CLAIMS

[Claim 1]

A binding system for binding a plurality of arranged reinforcing bars by using a binding device based on signal information on the reinforcing bars, comprising:

an information acquisition unit configured to acquire the signal information; and

a detection unit configured to detect a shape of the reinforcing bars based on contrast information included in the signal information.

[Claim 2]

The binding system according to claim 1, wherein

the detection unit detects a contour of the reinforcing bars based on the contrast information.

[Claim 3]

The binding system according to claim 1, wherein

the information acquisition unit calculates a distance to the reinforcing bars based on the signal information.

[Claim 4]

The binding system according to claim 1, further comprising:

a calculation unit configured to calculate a wire length necessary for the binding based on the signal information.

[Claim 5]

The binding system according to claim 1, wherein

the detection unit detects position information on a plurality of intersections of the plurality of reinforcing bars intersecting with each other based on the signal information.

[Claim 6]

The binding system according to claim 1, wherein

the detection unit detects an obstacle capable of interfering with the binding based on the signal information.

[Claim 7]

The binding system according to claim 1, further comprising:

a storage unit configured to store arrangement information on the plurality of reinforcing bars in advance; and

a comparison unit configured to compare the signal information and the arrangement information stored in the storage unit.

[Claim 8]

The binding system according to claim 2, wherein

the detection unit detects the contour of the reinforcing bars from a weak signal part to a strong signal part of the signal information.

[Claim 9]

The binding system according to claim 1, further comprising:

a second comparison unit configured to compare the signal information on a plurality of intersections of the plurality of reinforcing bars intersecting with each other and the signal information on the intersection.

[Claim 10]

The binding system according to claim 1, further comprising:

a plurality of binding devices; and

a selection unit configured to select one binding device for a binding object among the plurality of binding devices.

[Claim 11]

The binding system according to claim 10, wherein

the selection unit determines whether to bind the binding object based on the signal information.

[Claim 12]

The binding system according to claim 1, further comprising:

a binding device configured to bind the reinforcing bars with a wire; and

a storage unit configured to store the amount of the wire used.

[Claim 13]

The binding system according to claim 1, wherein

the information acquisition unit acquires the signal information after the binding, and

the binding system further comprises a determination unit configured to determine a bound state based on the signal information after the binding.

[Claim 14]

A computer readable medium storing a binding program causing a computer, which controls a binding system including an information acquisition unit for acquiring signal information on a plurality of arranged reinforcing bars, to function as

a detection unit that detects a shape of the reinforcing bars based on contrast information included in the signal information.