Claims

1. A H-beam joint structure for joining an end of a steel material adjacent to a H-beam to each other, wherein the steel material and the H-beam have at least a flange and a web, comprising:

at least a transmission plate arranged parallel to a front surface of at least one side of the web of the H-beam and the steel material, and welded to a back surface of at least one of the flange of the H-beam and/or the steel material; and

at least a coupling plate provided in close contact with at least one of the transmission plate to connect the H-beam and the steel material, wherein

the web of the H-beam, the web of the steel material and at least one of the transmission plate are bolted via at least one of the coupling plate.

2. A H-beam joint structure for joining an end of a steel material adjacent to a H-beam to each other, wherein the steel material and the H-beam have at least a flange and a web, comprising:

at least a transmission plate arranged parallel to a front surface of at least one side of the web of the H-beam and the steel material, and welded to a back surface of at least one of the flange of the H-beam and/or the steel material; and

at least a coupling plate connecting the H-beam and the steel material on an opposite side of the web on a side where at least one of the transmission plate is arranged, wherein

the web of the H-beam, the web of the steel material and at least one of the transmission plate are bolted via at least one of the coupling plate.

3. The H-beam joint structure according to claim 1 or 2, wherein

at least one of the transmission plate of the H-beam and the steel material are arranged in close contact with the front surface of the web, and at least one of the coupling plate is arranged in close contact with the front surface of at least one of the transmission plate or the front surface of the web.

4. The H-beam joint structure according to claim 1 or 2, wherein

at least one of the transmission plate of the H-beam and the steel material are arranged by being welded to the back surface of at least one of the flange of

the H-beam and/or the steel material at an interval corresponding to a thickness of at least one of the coupling plate from the front surface of the web, and

at least one of the coupling plate is arranged so as to be held in close contact between at least one of the transmission plate and the web.

5. The H-beam joint structure according to claim 1 or 2, wherein

a plurality of the transmission plates of the H-beam and the steel material are arranged at an interval corresponding to a thickness of at least one of the coupling plate, and

at least one of the coupling plate is arranged so as to be held in close contact between the web and at least one of the transmission plate and/or between the plurality of transmission plates.

6. The H-beam joint structure according to claim 1 or 2, wherein

a shearing coupling plate connecting a upper and a lower of at least one of the transmission plates and a upper and a lower of at least one of the coupling plates of the H-beam and the steel material is provided between the upper and lower of at least one of the transmission plates and the upper and lower of at least one of the coupling plates of the H-beam and the steel material.

7. The H-beam joint structure according to any one of claims 1 to 6, wherein

the steel material is any of an H-beam, a channel steel, a Z-beam, and an I-beam.

8. A H-beam joint structure for joining a H-beam and a structure, the H-beam joint structure comprising:

at least a transmission plate arranged parallel to a front surface of at least one side of a web of the H-beam, and welded to a back surface of at least a flange of the H-beam; and

at least a coupling plate provided in close contact with at least one of the transmission plate to connect the H-beam and the structure, wherein

at least a part of the coupling plate is welded or bolted to the structure, and at least one end of the coupling plate is bolted to the web of the H-beam and at least one of the transmission plate.

9. A H-beam joint structure for joining a H-beam and a structure, the H-beam joint structure, comprising:

at least a transmission plate arranged parallel to a front surface of at least one side of a web of the H-beam, and welded to a back surface of at least a flange of the H-beam; and

at least a coupling plate connecting the H-beam and the structure on an opposite side of the web on the side where at least one of the transmission plate is arranged, wherein

at least a part of the coupling plate is welded or bolted to the structure, and at least one end of the coupling plate is bolted to the web of the H-beam and at least one of the transmission plate.

10. The H-beam joint structure according to claim 8 or 9, wherein

at least one of the transmission plate of the H-beam is arranged in close contact with the front surface of the web, and

at least one of the coupling plate is welded to the structure, and at least the one end of the coupling plate is arranged in close contact with the front surface of at least one of the transmission plate or the front surface of the web.

11. The H-beam joint structure according to claim 8 or 9, wherein

at least one of the transmission plate of the H-beam is arranged by being welded to the back surface of at least one of the flange of the H-beam at an interval corresponding to a thickness of at least one of the coupling plate from the front surface of the web, and

at least one of the coupling plate is welded to the structure and at least the one end of the coupling plate is arranged so as to be held in close contact between at least one of the transmission plate and the web.

12. The H-beam joint structure according to claim 8 or 9, wherein

a plurality of the transmission plates of the H-beam are arranged at an interval corresponding to a thickness of at least one of the coupling plate, and

at least one of the coupling plate is welded to the structure and at least the one end of the coupling plate is arranged so as to be held in close contact between the web and at least one of the transmission plate and/or between the plurality of transmission plates.

13. The H-beam joint structure according to any one of claims 8 to 12, wherein the structure is any of an H-beam, a channel steel, a Z-beam, an I-beam, a square steel tube, and a foundation anchor plate.