CLAIMS

1. A method of manufacturing a cushion for a respiratory therapy mask for contacting the face of a user, comprising the steps of:

applying a curable substance to a textile tube to form a cushion pre-form, wherein the textile tube comprises a cylindrical shape formed from at least one sheet of a textile material;

shaping the cushion pre-form into a cushion profile, and

curing the curable substance to bias the cushion towards the cushion profile.

2. The method of manufacturing a cushion as claimed in claim 1, wherein the curable substance is applied to an outer surface of the textile tube.

3. A method of manufacturing a cushion for a respiratory therapy mask for contacting a face of a user, comprising the steps of:

applying a curable substance to a textile tube to form a cushion pre-form;

shaping the cushion pre-form into a cushion profile, wherein shaping the pre-form includes folding a first end of the textile tube outwards and over the remainder of the length of the textile tube towards a second end of the textile tube, creating a folded double walled textile tube, with the curable substance disposed between the two textile wall layers; and

curing the curable substance to bias the cushion towards the cushion profile.

4. The method of manufacturing a cushion as claimed in any one of claims 1 to 3, further including the step of placing the pre-form in a mold tool.

5. The method of manufacturing a cushion as claimed in any one of claims 1 to 4, further including the step of removing excess material from the pre-form or cured cushion to facilitate connection of the cushion to a housing of a cushion module.

6. A method of manufacturing a cushion for a respiratory therapy mask for contacting a face of a user, comprising the steps of:

applying a curable substance to a textile tube to form a cushion pre-form;

shaping the cushion pre-form into a cushion profile, wherein the step of shaping the pre-form includes stretching the pre-form over a mold; and

curing the curable substance to bias the cushion towards the cushion profile.

7. The method of manufacturing a cushion as claimed in any one of claims 1 to 6, wherein the pre-form has a shape that corresponds to the shape of a mold over which the pre-form is placed.

8. The method of any one of claims 4 to 7, further including the step of heating an environment of the mold to cure the curable substance.

9. The method of claim 8, further including the step of removing the cushion pre-form from the mold tool after curing the curable substance, wherein the curing of the curable substance holds the shape of the mold when removed.

10. The method of any one of claims 1 to 9, wherein the curable substance comprises silicone.

11. A method of manufacturing a cushion for a respiratory therapy mask for contacting a face of a user, comprising the steps of:
applying a curable substance to a textile tube to form a cushion pre-form, wherein the textile tube comprises a knitted textile tube;
shaping the cushion pre-form into a cushion profile; and
curing the curable substance to bias the cushion towards the cushion profile.

12. The method of any one of claims 3 to 11, wherein the textile tube is formed as a three-dimensional seam-free tube using three-dimensional knitting.

13. The method of any one of claims 1 to 12, wherein a radius of the textile tube varies along a length of the tube.

14. The method of any one of claims 3 to 13, wherein the textile tube comprises a tube with a cross sectional shape that varies along a length of the tube.

15. The method of claim 14, wherein the cross sectional shape transitions from circular to triangular along the length of the textile tube.

16. The method of any one of claims 1 to 15, wherein the cross sectional area of the tube varies along the length of the textile tube.

17. The method of claim 16, wherein the cross sectional area varies from a first cross sectional area to a second cross sectional area along a length of the textile tube, the first cross sectional area being larger than the second cross sectional area.

18. The method of any one of claims 1 to 17, wherein the textile tube comprises a tube that transitions from a circle of a first radius to a circle of a second radius along a length of the textile tube.

19. The method of claim 18, wherein the first radius is larger than the second radius.