CLAIMS

1. An injection system (200) for injecting one or more fluids into a patient, the injection system (200) comprising one or more supply stations (105a;105b) each one for supplying one of the fluids to be injected from a container (110a;110b), wherein at least one of the supply stations (105a;105b) comprises:

housing means (115a,120a;115b,120b) defining a closed chamber for housing the container (110a;110b), the chamber having a connection port (132a;132b) for connecting the container (110a;110b) to a delivery arrangement (135,145) for delivering the fluid to the patient, and

a conditioning device (205a;205b) for thermally conditioning the fluid in the chamber, characterized in that

the conditioning device (205a;205b) comprises a first conditioning element (210a;210b) arranged around the connection port (132a;132b) and a second conditioning element (215a;215b) extending transversally to the first conditioning element (210a;210b), said conditioning device (205a;205b) being positioned externally to said container (110a;110b) and internally to said closed chamber.

2. The injection system (200) according to claim 1, wherein the first conditioning element (210a;210b) extends horizontally in an operative condition of the injection system (200) and the second conditioning element (215a;215b) extends from a border of the first conditioning element (210a;210b) vertically in the operative condition of the injection system (200).

3. The injection system (200) according to claim 1 or 2, wherein the first conditioning element (210a;210b) completely surrounds the connection port (132a;132b) in a plan view.

4. The injection system (200) according to claim 3, wherein the first conditioning element (210a;210b) comprises a ring (320) formed by a disk having a through-hole matching the connection port (132a;132b).

5. The injection system (200) according to any claim from 1 to 4, wherein the second conditioning element (215a;215b) partially surrounds the connection port (132a;132b).

6. The injection system (200) according to claim 5, wherein the second conditioning element (215a;215b) extends along a circular arc subtending an angle of 220°-340°.

7. The injection system (200) according to any claim from 1 to 6, wherein the second conditioning element (215a;215b) comprises a fin (325) having a height decreasing from a center of the fin (325) to each end thereof.

8. The injection system (200) according to any claim from 1 to 7, wherein the first conditioning element (210a;210b) comprises a first heating coil (405) having a first resistance and the second conditioning element (215a;215b) comprises a second heating coil (415) having a second resistance higher than the first resistance.

9. The injection system (200) according to any claim from 1 to 8, wherein the housing means (115a,120a;115b,120b) comprises a holder (115;115b) for holding the container (110a;110b) and a cover (120a;120b) for covering the container (110a;110b) when held on the holder (115a;115b), and wherein at least one supply station (105a;105b) comprises means (622,625) for mounting the conditioning device (205a;205b) on the holder (115;115b), the conditioning device (205a;205b) comprising a first connector (635) and the cover (120a;120b) comprising a second connector (620) for mating with the first connector (635).

10. The injection system (200) according to any claim from 1 to 9, comprising means (640) for controlling the first conditioning element (210a;210b) and the second conditioning element (215a;215b) individually.

11. The injection system (200) according to any claim from 1 to 10, wherein the conditioning device (205a;205b) comprises a plurality of temperature sensors (330)

each one for measuring a temperature in the chamber, the injection system (200) comprising means (640) for detecting an error condition according to a comparison of the measured temperatures.

12. The injection system (200) according to any claim from 1 to 11, wherein the injection system (200) is for injecting the fluids into the patient during a scan examination thereof, the fluids being one or more medical fluids comprising a contrast agent and/or a saline solution.

13. The injection system (200) according to any claim from 1 to 12, wherein the conditioning device (205a;205b) is a heating device (205a;205b) for maintaining a target temperature in the chamber.

14. A conditioning device (205a;205b) for use in the injection system (200) according to any claim from 1 to 13, the conditioning device (205a;205b) comprising said first conditioning element (210a;210b) and said second conditioning element (215a;215b).