

The invention relates to a cargo container, particularly for air transports, having a support frame arranged on a baseplate and planking which at least partially fills this support frame, in which arrangement the side walls of the cargo container are limited to the top by in each case one ridge section and the two ridge sections project over a common edge of the baseplate and are connected to it by in each case at least two sections.

10 A cargo container of this type can be found in German Offenlegungsschrift 2,119,536. The side walls shown there consist of two parallel vertical sections which are connected by the ridge section; the cantilevered part of the ridge section spans a zone of the side wall which extends outside the baseplate and which is framed by sections and exhibits an oblique edge from the baseplate up to about half the side wall height.

20 This shape of the cargo container enables it to be adapted to the round or oval cross section of an aircraft fuselage and is mandatory for air cargo containers.

25 It has been found disadvantageous in this prior art that the rigid side frames frequently deform due to thrust loading and fracture phenomena occur particularly outside the baseplate, namely in the additional zone of the side wall described. It is a further disadvantage that cargo containers of the type described are of relatively heavy weight which, as is known, leads to increased fuel consumption in the case of aircraft.

30 In view of these facts, the inventor has made it his aim to develop a cargo container of the type initially mentioned in such a manner that, with further decrease in weight, an increase in stability occurs and, in addition, a more advantageous stock keeping and simple assembly become possible.

This object is achieved by the fact that the

side wall exhibits a support frame of a vertical side section, the ridge section adjoining the latter and a straight section which is inclined towards the outside at an angle from the baseplate and which is attached to a cantilever front of the cantilevered ridge section and that a moulded panel is fixed as filling between the inclined sections and a projection is moulded out at this panel between edge strips which is provided with a bottom strip at a distance from the baseplate.

10 A dimension of about 75° has been found to be a particularly advantageous angle of inclination between the baseplate and the inclined section.

Due to this design, a total of three sections are sufficient for producing the support frame which, in addition, can be easily displaced in the manner of a parallelogram by a force acting on them without fractures occurring; the additional end zone of the side walls according to the prior art, which opposes this displacement, is here omitted. To achieve the stepping described, nevertheless, the moulded panel is moulded out in the manner described and thus replaces the earlier stepping without its heavy type of construction. Moulded panels of this type can be easily produced from light metal plate by the deep-drawing process. However, it is also possible to produce such moulded panels from plastic.

20 The main area of the moulded panel and of its moulded-out projection extends parallel to the opposite wall so that a right angle is produced between this main area and the bottom strip.

30 This moulded panel can be provided at the bottom strip with a plinth plate which then reaches down to the baseplate. In a particularly advantageous embodiment, this plinth plate is produced separately from the moulded plate and of a slightly stronger material with respect to the higher loadings in the foot area.

Overall, this air cargo container meets all

requirements which arise, on the one hand, due to the wish for high stability and, on the other hand, due to the hope for a low weight.

Further advantages and details of the invention are found in the description of a preferred illustrative embodiment following and with reference to the drawing, in which:

Figure 1 shows an oblique view of an opened cargo container;

Figure 2 shows a side view of the cargo container;

Figure 3 shows a view which is at right angles to the view of Figure 2;

Figure 4 shows a section through parts of Figure 3 according to its section line IV - IV.

A cargo container 10, particularly for air transports, is provided with a support frame of two side frames 12 and transverse sections 13, 14 connecting these frames over a baseplate 11 of length a of, for example, 1562 mm and a width b of 1534 mm. Each side frame 12 exhibits a side section 16 of height h (1623 mm), which is vertical with respect to the surface 15 of the baseplate 11 and which is connected to a ridge section 17 which is parallel to the said surface 15. The ridge section has a length of 1980 mm (dimension e) and projects over the baseplate 11 by a cantilever dimension k of about 440 mm.

The cantilever front 18 of the ridge section 17 is connected by means of a section rod 20 to the baseplate 11 with the plane of which, determined by the surface 15, it encloses an angle w of 75° .

Corner plates for reinforcing the section connections are designated by 19.

Between the side frames 12 a cover plate 25 and a front planking 26 are attached and in the side frame 12 located at the back in Figure 1 a side wall 27. The front side of the cargo container 10 is open and can be closed by a cloth door 28 shown rolled up.

Between the two inclined section rods 20, a

plinth plate 29 extends up to a height i , which is a about a third of the height h of the side section 16, above the baseplate 11. A moulded panel 30 adjoins the plinth plate 29. Its width f corresponds to that of
5 the plinth plate 29 and both are provided with circumferential rivet strips 31 and fixed by means of these to the transverse sections 13, 14 and the oblique sections 20.

Plinth plate 29 and moulded panel 30 are
10 riveted to one another at the remaining in each case fourth rivet strips 31a.

From the moulded panel 30 produced of light metal a projection 33 is moulded out by the process of deep drawing in such a manner that its main area 34
15 encloses an angle t of 25° with the lateral rivet strips 31. Triangular areas 35 and a bottom strip 36 which connects these areas and which extends at right angles to the main area 34 and parallel to the baseplate 11 in the installed position, extend from the
20 main area 34 to the rivet strips 31.

The transition from the main area 34 to the triangular areas 35 and the bottom strip 36 is curved as is shown by the curvature edge 40 which can be seen in Figure 4.



(14)

Patent claims

1. Cargo container, particularly for air transports, having a support frame (12, 13, 14) arranged on a baseplate (11) and planking which at least partially fills this support frame, in which arrangement the side walls (27) of the cargo container (10) are limited to the top by in each case one ridge section (17) and the two ridge sections (17) project over a common edge of the baseplate (11) and are connected to it by in each case at least two sections (20), characterized in that the side wall (27) exhibits a support frame of a vertical side section (16), the ridge section (17) adjoining the latter and a straight section (20) which is inclined towards the outside at an angle (w) from the baseplate (11) and which is attached to a cantilever front (18) of the cantilevered ridge section (17), and that a moulded panel (30) is fixed as filling between the inclined sections (20) and a projection (33) is moulded out at this panel between edge strips (31), which is provided with a bottom strip (36) at a distance from the baseplate (11).
2. Cargo container according to Claim 1, characterized in that the projection (33) exhibits triangular side walls (35) which adjoin the edge strips (36).
3. Cargo container according to one of Claims 1 to 2, characterized in that the main area (34) extends parallel from the projection (33) to the opposite wall (26) of the cargo container (10).
4. Cargo container according to at least one of Claims 1 to 3, characterized in that the angle of inclination (w) between the baseplate (11) and section (20) is about 75° and/or the angle of inclination (t) between edge strip (31) and main area (34) of the projection (33) is about 25°.
5. Cargo container according to at least one of Claims 1 to 4, characterized in that the edge strips



(31) are constructed as rivet or screw strips.

6. Cargo container according to at least one of Claims 1 to 5, characterized in that a plinth plate (29) extending between the sections (20) is located between baseplate (11) and bottom strip (36).

7. Cargo container according to at least one of Claims 1 to 6, characterized in that moulded panel (30) and plinth plate (29) are constructed of one piece.

8. Cargo container according to at least one of Claims 1 to 7, characterized in that corner plates (19) are provided in a manner known per se between the ridge section (17) and the sections (16, 20) adjoining the latter.

9. Cargo container according to at least one of Claims 1 to 8, characterized in that the sections (20) are firmly connected to the ridge section (17) by means of corner plates (19) or by means of plug-in elements.