



Importance of technical drawing in clothing production

Technical drawing is a means of communication between a designer and a producer. Based on this simple definition, technical drawing is important in engineering because it is a language without border among designers and technicians or teachers in the clothing production/manufacturing line in engineering and technical fields.

It is important because it simplifies their jobs using 3D and 2D drawing and sketches.

Many of the symbols and principles of technical drawing are codified in an international standard called:

- ISO 128
- ISO 129



What is a Sketch?

Sketch is done by freehand drawing that is not usually intended as a finished shape of clothing. A sketch may serve a number of purposes: It might record something that the fashion a designer sees;

- It might record or develop an idea for later use;
- It might be used as a quick way of graphically demonstrating an image of product, idea or principle.

What is a Specification Sheet in Fashion?

A garment specification sheet is a technical document that contains an accurately drawn of flat form, and technical specifications of the product (instructions an measurements).

This information is needed to produce garments to the required standard design.

Technical drawing shows the exact design and details such as the position of a pocket, buttons, label and so on.

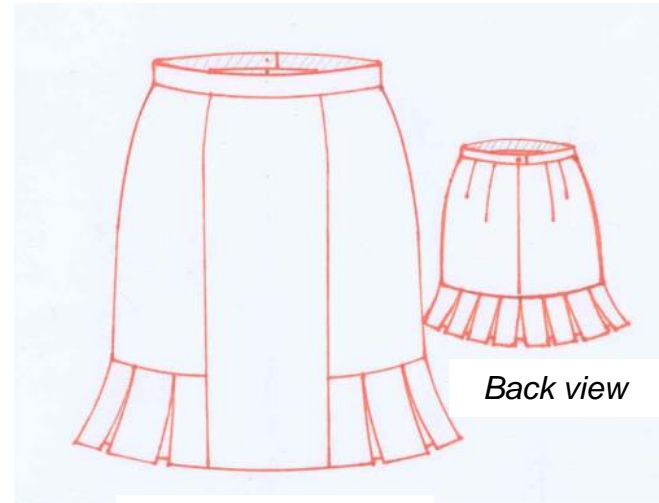


Display example

Sketch



Fashion technical sketch



Front view





Back view

Semestrální práce: Kovaliková Livia 2010



Type of lines for technical drawing in pattern making procedure

You can use different shapes and line types in different thicknesses in the chart

- Solid line 
- Dashed line 
- Dotted line 
- Dotdash line 

Recommended thickness ratio: (used in mechanical engineering) 1: 2: 4)

Lines	Line thickness ratio
Ultra thick	1,0
Very thick	0,5
Thick	0,25



Display example

Ultra thick solid line



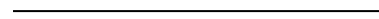
Contour lines used to represent feature
e.g. a outer line of a pattern piece edge.

Thick solid line



Contour lines used to represent feature
e.g. a styling line

Thin solid line



Constructional lines (net), auxiliary lines,
extension line, dimension line

Ultra thick dashed line



Contour lines used to represent feature
e.g. a invisible outer line of a pattern piece edge

Thick dashed line



Contour lines used to represent feature
e.g. a invisible styling line

Thick dotdashed line



Lines or set of two perpendicular lines used
to represent a median feature, e.g. an axis or centre
plane

Thin dotdashed line

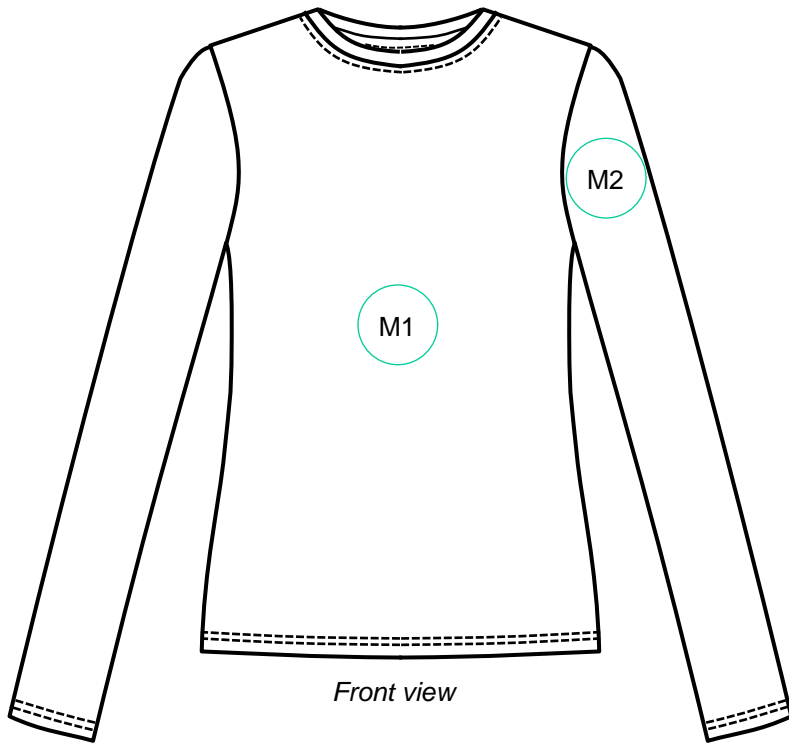


Lines or set of two perpendicular lines
used to represent a styling procedure,
e.g. an axis or centre plane

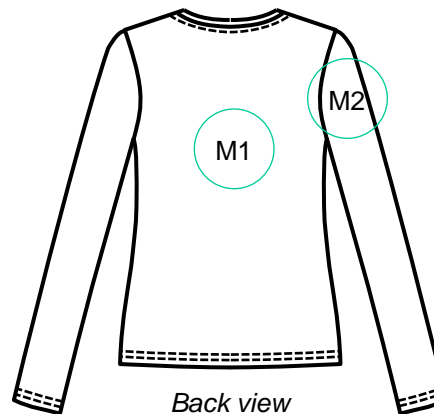


Display example



Fashion technical sketch of T-Shirt



Front view



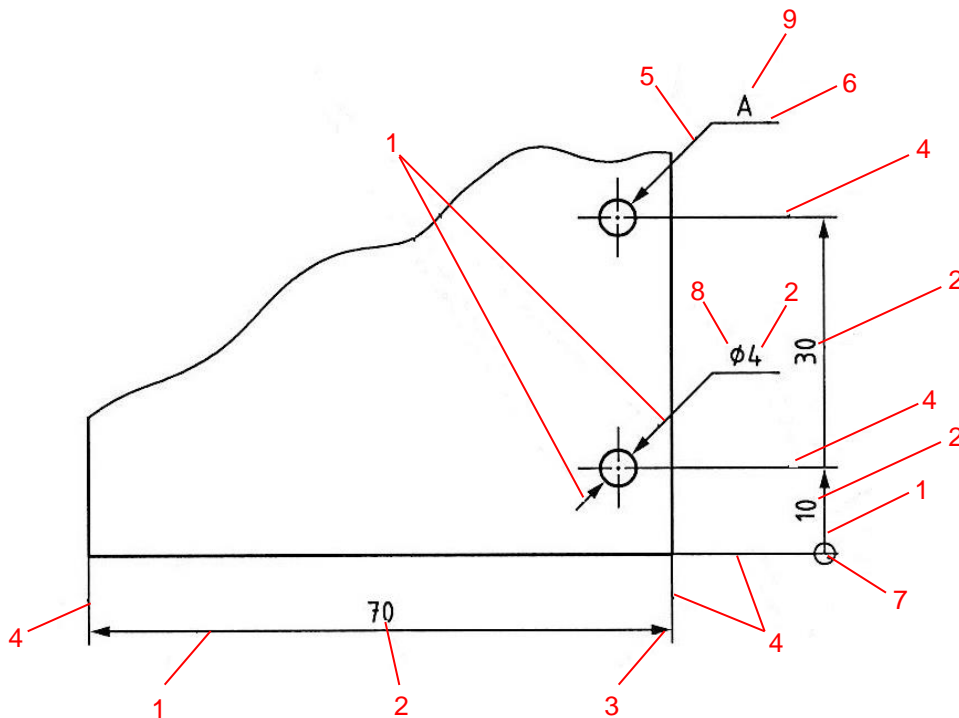
Back view

Fabric (Clothing material)	
M1	Double jersey č.1
	Weight: 190 [g/m ²]
	Colour: Pantone 19-0323 CHIVE 
M2	Double jersey č.2
	Weight: 188 [g/m ²]
	Colour: Pantone 13-0822 SUNLIGHT 



Elements of dimensioning

Various elements of dimensioning



Key:

1 dimension line

2 nominal dimension value

3 terminator

(in this case, an arrowhead)

4 extension line

5 leader line

6 reference line

7 origin symbol

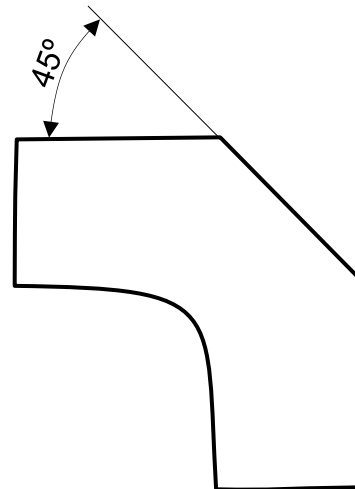
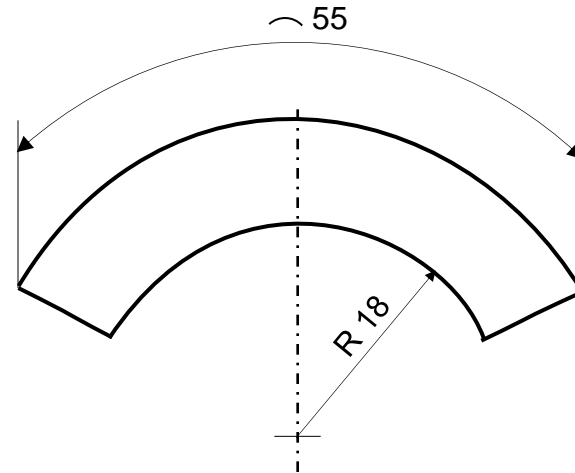
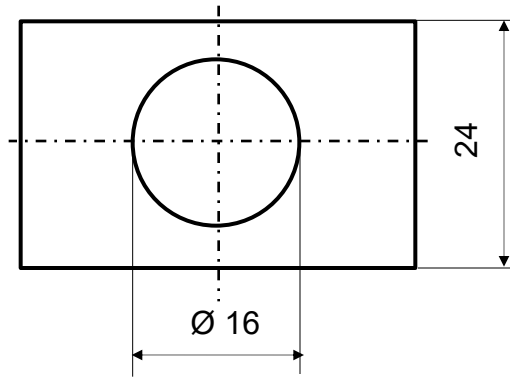
8 property indicator

(e.g. Ø as a Diameter, R as a Radius)

9 reference letter

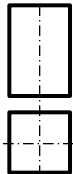
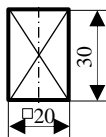
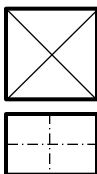
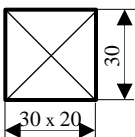

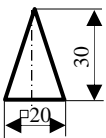
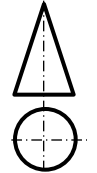
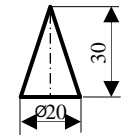
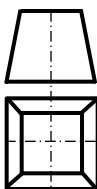
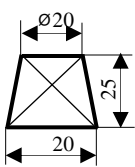
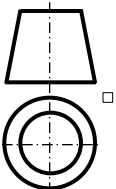
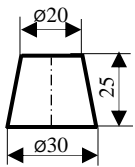
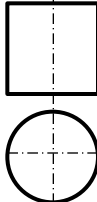
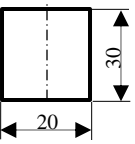
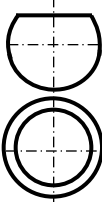
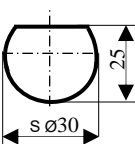


Display example



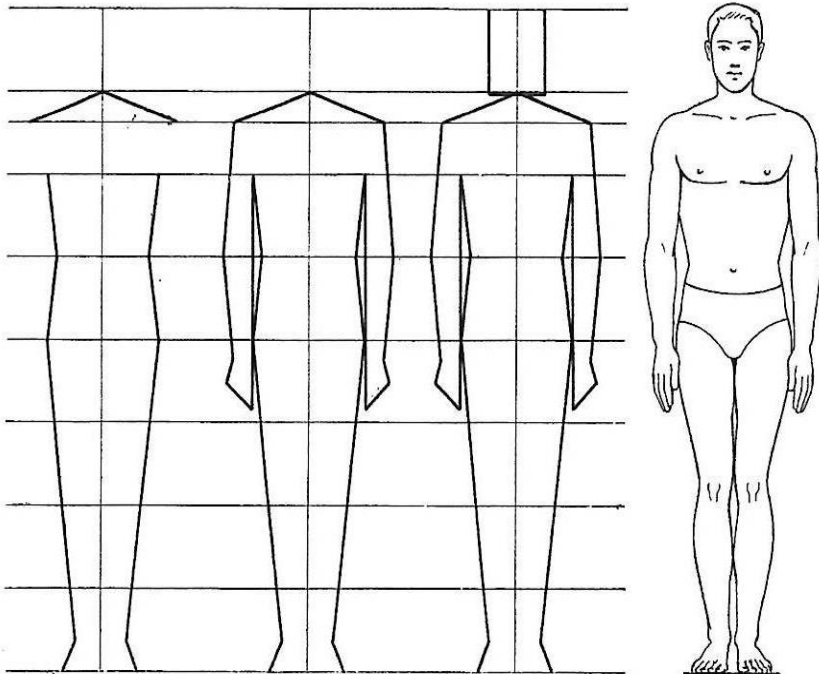


Basic geometric shapes and bodies

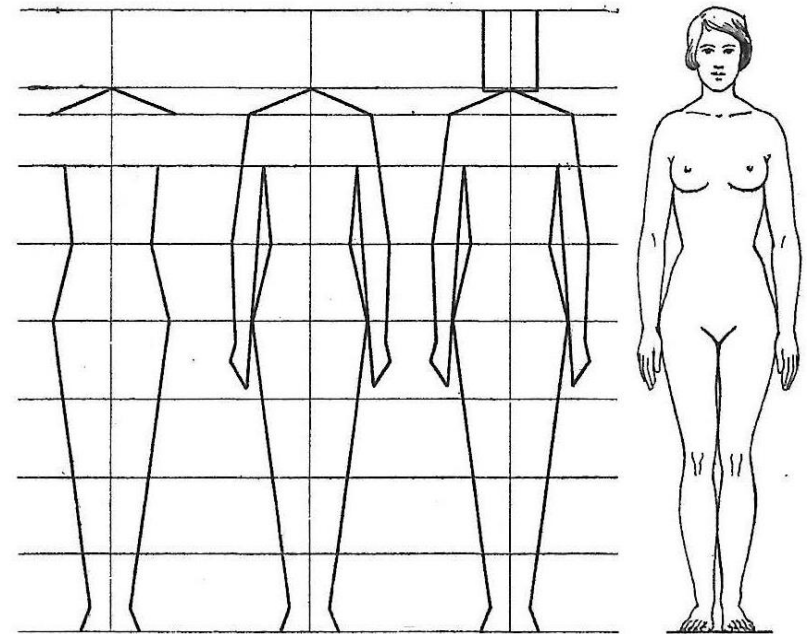
<i>Projection</i>		<i>Projection</i>	
<i>Orthographic</i>	<i>Engineering</i>	<i>Orthographic</i>	<i>Engineering</i>
<i>1. Tetragonal prism</i>		<i>2. Cuboid</i>	
			
<i>3. Quadrilateral pyramid</i>		<i>4. Circular cone</i>	
			
<i>5. Truncated pyramid</i>		<i>6. Truncated cone</i>	
			
<i>7. Round cylinder</i>		<i>8. Truncated ball</i>	
			



Drawing a human figure



The procedure of drawing a male figure according to the octave system



The procedure of drawing a female figure according to the octave system



References:

- [1] ŠVERCL, Josef. *Technické kreslení a deskriptivní geometrie*. Praha:Scientia, 2003. ISBN 80-7183-297-9.
 - [2] VRBA, Václav. *Odborné kreslení a stříhy*. Praha: SPN, 1970.
 - [3] ISO 129-1:2018 *Technical product documentation (TPD) — Presentation of dimensions and tolerances — Part 1: General principles*. ISO/TC 10, 2018.
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