

PATTERN CONSTRUCTION TECHNIQUES

Pattern represents the **two-dimensional** component parts of a garment.

They are used as a guide for cutting the fabric, which sewn together form a **three – dimensional garment**.

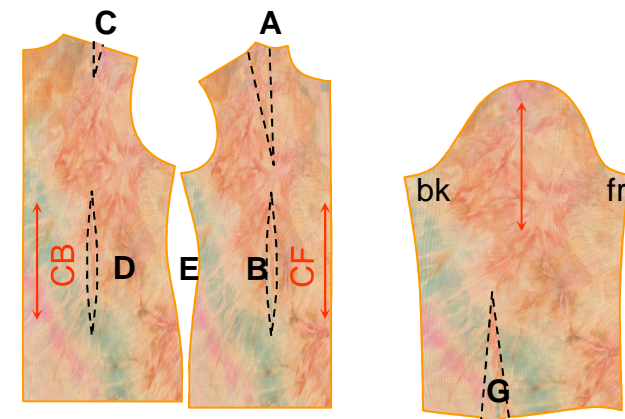
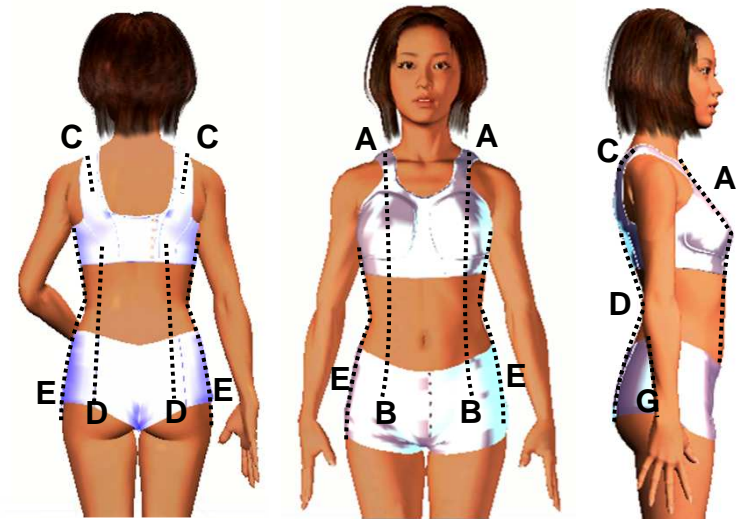
The creation of these patterns is the technique of pattern construction.

Garment shaping by suppression

Suppression is the reduction of surplus fabric to obtain a closer fit using darts, seams, pleats or gathers.

SUPRATIONS AREAS

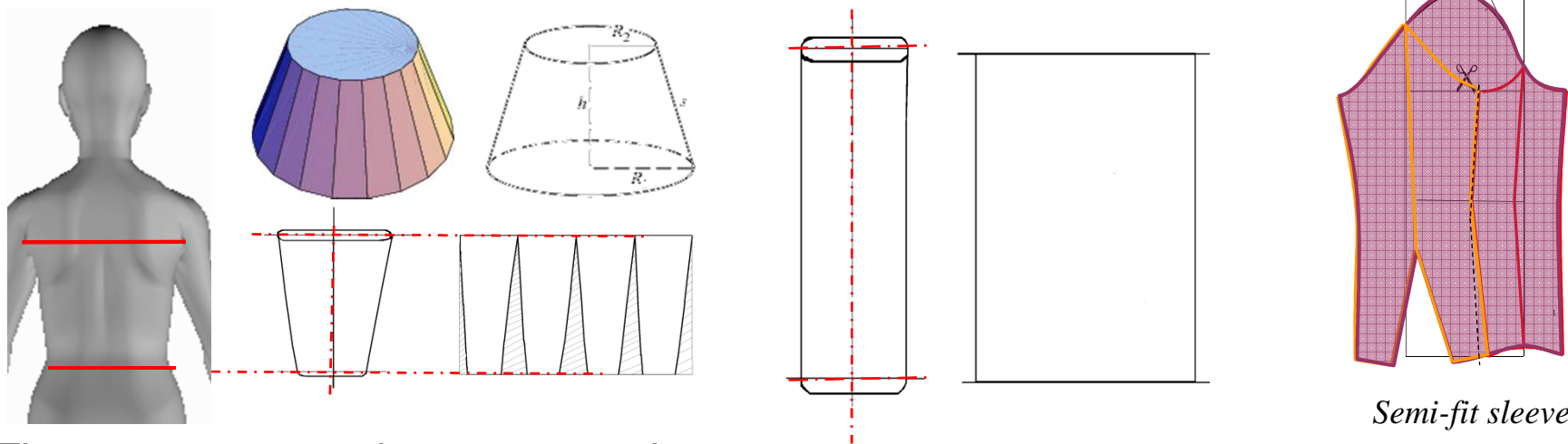
- | | |
|-------------------------|----------------|
| A = front shoulder dart | E = side seam |
| B = front waist dart | F = elbow dart |
| C = back shoulder dart | G = wrist dart |
| D = back waist dart | |



Flattened body surface in relation of clothing construction

Flattened body surface in relation of clothing construction

The Human body is a very complicated *three-dimensional shape*. Flattened body surface is the base for the pattern construction. *Three dimensional shape is transformed into two dimensions shape*. The plastic three dimensional models can demonstrate correct form of the body surface.

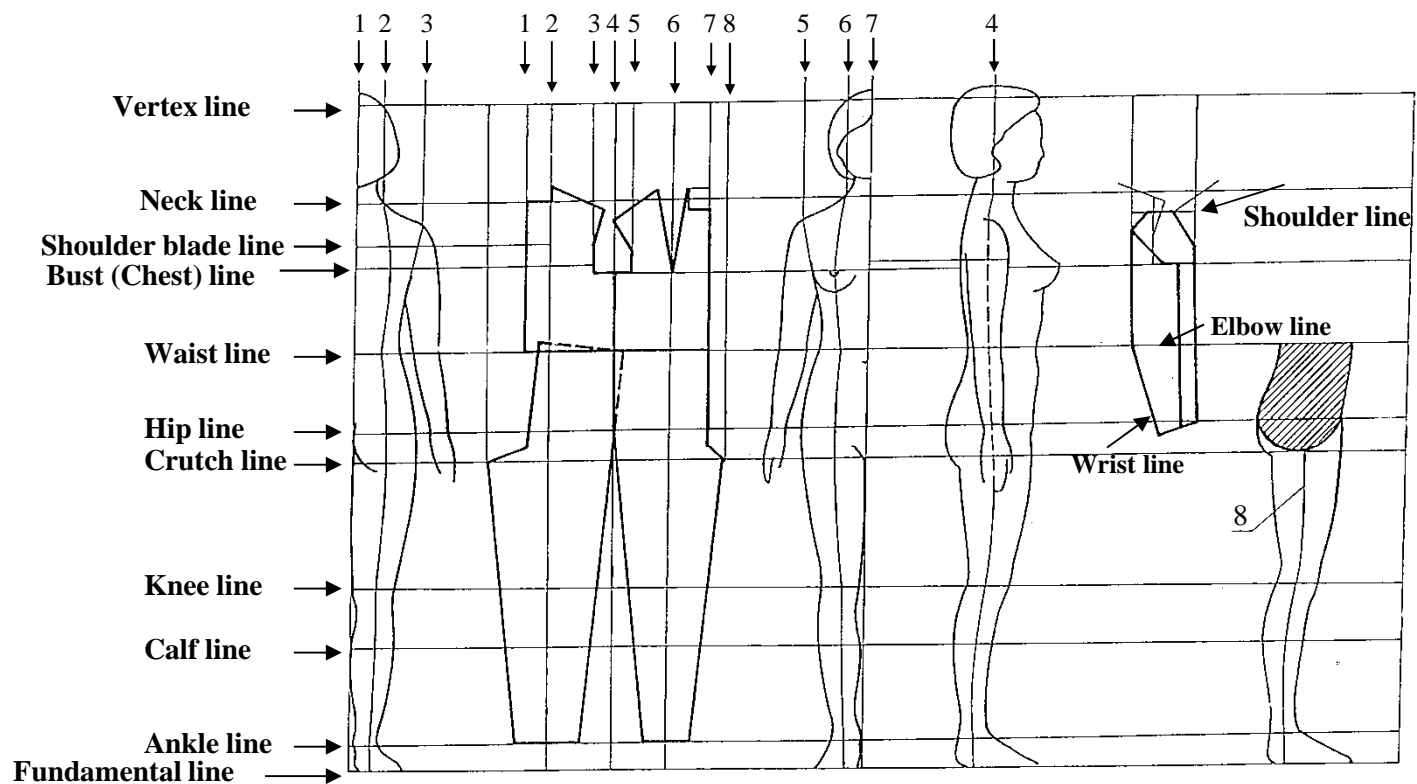


The cross sections can be described through basic geometric shapes as triangle, rectangle, circle, cone or frustum by sections of these shapes.

Cylinder surface flattened is the base for the pattern construction of sleeve.

Flattened body surface in relation of clothing construction

Projection of horizontal and vertical intersections of 3D body surface into 2D pattern constructional net



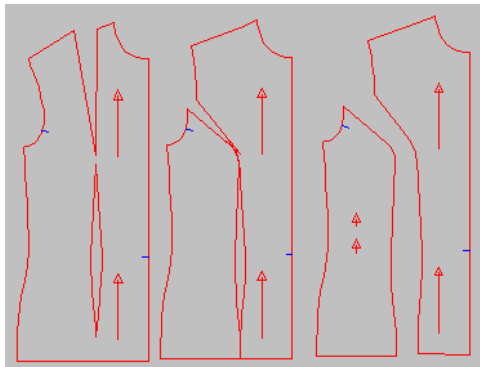
- | | |
|-----------------------|------------------------|
| 1 - Centre back line | 5 - Front armhole line |
| 2 - Side neck line | 6 - Chest line |
| 3 - Back armhole line | 7 - Centre front line |
| 4 - Side line | 8 - Inside leg line |

Flattened body surface in relation of clothing construction

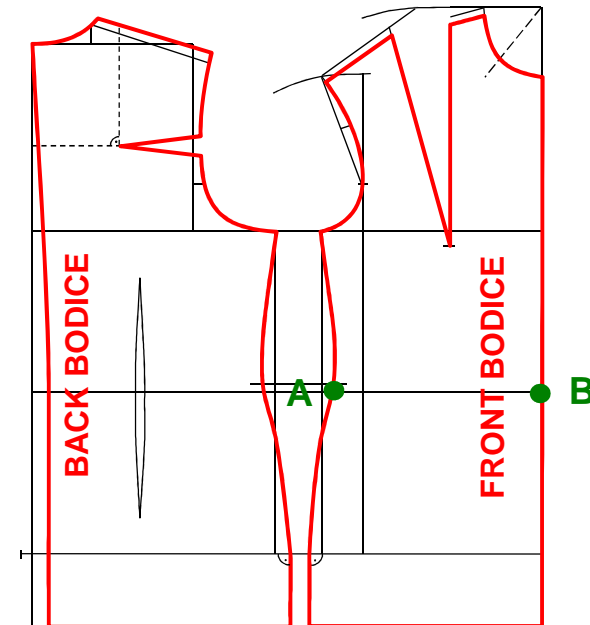
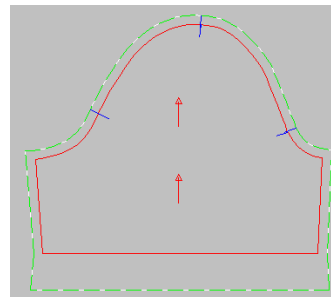
Pattern construction procedure

The Block Pattern...basic pattern that is used as a basic for all adaptations.

The Working Pattern...is used for marking out the basic style lines and design feature.



The final Pattern (Master)...is pattern from which the garment will be cut. It must be clearly marked with all the information required for making up the garment.



Body block pattern

Flattened body surface in relation of clothing construction

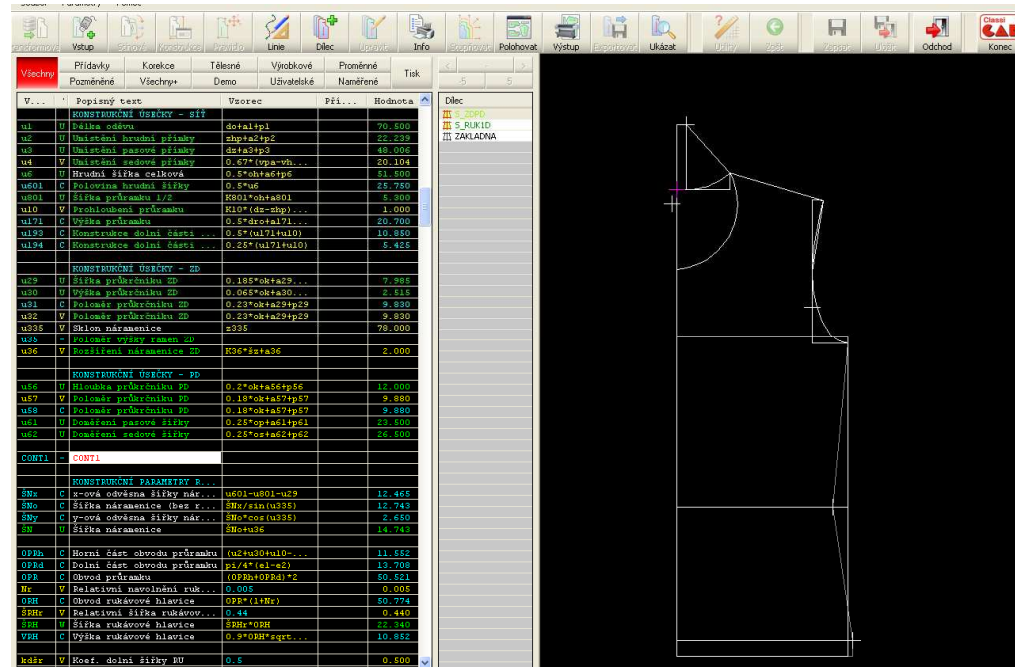
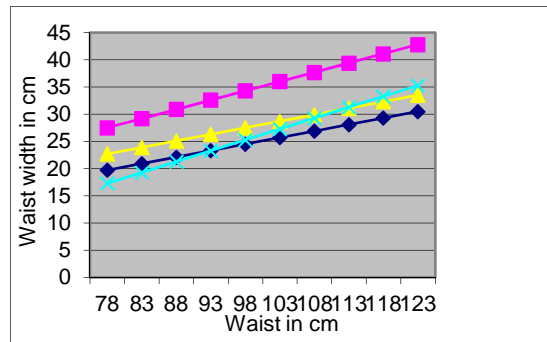
Parametric clothing pattern construction

Ready-to-wear garment pattern is produced to use body = constructional dimensions, that are setting in connection with the proposed sizing assortment

Constructional abscissa
(regression equation)

$$AB_i = k_i * D_i + q_i \pm e_i$$

- AB_i constructional abscissa
- k_i regression coefficient
- D_i body dimension
- q_i absolute term
- e_i easy allowances



Waist width

$$u46 = 0,24 * op + -1,5 + 2,5$$

$$u46 = 0,34 * op + -1,5 + 2,5$$

$$u46 = 0,24 * op + 1,5 + 2,5$$

$$u46 = 0,40 * op + -16,4 + 2,5$$

Reference

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