

Newsletter



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Single-Mould Pallet Box - Craemer

BPO has developed the new injection moulded SB3 pallet box for Craemer GmbH. The 1200 x 1000 x 790 mm box is made of high-quality, food-safe polyethylene and made in one shot of over 40 kg of plastic. It is optionally available in a closed or perforated version, with three runners or nine feet. Its single-mould production and a particularly stable construction make it extremely durable.

Plastic pallet boxes are the ideal solution for storing and transporting products and bulk goods of all kinds – provided the containers are robust, stackable, easy to transport and easy to clean. BPO used its knowledge and experience in the development of plastic products and materials handling systems in particular to ensure the new pallet box meets these requirements and more.



Pallet Box

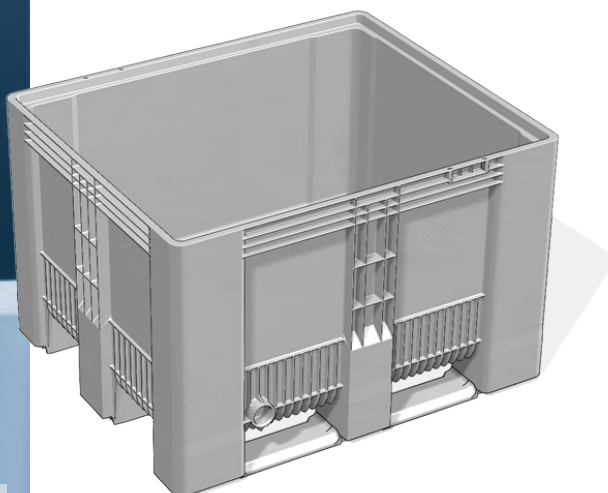
The all-round stacking shoulder in the upper and lower edge make the container compatible with a large number of other containers. The seamless construction and the smooth inner surfaces enable easy emptying, easy cleaning and good drying properties. The box is optionally available with two closed or open drain ports. These ports have

Very durable. The box is very durable. The performance is maximised by various clever construction features, such as the particularly stable runner connection, which ensures extreme resistance and secure lift-tilt emptying by a rotating forklift. Additional ribs on the outer walls provide impact protection against forklift tines. The box can contain up to 700 kg of content. During the development, load cases as required from standards DIN EN 13626 and DIN EN ISO 12048 were simulated. The simulation results were used for decision making and to ensure the actual product would pass the standard tests.

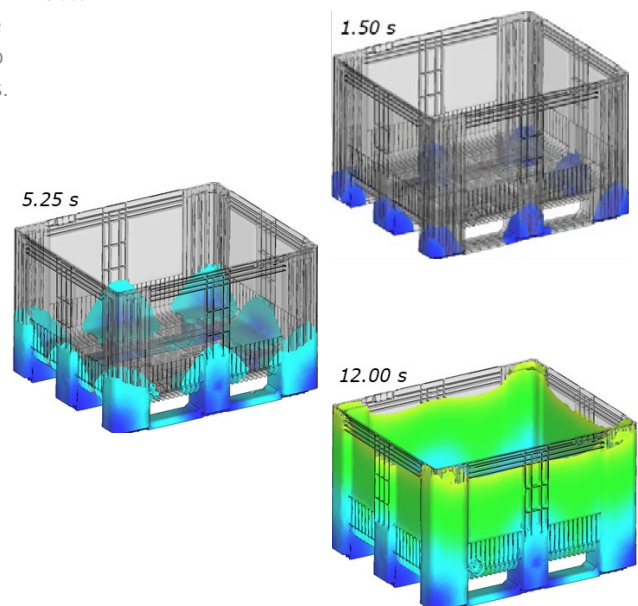
Advantages in day-to-day use. Thanks to its ingenious design, the one-piece, injection moulded SB3 offers numerous advantages in day-to-day use.

integrated thread and a drilling mark make it easier to open the holes later if necessary. The SB3 is rounded off by a custom-fit lid.

Injection moulding. Injection moulding simulations were used to analyse the injection moulding process and ensure that undesirable effects such as warpage and bending of long steel mould parts (core bending) would occur.



Pallet Box



For more information on the products check: <https://www.craemer.com/uk/products/pallet-boxes/palletbox-sb3/>

Injection moulding simulations

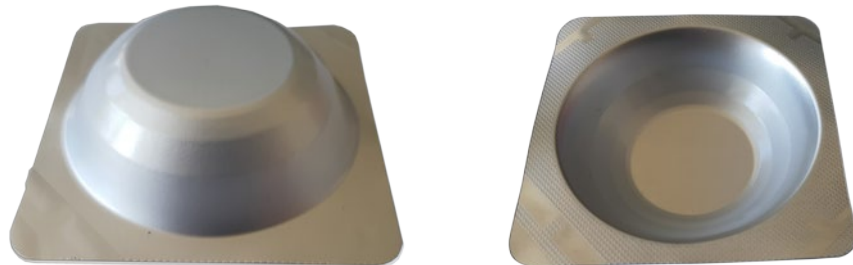


Product optimisation for animal medicine blisters

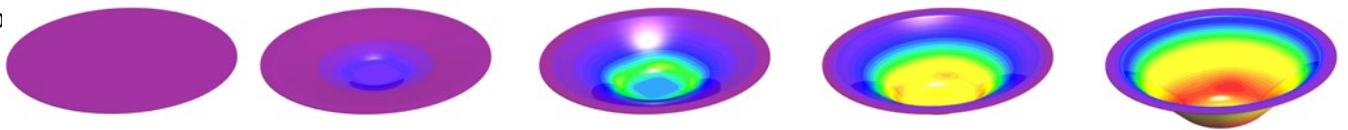
An international pharmaceutical company is benefitting from the optimisation services of BPO since several years. BPO assists in the coldforming process of their blisters made of laminated sheet material. These blisters come in sheets and are used to pack medicine in the form of capsules.

The company came to us with a challenge in their production process. The capsule pockets are made of a laminate which consists of several plastics and aluminium and is pre-processed. In the coldforming process or stamping of these shapes, the design could be optimised to save excess material. With extensive simulations, BPO was able to change the design in a way that improved the design significantly. These simulations gave a clear insight in which direction the optimisations were to be applied.

In the following years after this result, BPO was able to help with the design of their new capsules. The new designs were made according to the set of design rules that were drawn up after the previous case. With the knowledge used from other projects, we were able to help our client in an efficient way. This reduces the risk that the company takes before large production investments are made.



Blisters front and back



Blister simulations

BPO Nederland b.v.
Scheepmakerij 11
2628 AA Delft
the Netherlands
+31 (0) 15 362 000
info@bpo.nl
www.bpo.nl

Plastics, Costs and Opportunities

Material prices (April 2022) have increased astronomically compared to a few months ago. Many metals, woods, paper, electronics, but also energy and therefore transport costs have increased to such an extent that opportunities arise for other solutions. Although plastics have also increased in price, their increase is lower than most metals and woods.

There are now options to replace more expensive materials with, for example, plastics, but lighter constructions also offer opportunities. The use of wood in pallets is one such example, where you may wonder whether this cannot be solved much better by using (recycled) plastics. In addition to the advantage of hygienics, integration of functional details, reuse and possible nestability, wood is not the most ecological material to use in this type of logistics products.

costs, but also the environmental impact of the product are evaluated is a service that BPO can help with. We provide insight into which alternatives there are, what the consequences are of an alternative choice of material and what options this offers. We can develop this into the new generation of products, that are better balanced in terms of costs, but also better balanced with the environment and the future.

Thinking carefully about other materials, designs and/or production methods whereby the total life cycle



LPR pallet



Wooden pallets