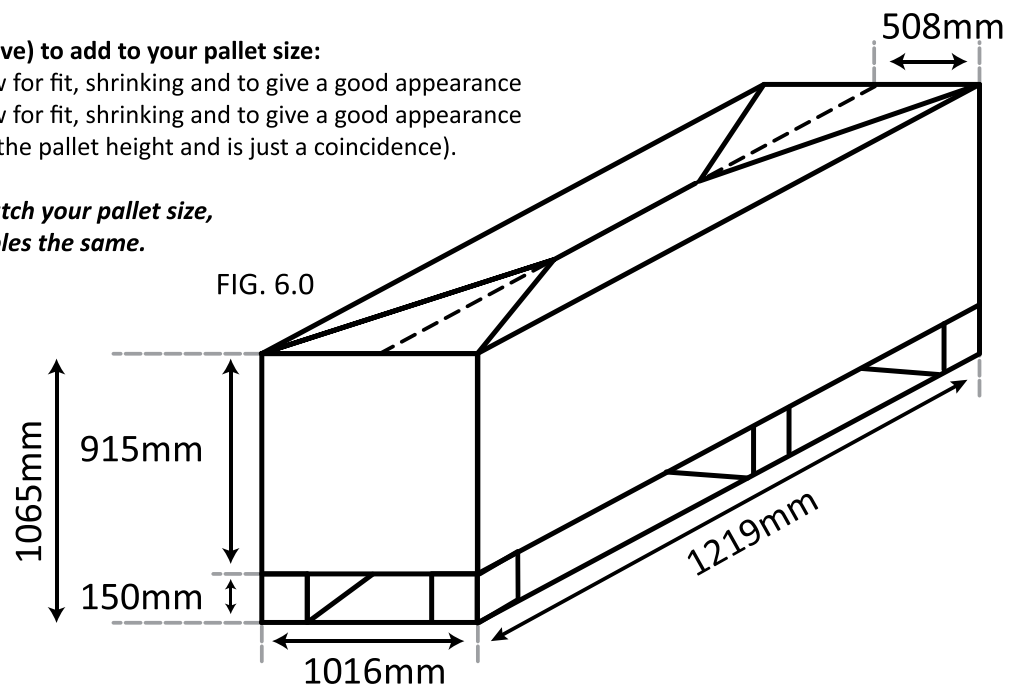
7.   MEASURING THE BAG SIZE FOR BOX LINERS (GUSSETED FILM WILL BE REQUIRED AS BOX SHAPED)

7.1   WIDTH
Allow for 2 inches, about 5 cm, for the bag to stretch into the corners of the box on both width dimensions.

The larger width **W1** in the drawing is the Lay flat width (or wound width) before a gusset is added. **W1 = 127cm + 5cm = 132cm**
Lay flat width (or wound width) is thus 132cm

The maximum open width has to cover the smaller W2 side by way of gusset. **W2, the gusset = 107cm + 5cm = 112cm.**

The maximum open width is the lay flat width plus the gusset and is thus **132cm + 112cm = 244cm**

7.2   Looking down on the box / bag the dimension would appear as **132cm x 244cm**
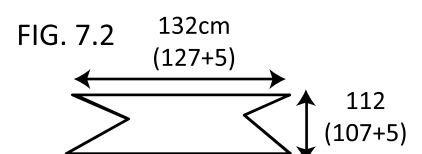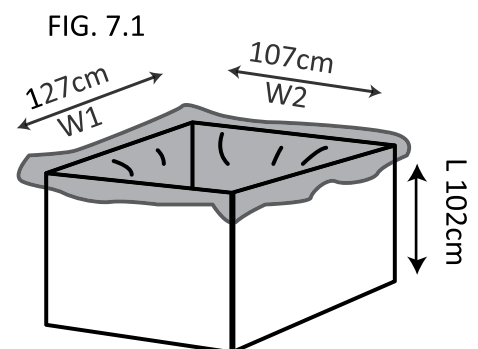
FIG. 7.1
127cm W1
107cm W2
L 102cm

FIG. 7.2
132cm (127+5)
112 (107+5)

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7.3 LENGTH

The length of the bag has to cover the height of the box, plus half of the box width at the bottom and half of the box width at the top (which taken together equals the smaller width side marked W2) and enough length for the product to be "closed over" at the top by potentially tying off the bag.

Allow 15cm for tying off.

The smaller width W2 is 107cm. Add 107cm to go across (½ the width at the bottom and a further ½ the width at the top = W2) and add the tie off
i.e. 102cm height (L) + 107 cm (W2) + 15cm tie off
The length is thus 224cm

SUMMARY
We would quote this as a gusseted bag
132cm x 244cm x 224cm

8. MEASURING THE BAG SIZE FOR A DRUM LINER
(NO GUSSET IS REQUIRED AS CYLINDRICAL IN SHAPE)

FIG. 8.0

WIDTH
As the bag is made from a tube of film with no gusset, this is effectively ½ the circumference of the drum, but allow approx. 2 inches, i.e. 5cm for the bag to fit well

D is the diameter of the drum
The bag width = (D x 1.57) +5cm
W = (75 x 1.57) + 5
W = 123cm

LENGTH
This is the length of bag to cover the height of the drum, ½ of the diameter at the base and ½ the diameter across the top of the drum, the fold over (which taken together equals D), and allow approx. 15cm for tying off.
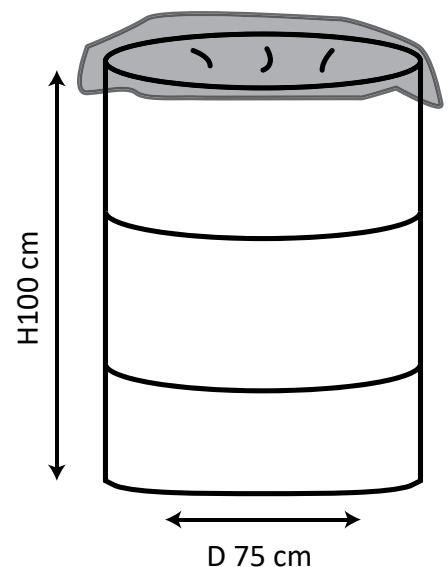
Thus the length has to cover D + H + tie off
Length = 75 +100 +15
Length = 190cm

We would thus produce bottom weld bags **123cm x 190cm**

H100 cm

D 75 cm

9. THICKNESS
The final film or bag dimension, which is the thickness (quoted in micron or gauge) will determine the strength and level of protection given to the product, and in the case of shrink based product, how soon the film will burn through when heat is applied to shrink the film.

For example 50mu is equivalent to 200Gauge (the relationship is a fixed factor of 4)

10. SUMMARY
This guide is designed to help you think about the dimensions you will require. It is only a guide, and you should perform your own testing & make mock ups to ensure the measurements you give us are correct.