

Introduction to Patterns for Armouring

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This is a very brief overview of basic patterning for armouring and related hollow ware forms. As one starts in the craft of armouring, learning to develop patterns is critical. The process of seeing the shapes in armour and being able to “unfold” a piece of armour to start laying out a pattern is not an immediately obvious skill. Looking at original pieces of armour and recognizing the component forms is very important.

The patterns for shapes and volumes of armour can be broken down into basic geometric or hybrid combinations of these forms.

Spherical Forms:

Helmets, breastplates, knee, elbow and spaulder cops and knee lames are some examples of shapes derived from spheres or sections of spheres.

Conical Forms:

Gauntlet cuffs, pignose visors, faulds, great helm plates and gorgets are some examples of shapes derived from cones or conical sections.

Cylindrical Forms:

Coat of plates, spaulder lames, upper cannons, elbow lames and finger plates / scales are some examples of shapes based on cylindrical sections.

These are some cases where an element of armour is readily identifiable as being derived from one of these forms. Most parts of armour are hybrid combinations of two or all three of these forms.

Spherical / Conical Forms:

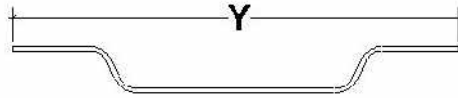
Bascinet, gauntlet metacarpal plates (14th-15th century) & pauldrons

Conical / Cylindrical Forms:

Vambraces, cuisses, greaves

The following formulas for patterns are for the basic shapes, one will need to modify these to produce more complex hybrids of these shapes. These patterns need be changed based on whether sinking or raising techniques will be used on the piece of armour.

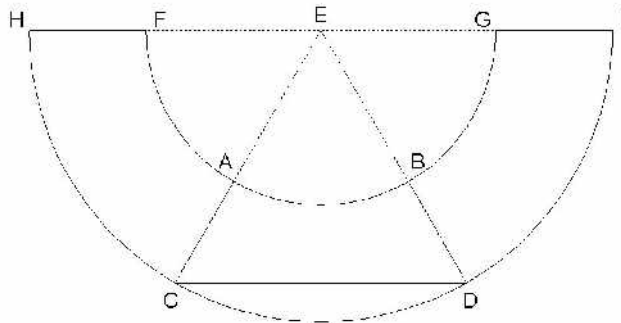
Spherical Forms: Sinking / Dishing: The original diameter does not change much, as the metal is stretched and thinned. Start with thicker metal.



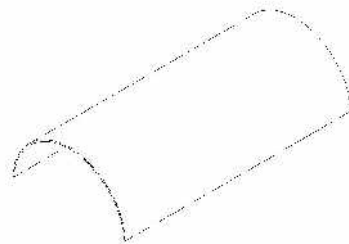
Raising: The diameter for layout is approximately the depth plus the widest part of the projected shape.



Conical Forms: Draw the 2 Dimensional profile of the conical shape. Points defined by ABCD, continue lines through points AC and BD to find point E. From point E draw two arcs through AB and CD. With a compass measure the length of CD and using this measurement, mark the points H and I. This provides the dimensions for the final length. If an overlap is needed for riveting add accordingly.



Cylindrical Forms:



(In certain cases can be considered an extension of the Conical Form)