CLAIMS

1. A tree-shaped stainless steel folded plate complex skin integrated structural system, characterized by comprising a main steel column (1), stainless steel folded plates (3), stainless steel ring plates (7), and steel connectors (14), wherein branched steel columns (2) are extended out of an outer wall of the main steel column (1);

the branched steel columns (2) are used for bearing the weight load of the stainless steel folded plates (3);

a plurality of stainless steel ring plates (7) are configured according to the length of the main steel column (1), and are connected to a stainless steel panel (15) and the main steel column (1) through a tray support system;

a plurality of stainless steel ring plates (7) are configured according to the length of the branched steel columns (2), and are connected to the stainless steel panel (15) and the branched steel columns (2) through a tray support system;

an outer side of the branched steel column (2) is smeared with a fireproof layer and an anti-corrosion coating, and the coating is wrapped by a layer of waterproof aluminum plate (11);

downspouts (8) are arranged on two sides of the stainless steel ring plate (7), an annular stainless steel pendant (12) is arranged at intervals in a vertical height direction, and the stainless steel panel (15) is arranged on an outermost side of the annular stainless steel pendant (12); and

the stainless steel panel (15) is connected to a stainless steel annular bottom plate by self-tapping screws and the steel connectors (14).

2. The tree-shaped stainless steel folded plate complex skin integrated structural system according to claim 1, characterized in that the tray support system comprises an upper tray support and a lower tray support, wherein

the upper tray support and the lower tray support comprise an upper plate tray and a lower plate tray, a plurality of notched bases (10) are arranged on a surface of the upper plate tray, and an plurality of L-shaped bases (9) are arranged on a surface of the lower plate tray.

3. The tree-shaped stainless steel folded plate complex skin integrated structural system

according to claim 2, characterized in that the upper tray support for a unit of stainless steel plate is a load-bearing hanging point, the height of the plate can be adjusted, and the plate is locked by bolts after adjustment.

4. The tree-shaped stainless steel folded plate complex skin integrated structural system according to claim 3, characterized in that the lower tray support is not subject to gravity and is a support capable of sliding up and down.

5. The tree-shaped stainless steel folded plate complex skin integrated structural system according to claim 4, characterized in that the stainless steel folded plate (3) has a wide upper end and a narrow lower end and is bent in two directions as a whole, a portion of each branched steel column (2) protrudes vertically at the end to support a planar steel frame (6), and the size of the planar steel frame (6) is substantially equivalent to a projected contour of a flower pattern.

6. The tree-shaped stainless steel folded plate complex skin integrated structural system according to claim 5, characterized in that the planar steel frame (6) and secondary keels (4) are connected together through short steel connectors by bolts, the secondary keel (4) is arranged along a crest of the stainless steel folded plate (3), a reinforcing rib is welded to the crest of the stainless steel folded plate (3), and the reinforcing rib is connected to the secondary keel (4) through a bolt connector.

7. The tree-shaped stainless steel folded plate complex skin integrated structural system according to claim 6, characterized in that at a node where the reinforcing rib is connected to the secondary keel (4), the bolt hole is a long round hole, and a long edge direction of the long round hole is parallel to that of the rib, so as to release temperature stress in the direction; and different stainless steel folded plates (3) are directly connected together through bolts and stainless steel strips.