

**Product Description:**      **Patient Head Enclosure****Risk Analysis Report**

This product range was designed by hospitals in the early 1960's, and has been continually improved in line with medical practices.

Headboxes are small enclosures usually used to surround a neonates head to allow a greater concentration of oxygen to be achieved, They are manufactured from transparent 4mm or 5mm Acrylic (Perspex) for bio-compatibility and minimal toxic risk to newborns and are shaped with a neck opening.

Several "Standard sizes" are available for neonate, infant & paediatric patients.

Specials are manufactured to the user specification; all follow the basic description. The main requirements for change being, size and position of the access holes.

- They all have sliding neck doors giving a better seal around the patient's neck.
- The neonatal neck door is slanted backwards into the head-box to allow room for the chin. This prevents abrasion on the shoulders as the infant moves.
- Half holes are drilled around the base to give access for IV tubes and leads etc; this prevents instability.
- Some versions have rotating side windows.
- All Head-boxes have at least a 22mm hole for oxygen.
- CO<sub>2</sub> can build up if there is no flow or a very low flow.
- All edges of the device are polished in the manufacturing process to prevent abrasion to the patient.
- The shape is a squared hemisphere without sharp comers to make cleaning and disinfection easy to achieve, and to minimise cross-infection.
- The flat panels are designed to maximise visibility of the patient and reduce distortion.

**User Recommendations.**

1. When used with neonates, the head-box should be pre-warmed to prevent cooling of the infant from radiant loss to the Acrylic.
2. The gas used should be warmed and humidified before introduction into the head-box to prevent cooling of the infant and fluid losses from the skin.

**WARNINGS**

To avoid carbon dioxide accumulation, a warning to use gas flows of at least 6 litres / mm is to be on a label affixed to the head-box