CLAIMS

[Claim 1] A manufacturing method of a laminated iron core, comprising:

a step of pressing, with a die, an electrical steel sheet having a coating containing an adhesive that exhibits adhesive ability through heating, provided to a sheet surface thereof, to obtain a unit iron core; and

a step of moving the unit iron cores pressed with the die to a lamination position and laminating the unit iron cores, and at the lamination position, heating the sheet surface of the unit iron core of an uppermost layer at a plurality of partial regions to make the unit iron core of the uppermost layer to be partially adhered to the unit iron core of a lower layer thereof at a plurality of regions.

[Claim 2] The manufacturing method of the laminated iron core according to claim 1, further comprising

a step of pressurizing the laminated unit iron cores.

[Claim 3] The manufacturing method of the laminated iron core according to claim 1 or 2, wherein:

the die is a progressive die; and

the unit iron cores after being subjected to a final pressing step in the progressive die are moved to the lamination position and laminated.

[Claim 4] The manufacturing method of the laminated

iron core according to claim 1 or 2, wherein

the unit iron core of the uppermost layer is heated every time one of the unit iron cores is laminated.

[Claim 5] A manufacturing apparatus of a laminated iron core, comprising:

a progressive die that presses an electrical steel sheet having a coating containing an adhesive that exhibits adhesive ability through heating, provided to a sheet surface thereof, to obtain a unit iron core;

a lamination space in which the unit iron cores after being subjected to a final pressing step in the progressive die are laminated; and

a heating unit that is disposed at an upper part of the lamination space and that heats the sheet surface of the unit iron core of an uppermost layer laminated in the lamination space, at a plurality of partial regions to make the unit iron core of the uppermost layer to be partially adhered to the unit iron core of a lower layer thereof at a plurality of regions.

[Claim 6] The manufacturing apparatus of the laminated iron core according to claim 5, further comprising

a pressurizing unit that pressurizes the unit iron cores laminated in the lamination space, wherein

the pressurizing unit is configured in a retractable manner from the lamination space.