Claims

1. A coreless roll of a tissue paper product, such as toilet paper, made of a spirally wound continuous web of tissue paper product having a first end and a second end, the web of tissue paper product being wound such as to define an axially extending inner hole centrally positioned relative to the coreless roll and such that the first end is located on the outer side of the coreless roll and the second end is located at the inner hole,
wherein the tissue paper product comprises two plies of Conventional Wet Press paper (CWP), a total number of plies of the tissue paper product is two, at least one of the plies is an embossed ply, and
wherein the two plies are ply-bonded, optionally with an adhesive, such as lamination glue, and/or with mechanical bonding, such as edge embossing,
wherein the grammage of the tissue paper product is in a range of 24 g/m^2 to 50 g/m^2, optionally 30 g/m^2 to 45 g/m^2,
wherein the coreless roll has an outer diameter in the range of 95 to 150 mm, a diameter of the inner hole is in the range of 20 to 50 mm, and a density of the coreless roll is in a range of 80 to 160 kg/m^3,
wherein a caliper ratio of the roll is in a range of 30% to 80%,
the caliper ratio $(c_S-c_t)/c_t$ being obtained by dividing a difference between a standard caliper c_S of the tissue paper product as defined by the standard ISO-12625-3 and a theoretical caliper c_t of the tissue paper product by the theoretical caliper c_t, and
the theoretical caliper c_t being defined as a ratio between a grammage of the tissue paper product and the density of the roll,
the two plies being a first ply and a second ply,
wherein the first ply comprises first embossments with a first height (h1), the first height (h1) being in a range

of 0.2 mm to 2.0 mm,
wherein the first embossments have been formed by a first heated embossing roll.

2. The coreless roll of a tissue paper product of claim 1, wherein the caliper of the tissue paper product is at least 0.35 mm, optionally at least 0.40 mm, or at least 0.45 mm.

3. The coreless roll of a tissue paper product of claim 1 or 2,
wherein the adhesive, such as lamination glue, is optionally applied to tips of the first embossments of the first ply,
wherein the second ply comprises second embossments with a second height (h2), the second height (h2) being in a range of 0.2 mm to 2.0 mm, and
wherein the first ply optionally comprises third embossments with a third height (h3) smaller than the first height (h1) (h1>h3).

4. The coreless roll of a tissue paper product of claim 3,
wherein the third embossments have been formed by the first heated embossing roll,
and/or wherein the second embossments have been formed by a second heated embossing roll,
and/or wherein the third embossments have been formed by a third heated embossing roll,
and/or wherein, optionally, the first ply has been moistened, prior to having been embossed, with an amount of liquid, such as water, in the range of 2% to 12% of the basis weight of the first ply, or optionally 4% to 10% of the basis weight of the first ply, wherein the liquid optionally is provided with one or several additives, or wherein the first ply has not been moistened with a liquid prior to having been embossed.

5. A coreless roll of a tissue paper product, such as toilet paper, made of a spirally wound continuous web of tissue paper product having a first end and a second end, the web of tissue paper product being wound such as to define an axially extending inner hole centrally positioned relative to the coreless roll and such that the first end is located on the outer side of the coreless roll and the second end is located at the inner hole,

wherein the tissue paper product comprises three plies of Conventional Wet Press paper (CWP), a total number of plies of the tissue paper product is three, at least one of the plies is an embossed ply, and

wherein the three plies are ply-bonded, optionally with an adhesive, such as lamination glue, and/or with mechanical bonding, such as edge embossing,

wherein the grammage of the tissue paper product is in a range of 34 g/m^2 to 65 g/m^2, optionally 40 g/m^2 to 63 g/m^2, or 45 g/m^2 to 60 g/m^2,

wherein the coreless roll has an outer diameter in the range of 95 to 150 mm, a diameter of the inner hole is in the range of 20 to 50 mm, and a density of the coreless roll is in a range of 110 to 170 kg/m^3,

wherein a caliper ratio of the roll is in a range of 20% to 60%,

the caliper ratio $(c_S-c_t)/c_t$ being obtained by dividing a difference between a standard caliper c_S of the tissue paper product as defined by the standard ISO-12625-3 and a theoretical caliper c_t of the tissue paper product by the theoretical caliper c_t, and

the theoretical caliper c_t being defined as a ratio between a grammage of the tissue paper product and the density of the roll,

the three plies being a first ply, a second ply, and a third ply, wherein the third ply is positioned between the first ply and the second ply,

wherein the first ply comprises first embossments with a first height (h1), the first height (h1) being in a range

of 0.2 mm to 2.0 mm,
wherein the first embossments have been formed by a first heated embossing roll.

6. The coreless roll of a tissue paper product of claim 5, wherein the caliper of the tissue paper product is at least 0.40 mm, optionally at least 0.45 mm, or at least 0.50 mm.

7. The coreless roll of a tissue paper product of claim 5 or 6,
wherein the adhesive, such as lamination glue, is optionally applied to tips of the first embossments of the first ply,
wherein the second ply comprises second embossments with a second height (h2), the second height (h2) being in a range of 0.2 mm to 2.0 mm, and
wherein the first ply optionally comprises third embossments with a third height (h3) smaller than the first height (h1) (h1>h3).

8. The coreless roll of a tissue paper product of claim 7, wherein the third ply is unembossed.

9. The coreless roll of a tissue paper product of claim 7 or 8, wherein the first ply and the third ply have been embossed together to form the first embossments on the first ply and the third ply, and
wherein, optionally, the third embossments have been formed only on the first ply but not on the third ply, or,
wherein, optionally, the first ply and the third ply have been embossed together to form the third embossments on the first ply and the third ply.

10. The coreless roll of a tissue paper product of claim 7,
wherein the third ply comprises fourth embossments with a fourth height (h4), the fourth height (h4) being in a

range of 0.2 mm to 2.0 mm, and wherein the third ply has been embossed separately from the first ply and the second ply,
wherein, optionally, the fourth embossments have been formed by a fourth heated embossing roll.

11. The coreless roll of a tissue paper product of any one of the claims 7 to 10,
wherein the second embossments have been formed by a second heated embossing roll, and/or,
wherein the third embossments have been formed by the first heated embossing roll or a third heated embossing roll, and/or
wherein, optionally, the first ply has been moistened, prior to having been embossed, with an amount of liquid, such as water, in the range of 2% to 12% of the basis weight of the first ply, or optionally 4% to 10% of the basis weight of the first ply, wherein the liquid optionally is provided with one or several additives, or wherein the first ply has not been moistened with a liquid prior to having been embossed.

12. A coreless roll of a tissue paper product, such as toilet paper, made of a spirally wound continuous web of tissue paper product having a first end and a second end, the web of tissue paper product being wound such as to define an axially extending inner hole centrally positioned relative to the coreless roll and such that the first end is located on the outer side of the coreless roll and the second end is located at the inner hole,
wherein the tissue paper product comprises four plies of Conventional Wet Press paper (CWP), a total number of plies of the tissue paper product is four, at least one of the plies is an embossed ply, and
wherein the four plies are ply-bonded, optionally with an adhesive, such as lamination glue, and/or with mechanical bonding, such as edge embossing,

the grammage of the tissue paper product is in a range of 55 g/m^2 to 95 g/m^2, or optionally 60 g/m^2 to 80 g/m^2,
wherein the coreless roll has an outer diameter in the range of 95 to 150 mm, a diameter of the inner hole is in the range of 20 to 50 mm, and a density of the coreless roll is in a range of 120 to 160 kg/m^3,
wherein a caliper ratio of the roll is in a range of 12% to 40%,
the caliper ratio $(c_S-c_t)/c_t$ being obtained by dividing a difference between a standard caliper c_S of the tissue paper product as defined by the standard ISO-12625-3 and a theoretical caliper c_t of the tissue paper product by the theoretical caliper c_t, and
the theoretical caliper c_t being defined as a ratio between a grammage of the tissue paper product and the density of the roll,
the four plies being a first ply, a second ply, a third ply, and a fourth ply, wherein the first ply and the second ply are outermost plies of the tissue paper product,
wherein the first ply comprises first embossments with a first height (h1), the first height (h1) being in a range of 0.2 mm to 2.0 mm,
wherein the first embossments have been formed by a first heated embossing roll.

13. The coreless roll of a tissue paper product of claim 12, wherein the caliper of the tissue paper product is at least 0.55 mm, optionally at least 0.60 mm, or at least 0.65 mm.

14. The coreless roll of a tissue paper product of claim 12 or 13,
wherein the adhesive, such as lamination glue, is optionally applied to tips of the first embossments of the first ply,
wherein the second ply comprises second embossments with a

second height (h2), the second height (h2) being in a range of 0.2 mm to 2.0 mm, and
wherein the first ply optionally comprises third embossments with a third height (h3) smaller than the first height (h1) (h1>h3).

15. The coreless roll of a tissue paper product of claim 14, wherein the first ply and the third ply have been embossed together to form the first embossments on the first ply and the third ply,
wherein the fourth ply is unembossed or has been embossed separately from the first ply, the second ply, and the third ply to form fourth embossments, the fourth embossments optionally having been embossed by a fourth heated embossing roll, and
wherein the third embossments have optionally been formed only on the first ply but not on the third ply, or wherein the first ply and the third ply have been embossed together to form the third embossments on the first ply and the third ply.

16. The coreless roll of a tissue paper product of claim 14, wherein the first ply, the third ply, and the fourth ply have been embossed together to form the first embossments on the first ply, the third ply, and the fourth ply, and
wherein, optionally, the first ply, the third ply, and the fourth ply have been embossed together to form the third embossments on the first ply, the third ply, and the fourth ply, or
wherein, optionally, the third embossments have been formed on the first ply and the third ply, but not on the fourth ply, or
wherein, optionally, the third embossments have been formed on the first ply, but not on the third ply and the fourth ply.

17. The coreless roll of a tissue paper product of claim 14,

wherein the third ply and the fourth ply have been embossed together separately from the first ply and the second ply, or
wherein one of the third ply and the fourth ply has been separately embossed from the first ply and the second ply, and the other one of the third ply and the fourth ply is unembossed, or
wherein the third ply and the fourth ply are unembossed.

18. The coreless roll of a tissue paper product of claim 14,
wherein the first ply and the third ply have been embossed together to form the first embossments on the first ply and the third ply,
wherein the fourth ply and the second ply have been embossed together to form the second embossments on the fourth ply and the second ply, and
wherein, optionally, the first ply and the third ply have been embossed together to form the third embossments on the first ply and the third ply, or wherein the third embossments have been formed only on the first ply but not on the third ply.

19. The coreless roll of a tissue paper product of any one of the claims 14 to 18,
wherein the second embossments have been formed by a second heated embossing roll, and/or,
wherein the third embossments have been formed by the first heated embossing roll or a third heated embossing roll, and/or,
wherein, optionally, the first ply has been moistened, prior to having been embossed, with an amount of liquid, such as water, in the range of 2% to 12% of the basis weight of the first ply, or optionally 4% to 10% of the basis weight of the first ply, wherein the liquid optionally is provided with one or several additives, or wherein the first ply has not been moistened with a liquid prior to having been embossed.

20. A coreless roll of a tissue paper product, such as toilet paper, made of a spirally wound continuous web of tissue paper product having a first end and a second end, the web of tissue paper product being wound such as to define an axially extending inner hole centrally positioned relative to the coreless roll and such that the first end is located on the outer side of the coreless roll and the second end is located at the inner hole,
wherein the tissue paper product comprises five or six plies of Conventional Wet Press paper (CWP), a total number of plies of the tissue paper product is five or six, at least one of the plies is an embossed ply, and
wherein the five or six plies are ply-bonded, optionally with an adhesive, such as lamination glue, and/or with mechanical bonding, such as edge embossing,
wherein the grammage of the tissue paper product is in a range of 65 g/m^2 to 125 g/m^2, or optionally 65 g/m^2 to 100 g/m^2,
wherein the coreless roll has an outer diameter in the range of 95 to 150 mm, a diameter of the inner hole is in the range of 20 to 50 mm, and a density of the coreless roll is in a range of 130 to 160 kg/m^3,
wherein a caliper ratio of the roll is in a range of 10% to 25%,
the caliper ratio $(c_S\text{-}c_t)/c_t$ being obtained by dividing a difference between a standard caliper c_S of the tissue paper product as defined by the standard ISO-12625-3 and a theoretical caliper c_t of the tissue paper product by the theoretical caliper c_t, and
the theoretical caliper c_t being defined as a ratio between a grammage of the tissue paper product and the density of the roll,
wherein at least one of the outermost plies of the tissue paper product comprises first embossments with a first height (h1), the first height (h1) being in a range of 0.2 mm to 2.0 mm,

wherein the first embossments have been formed by a first heated embossing roll.

21. The coreless roll of a tissue paper product of claim 20, wherein the caliper of the tissue paper product is at least 0.65 mm, optionally at least 0.70 mm or at least 0.75 mm.

22. The coreless roll of a tissue paper product of claim 20 or 21,
wherein the adhesive, such as lamination glue, is optionally applied to tips of the first embossments of the first ply,
wherein the other one of the outermost plies of the tissue paper product comprises second embossments with a second height (h2), the second height (h2) being in a range of 0.2 mm to 2.0 mm,
wherein, optionally, the second embossments have been formed by a second heated embossing roll,
wherein the first ply optionally comprises third embossments with a third height (h3) smaller than the first height (h1) (h1>h3).

23. The coreless roll of a tissue paper product of any one of the preceding claims,
wherein the coreless roll has a radial compression strength of 20 N or more, optionally of 25N or more, or of 30N or more.

24. A coreless roll of a tissue paper product, such as toilet paper, made of a spirally wound continuous web of tissue paper product having a first end and a second end, the web of tissue paper product being wound such as to define an axially extending inner hole centrally positioned relative to the coreless roll and such that the first end is located on the outer side of the coreless roll and the second end is located at the inner hole,

wherein the tissue paper product comprises at least two plies, wherein a total number of plies of the tissue paper product is between 2 and 6, all of the plies being plies of Conventional Wet Press paper (CWP), and wherein at least one of the plies is an embossed ply,
wherein the plies of the tissue paper product are ply-bonded, optionally with an adhesive, such as lamination glue, and/or with mechanical bonding, such as edge embossing,
wherein the coreless roll has an outer diameter in the range of 95 to 150 mm, a diameter of the inner hole being in the range of 20 to 50 mm, and a density of the coreless roll being in a range of 80 to 160 kg/m^3,
wherein a caliper ratio of the roll is in a range of 30%-80% if the total number of plies is 2, the caliper ratio of the roll is in a range of 20%-60% if the total number of plies is 3, the caliper ratio of the roll is in a range of 12%-30% if the total number of plies is 4, and the caliper ratio of the roll is in a range of 10%-25% if the total number of plies is 5 or 6, the caliper ratio $(c_S-c_t)/c_t$ being obtained by dividing a difference between a standard caliper c_S of the tissue paper product as defined by the standard ISO-12625-3 and a theoretical caliper c_t of the tissue paper product by the theoretical caliper c_t, the theoretical caliper c_t being defined as a ratio between a grammage of the tissue paper product and the density of the roll,
wherein the coreless roll has a radial compression strength of 20 N or more, optionally of 25N or more, or of 30N or more, and
wherein all of the plies of the tissue paper product are made of Conventional Wet Press (CWP) paper,
wherein at least one of the outermost plies of the tissue paper product comprises first embossments with a first height (h1), the first height (h1) being in a range of 0.2 mm to 2.0 mm,
wherein the first embossments have been formed by a first

heated embossing roll.

25. The coreless roll of a tissue paper product of any one of the preceding claims, wherein at least a part of an innermost circumvolution, optionally the entire innermost circumvolution, of the absorbent material of the coreless roll at the second end comprises a stabilizing coating composition.

26. A method of manufacturing a coreless roll of a tissue paper product, such as toilet paper, the tissue paper product being made of two plies, the method comprising the steps of:
- providing two plies of Conventional Wet Press paper (CWP) and embossing at least one of the two plies;
- ply-bonding the two plies, optionally with an adhesive, such as a lamination glue, and/or with mechanical bonding, such as edge embossing, to form a tissue paper product with a grammage in a range of 24 g/m^2 to 50 g/m^2, optionally 30 g/m^2 to 45 g/m^2, and a caliper ratio in a range of 30% to 80%;
- spirally winding up the tissue paper product on a mandrel to form a coreless roll and to define an axially extending inner hole facing the mandrel, with a first end of the tissue paper product being located on the outer side of the coreless roll and the second end being located at the inner hole; and
- withdrawing the mandrel;
wherein the coreless roll comprises an outer diameter in the range of 95 to 150 mm and a diameter of the inner hole is in the range of 20 to 50 mm, and the density of the coreless roll lies in a range of 80 to 160 kg/m^3,
a caliper of the formed tissue paper product optionally being at least 0.35 mm, or at least 0.40 mm, or at least 0.45 mm,
the two provided plies being a first ply and a second ply, and the method comprising the step of:

- embossing the first ply with a first heated embossing roll with first embossing protrusions to form first embossments with a first height (h1) in a range of 0.2 mm to 2.0 mm.

27. The method of manufacturing a coreless roll of a tissue paper product of claim 26, the method comprising the steps of:
- embossing the second ply with a second embossing roll with second embossing protrusions to form second embossments with a second height (h2) in a range of 0.2 mm to 2.0 mm; and
- wherein, optionally, the first embossing roll also comprises third embossing protrusions and the step of embossing the first ply forms first and third embossments on the third ply,
or, wherein the method optionally comprises a step of embossing the first ply with a third embossing roll with third embossing protrusions to form third embossments.

28. A method of manufacturing a coreless roll of a tissue paper product, such as toilet paper, the tissue paper product being made of three plies, the method comprising the steps of:
- providing three plies of Conventional Wet Press paper (CWP) and embossing at least one of the three plies;
- ply-bonding the three plies, optionally with an adhesive, such as a lamination glue, and/or with mechanical bonding, such as edge embossing, to form a tissue paper product with a grammage in a range of 34 g/m^2 to 65 g/m^2, optionally 40 g/m^2 to 63 g/m^2, or 45 g/m^2 to 60 g/m^2 and a caliper ratio in a range of 20% to 60%;
- spirally winding up the tissue paper product on a mandrel to form a coreless roll and to define an axially extending inner hole facing the mandrel, with a first end of the tissue paper product being located on the outer side of the coreless roll and the second end being located

at the inner hole; and
- withdrawing the mandrel;
wherein the coreless roll comprises an outer diameter in the range of 95 to 150 mm and a diameter of the inner hole is in the range of 20 to 50 mm, and the density of the coreless roll lies in a range of 110 to 170 kg/m^3,
a caliper of the formed tissue paper product optionally being at least 0.40 mm, optionally at least 0.45 mm, or at least 0.50 mm,
the three provided plies being a first ply, a second ply, and a third ply, and the method comprising the step of:
- embossing the first ply with a first heated embossing roll with first embossing protrusions to form first embossments with a first height (h1) in a range of 0.2 mm to 2.0 mm.

29. The method of manufacturing a coreless roll of a tissue paper product of claim 28, the method comprising the steps of:

- embossing the second ply with a second embossing roll with second embossing protrusions to form second embossments with a second height (h2) in a range of 0.2 mm to 2.0 mm;
- wherein the first, second, and third plies are ply-bonded such that the third ply is located between the first ply and the second ply; and
- wherein, optionally, the first embossing roll also comprises third embossing protrusions and the step of embossing the first ply forms first and third embossments on the third ply, or
wherein the method optionally comprises a step of embossing the first ply with a third embossing roll with third embossing protrusions to form third embossments.

30. The method of manufacturing a coreless roll of a tissue paper product of claim 29, wherein the third ply is not

embossed.

31. The method of manufacturing a coreless roll of a tissue paper product of claim 29, wherein the first ply and third ply are embossed together using the first embossing roll to form the first embossments on the first ply and the third ply,

wherein the third embossments are optionally formed only on the first ply but not on the third ply, or wherein the first ply and the third ply are embossed together to form the third embossments on the first ply and the third ply.

32. The method of manufacturing a coreless roll of a tissue paper product of claim 29, the method comprising a step of forming fourth embossments with a fourth height (h4) on the third ply with a fourth embossing roll, the fourth height (h4) being in a range of 0.2 mm to 2.0 mm, and wherein the third ply is embossed separately from the first ply and the second ply,

wherein, optionally, the fourth embossments are formed by a fourth heated embossing roll.

33. The method of manufacturing a coreless roll of a tissue paper product of any one of the claims 28 to 32,
wherein the second embossments are formed by a second heated embossing roll, and/or,
wherein the third embossments are formed by the first heated embossing roll or a third heated embossing roll.

34. A method of manufacturing a coreless roll of a tissue paper product, such as toilet paper, the tissue paper product being made of four plies, the method comprising the steps of:
- providing four plies of Conventional Wet Press paper (CWP) and embossing at least one of the four plies;
- ply-bonding the four plies, optionally with an adhesive,

such as a lamination glue, and/or with mechanical bonding, such as edge embossing, to form a tissue paper product with a grammage in a range of 55 g/m^2 to 95 g/m^2, or optionally 60 g/m^2 to 80 g/m^2, and a caliper ratio in a range of 12% to 40%;

- spirally winding up the tissue paper product on a mandrel to form a coreless roll and to define an axially extending inner hole facing the mandrel, with a first end of the tissue paper product being located on the outer side of the coreless roll and the second end being located at the inner hole; and

- withdrawing the mandrel;

wherein the coreless roll comprises an outer diameter in the range of 95 to 150 mm and a diameter of the inner hole is in the range of 20 to 50 mm, and the density of the coreless roll lies in a range of 120 to 160 kg/m^3,

a caliper of the formed tissue paper product optionally being at least 0.55 mm, or at least 0.60 mm, or at least 0.65 mm,

the four provided plies being a first ply, a second ply, a third ply, and a fourth ply, the method comprising the step of:

- embossing the first ply with a first heated embossing roll with first embossing protrusions to form first embossments with a first height (h1) in a range of 0.2 mm to 2.0 mm.

35. The method of manufacturing a coreless roll of a tissue paper product of claim 34, the method comprising the steps of:

- embossing the second ply with a second embossing roll with second embossing protrusions to form second embossments with a second height (h2) in a range of 0.2 mm to 2.0 mm;

- wherein the first ply, the second ply, the third ply, and the fourth ply are ply-bonded such that the third ply and the fourth ply are located between the first ply and

the second ply; and

- wherein, optionally, the first embossing roll optionally also comprises third embossing protrusions and the step of embossing the first ply forms first and third embossments on the third ply, or

wherein the method optionally comprises a step of embossing the first ply with a third embossing roll with third embossing protrusions to form third embossments.

36. The method of manufacturing a coreless roll of a tissue paper product of claim 35, the method comprising the step of embossing the first ply and third ply together using the first embossing roll to form the first embossments on the first ply and the third ply,

wherein the third embossments are optionally formed only on the first ply but not on the third ply, or wherein the first ply and the third ply are optionally embossed together to form the third embossments on the first ply and the third ply.

37. The method of manufacturing a coreless roll of a tissue paper product of claim 35,

wherein the first ply and the third ply are embossed together to form the first embossments on the first ply and the third ply,

wherein the fourth ply is unembossed or embossed separately from the first ply, the third ply, and the second ply, and

wherein the third embossments are optionally formed only on the first ply but not on the third ply, or wherein the first ply and the third ply are optionally embossed together to form the third embossments on the first ply and the third ply.

38. The method of manufacturing a coreless roll of a tissue paper product of claim 35,

wherein the first ply, the third ply, and the fourth ply

are embossed together to form the first embossments on the first ply, the third ply, and the fourth ply, and

wherein, optionally, the first ply, the third ply, and the fourth ply are embossed together to form the third embossments on the first ply, the third ply, and the fourth ply, or

wherein, optionally, the third embossments are formed on the first ply and the third ply, but not on the fourth ply, or

wherein, optionally, the third embossments are optionally formed on the first ply, but not on the third ply and the fourth ply.

39. The method of manufacturing a coreless roll of a tissue paper product of claim 35,

wherein the third ply and the fourth ply are embossed together separately from the first ply and the second ply, or

wherein one of the third ply and the fourth ply is separately embossed from the first ply and the second ply, and the method does not comprise a step of embossing the other one of the third ply and the fourth ply, or

wherein the method does not comprise a step of embossing the third ply and does not comprise a step of embossing the fourth ply.

40. The method of manufacturing a coreless roll of a tissue paper product of claim 35,

wherein the first ply and the third ply are embossed together to form the first embossments on the first ply and the third ply,

wherein the fourth ply and the second ply are embossed together to form the second embossments on the fourth ply and the second ply, and

wherein, optionally, the first ply and the third ply are embossed together to form the third embossments on the first ply and the third ply, or wherein the third

embossments are optionally formed only on the first ply but not on the third ply.

41. The method of manufacturing a coreless roll of a tissue paper product of claim 35,
wherein the second embossments are formed by a second heated embossing roll, and/or,
wherein the third embossments are formed by the first heated embossing roll or a third heated embossing roll.

42. A method of manufacturing a coreless roll of a tissue paper product, such as toilet paper, the tissue paper product being made of five or six plies, the method comprising the steps of:
- providing five or six plies of Conventional Wet Press paper (CWP) and embossing at least one of the five or six plies;
- ply-bonding the five or six plies, optionally with an adhesive, such as a lamination glue, and/or with mechanical bonding, such as edge embossing, to form a tissue paper product with a grammage in a range of 65 g/m^2 to 125 g/m^2, optionally a range of 65 g/m^2 to 100 g/m^2, and a caliper ratio in a range of 10% to 25%;
- spirally winding up the tissue paper product on a mandrel to form a coreless roll and to define an axially extending inner hole facing the mandrel, with a first end of the tissue paper product being located on the outer side of the coreless roll and the second end being located at the inner hole; and
- withdrawing the mandrel;
wherein the coreless roll comprises an outer diameter in the range of 95 to 150 mm and a diameter of the inner hole is in the range of 20 to 50 mm, and the density of the coreless roll lies in a range of 130 to 160 kg/m^3,
a caliper of the formed tissue paper product optionally being at least 0.65 mm, or at least 0.70 mm, or at least 0.75 mm,

the method comprising the step of:
- embossing one of the outermost plies with a first heated embossing roll with first embossing protrusions to form first embossments with a first height (h1) in a range of 0.2 mm to 2.0 mm.

43. The method of manufacturing a coreless roll of a tissue paper product of any one of the claims 26 to 42,
wherein the method comprises the step of coating at least a part of an innermost circumvolution, optionally the entire innermost circumvolution, of the tissue paper product of the coreless roll at the second end with a stabilizing coating composition.