

[CLAIMS]

[Claim 1]

A weight estimation system comprising:

5 a vehicle;

a plurality of measuring devices mounted on the vehicle and which measures heights of a loading platform of the vehicle, the height being from the ground to the loading platform of the vehicle;

10 a change amount calculation unit which, based on heights of the loading platform before loading the vehicle and heights of the loading platform after loading the vehicle that are measured, calculates amounts of change between the heights of the loading platform between before and after the loading;

15 a loaded weight estimation unit which, based on the amounts of change calculated, calculates an average value, and which, based on mapping data stored in advance of a correlation between a loaded weight and an amount of change between height of the loading platform between before and after the loading, estimates a loaded weight corresponding to the average value; and

20 a center of gravity position estimation unit which, based on mapping data stored in advance of a correlation between a center of gravity position and amounts of change between heights of the loading platform between before and after the loading, estimates a center of gravity position corresponding to the amounts of change calculated.

[Claim 2]

The weight estimation system according to claim 1, further comprising:

25 a speed limit setting unit which, based on mapping data stored in advance of a correlation between a center of gravity position, a loaded weight, and a speed limit of the vehicle that does not cause a load collapse or a rollover, sets a speed limit of the vehicle corresponding to the center of gravity position and the loaded weight estimated.