What is claimed is:

1. A rail transport system, comprising:

a rail, provided with a first concave portion built thereon;

a rail vehicle, the rail vehicle comprising a bogie and a vehicle body, wherein the bogie has a second concave portion for straddling the rail, the bogie movably straddles the rail, and the vehicle body is connected to the bogie and is pulled by the bogie to move along the rail,

wherein the bogie comprises:

a bogie frame, the second concave portion is disposed inside the bogie frame;

a first running wheel and a second running wheel, the first running wheel and the second running wheel being pivotably mounted on the bogie frame and being disposed coaxially and spaced apart; and

a driving device, the driving device being mounted on the bogie frame and being located between the first running wheel and the second running wheel, and the first running wheel and the second running wheel being driven by the driving device;

a first horizontal wheel, the first horizontal wheel being pivotably mounted on the bogie frame; and

a second horizontal wheel, the second horizontal wheel being pivotably mounted on the bogie frame;

wherein the bogie further comprises:

a first horizontal safety wheel that moves synchronously with the first horizontal wheel and is connected to the first horizontal wheel; and

a second horizontal safety wheel that moves synchronously with the second horizontal wheel and is connected to the second horizontal wheel;

wherein an external diameter of the first horizontal safety wheel is less than an external diameter of the first horizontal wheel, and an external diameter of the second horizontal safety wheel is less than an external diameter of the second horizontal wheel.

2. The rail transport system according to claim 1, wherein the first concave portion is configured to be an escape passage.

3. The rail transport system according to claim 1 or 2, wherein the vehicle body comprises a

plurality of carriages that are sequentially hinged in a lengthwise direction of the rail and an emergency door that can be opened and closed, and the emergency door is disposed on a surface, opposite an adjacent carriage, of a carriage that is located at at least one end of the vehicle body in the lengthwise direction of the rail;

wherein the emergency door comprises a first end and a second end, the first end of the emergency door is pivotably mounted on a corresponding carriage, and the second end of the emergency door slants downwards and is inserted in the escape passage when the emergency door is open.

4. The rail transport system according to claim 3, wherein a slideway is disposed on an inner surface of the emergency door.

5. The rail transport system according to claim 1 or 2, wherein the vehicle body comprises a plurality of carriages that are sequentially hinged in a lengthwise direction of the rail and an emergency door that can be opened and closed, and the emergency door is disposed on a surface, opposite an adjacent carriage, of a carriage that is located at at least one end of the vehicle body in the lengthwise direction of the rail;

wherein the vehicle body further comprises an emergency exit and a cover plate;

wherein the emergency exit is disposed on an inner floor of the carriage that is located at the at least one end, and the cover plate is linked with the emergency door and disposed on the inner floor of the carriage that is located at the at least one end to enable the cover plate to open and close the emergency exit.

6. The rail transport system according to claim 5, wherein the emergency exit has an escape ladder connected to the escape passage;

the vehicle body further comprises a telescopic driving device configured to drive the escape ladder to extend or retract.

7. The rail transport system according to any one of claims 1 to 6, wherein the rail comprises:

a first track beam;

a second track beam, the first track beam being spaced apart from the second track beam; and

a bearing floor, the bearing floor being disposed between the first track beam and the second track beam and connected to the first track beam and the second track beam.

8. The rail transport system according to claim 7, wherein the bearing floor comprises:

a connecting beam, two ends of the connecting beam being respectively connected to the first

track beam and the second track beam;

a support frame, the support frame being mounted on the connecting beam; and

a support plate, the support plate being connected on the support frame and being supported by the support frame.

9. The rail transport system according to claim 8, wherein the support plate is spaced apart from at least one of the first track beam and the second track beam in a horizontal direction.

10. The rail transport system according to claim 8 or 9, wherein a plurality of connecting beams exist and are spaced apart in the lengthwise direction of the rail, and a plurality of support plates exist and are sequentially connected in the lengthwise direction of the rail.

11. The rail transport system according to any one of claims 7 to 10, wherein the rail further comprises an anti-falling edge;

wherein the anti-falling edge is disposed at at least one of an upper end and a lower end of at least one of the first track beam and the second track beam, and the anti-falling edge extends outwards horizontally and is configured to prevent the bogie from falling out of the rail.

12. The rail transport system according to any one of claims 7 to 11, wherein the first running wheel is fit on an upper surface of the first track beam, and the second running wheel is fit on an upper surface of the second track beam.

13. The rail transport system according to any one of claims 7 to 11, wherein the bogie further comprises:

a third running wheel and a fourth running wheel, the third running wheel and the fourth running wheel being pivotably mounted on the bogie frame and being disposed coaxially and spaced apart, the third running wheel being fit on the upper surface of the first track beam and being spaced apart from the first running wheel in a lengthwise direction of the first track beam, and the fourth running wheel being fit on the upper surface of the second track beam and being spaced apart from the second running wheel in a lengthwise direction of the second track beam.

14. The rail transport system according to claim 13, wherein the first running wheel and the second running wheel are connected through a first connecting shaft and/or the third running wheel and the fourth running wheel are connected through a second connecting shaft, and the driving device has a transmission connection to the first connecting shaft and/or the second connecting shaft.

15. The rail transport system according to any one of claims 12 to 14, wherein the first

horizontal wheel is fit on a side surface of the first track beam; and

the second horizontal wheel is fit on a side surface of the second track beam.

16. The rail transport system according to claim 15, wherein

the first horizontal wheel is fit on an outside surface of the first track beam; and

the second horizontal wheel is fit on an outside surface of the second track beam.

17. The rail transport system according to claim 15, wherein

the first horizontal wheel is fit on an inside surface of the first track beam; and

the second horizontal wheel is fit on an inside surface of the second track beam.

18. The rail transport system according to claim 15, wherein

a plurality of first horizontal wheels exist and are fit on the inside surface and the outside surface of the first track beam respectively; and

a plurality of second horizontal wheels exist and are fit on the inside surface and the outside surface of the second track beam respectively.

19. The rail transport system according to claim 17 or 18, wherein the first horizontal wheel that is fit on the inner side surface of the first track beam and the second horizontal wheel that is fit on the inner side surface of the second track beam are located at different heights in an up-down direction.