

# Setting up a Repair Department for SpO2 Probes

The repair function requires:

## **Procedure**

- ♦ Each incoming probe requires cleaning and decontaminating to prevent cross infection. This can be achieved using Alcohol wipes and anti-bacterial soaps etc. Facilities such as disposable gloves, and hand washing are essential. The cleaned probes should be bagged.
- ♦ The probe may also be contaminated inside and require the use of an Ultrasonic bath.
- ♦ Each probe usually has a serial number but some have batch or lot numbers only. It is therefore essential to ensure a fool proof system of logging in and traceability.
- ♦ Cross infection in Hospitals caused by probe repair will kill the exercise.

## **Clean Area**

- ♦ A relatively clean area is required for repair. The complete repair is time consuming requiring re-gluing of components and re-potting of components.
- ♦ To be efficient more than one probe will always be in the process of repair. It is therefore essential that a system is used that completely separates individual repairs at all times.

## **Technicians**

- ♦ The technicians do not need to be Electronic engineers but do need to be trained in probe repair and capable of ; soldering, using small electronic hand tools such as wire cutters , knives, jewelers screwdrivers, glue guns, and competent with adhesives.
- ♦ The re-assembly requires care and attention .

## **Test Equipment**

- ♦ OEM Pulse Oximeters for each type of probe repaired is essential to ensure the probe actually works.
- ♦ Many many manufacturers use Nellcor technology so a Nellcor SpO2 and interface cables can be used.. However a minimum of Nellcor : Ohmeda : Datex: Criticare: (CSI) Critikon: Physiocontrol :Minolta: Sormedics: Kontron: Datascope: BCI: Novametrics: Simed: Nonin
- ♦ It is also important to have a simulator of some description. Nonin Fingers: Bio-Tek Index or our own DL3000 which are used in conjunction with the original equipment. A curve tracer is also valuable in the checking of the Diodes.

## **Parts**

- ♦ Parts including: Cable: Finger clip shells , strain relief etc have to held in reasonable quantities.