

Design Calculations

The probes were originally designed by Teledyne Analytical USA.

Teledyne is an ISO 9001 certified company which has been manufacturing for the Medical devices market for many years.

Original manufacturers probes were reversed engineered and "re-designed" using the same materials and specifications.

The design drawings were then used by UDT who have been a manufacturer of several types of pulse oximeter probes for several original probe manufacturers for many years. UDT is possibly the third largest manufacturer of pulse oximeter probes in the world today.

The above has enabled the compatible probes to be designed and manufactured to exacting standards by companies with a proven history of medical device design and manufacture.

In order to improve accuracy and tracking between the original manufacturers probe and the Teledyne compatible generic the use of generic diodes was not allowed.

Each manufacturers probe had the diodes examined for wavelength and output and the compatible uses matched diodes and detectors. This becomes apparent in the electronic testing.

There are a limited number of diodes being used by the original manufacturers and this has allowed a colour coding system to be introduced into the probe for easy identification.

All the probes use the same method of mounting and assembly.

All new probes are designed by the reverse engineering method.