

Size 2 Product on a size 4 Baby

In order to demonstrate the significant material and cost savings potential of the BoCo (Body Conforming) Product, compared to currently marketed alternatives, the following experiment has been done.

Step 1

A standard size 2 product was put on a size 4 baby torso



As expected, the product is way too short and too narrow.

Step 2

The product was “cut narrow”, as shown on the following pictures



Step 3

The product was modified according to one of many possible BoCo design versions. Leg hoops were attached left and right, and side panels added.



Result

The same size 2 centre chassis section including the core, that fitted much too small in its original setup (shown in the

first picture above) now fits a size 4 torso very well. The legs are gently touched by concentric hoops, which provide a perfect, soft seal around the legs.



There is no bulging of the core – it fits like underwear.

There are no extra leg cuffs required – the upstanding leg hoops provide perfect protection against leaks – and void space to store feces.



For those who care about product costs: This product is 400mm long. The centre part is 120mm wide. Total centre piece area is 48000mm². The preferably rectangular core can be of the same width, and provides much capacity close to the loading point.

The leg hoops can be made of plain fabric or equipped with some elastics. They measure 225x40mm each. Total area 18000mm².

The side panels add 4x110x80mm of plain fabric, 35200mm².

This all adds up to 101200mm² of very simple and low cost materials.

For reference – the centre piece of a standard size 4 product is about 500mm long, 220mm wide (=110000mm²). The standard product needs

- barrier leg cuffs (2x40x500mm of plain fabric = 40000mm²)
- back ears (2x110x80mm = 17600mm²)
- front ears (120x95mm= 11400mm², assuming nested cutting)
- leg elastics and glue to fix them
- BLC elastics and glue to fix them

Adding all components (without elastics), you need to provide 168740mm² of material. This is certainly a very simplified approach to compare costs, but it is very obvious that the chassis material savings are well in the 20 to 30% range.

A tape or hook landing surface has not been considered in the calculation. It is assumed that such landing zones are not required, due to the low force levels required to keep the BoCo products up.