【CLAIMS】

【Claim 1】

A curve-combined square pressure tank 10 for accommodating a fluid at high pressure therein, the pressure tank 10 comprising:

flat members 100 disposed at upper and lower portions of the pressure tank 10;

a first curved member 200 that connects edges of the flat member disposed at the upper portion and the flat member disposed at the lower portion and is formed with predetermined curvature; and

a second curved member 300 connecting neighboring curved edges of the first curved member,

wherein the curve-combined square pressure tank includes an internal grid structure 490 comprising a plurality of horizontal grid plates 491, a plurality of vertical grid plates 492 and a plurality of linear-type reinforcing members 493 disposed between the horizontal grid plates 491 or the vertical grid plates 492 to reinforce strength, each of the horizontal grid plates and the vertical grid plates includes a reinforcing ring formed therein and cross each other.

【Claim 2】

The curve-combined square pressure tank of claim 1,

wherein a distance by which an outermost member is spaced apart from a boundary between the flat member 100 and the curved member 200 may be configured with different distances d1 and d2 in width and length directions, respectively.

【Claim 3】

The curve-combined square pressure tank of claim 2, wherein the plurality of linear-type reinforcing members 493 extend beyond the outermost horizontal grid plates or the outermost vertical grid plates.

【Claim 4】

The curve-combined square pressure tank of claim 1, wherein the reinforcing rings have a T-shape sectional view.