

ABSTRACT

CORRUGATED PLATE AND LIQUEFIED GAS STORAGE CONTAINER HAVING THE SAME

The present invention provides a corrugated plate and a liquefied gas storage container having the same. The corrugated plate comprises a plate body, a first corrugation and a second corrugation orthogonal to each other, and an intersection structure formed at the intersection position. The first corrugations are higher than the second corrugations. The intersection structure comprises a top portion, ridges, and recessed portions. The top portion is located at the center of the intersection position and has a protrusion height greater than that of the first corrugation. A ridge is formed in each of the four quadrants defined by the orthogonal corrugations, extending from the top portion toward the plate body, with an overall extension direction intersecting the first corrugation, the second corrugation, and the height direction, respectively. The recessed portions consist of four, each located in one quadrant, formed on the outer side of the first corrugation and sandwiched between a first crest of the first corrugation and a corresponding ridge, and concaved inward relative to the outer side. According to the present invention, the intersection structure ensures that the upper and lower surfaces at the intersection position have uniform line lengths, thereby achieving uniform thickness, avoiding excessive thinning, and providing improved structural strength and fatigue resistance.

FIG. 1