



ISC CASE STUDY

## Philips Medical

### OVERVIEW

- Philips medical was one of the first large medical customers ISC Engineering did business with starting in January 2008. Philips helped push the envelope in helping ISC Engineering evolve their quality system. Philips recognized ISC's commitment to continuous improvement and efforts to expand their quality department which led to the kickoff of a new business relationship.
- Philips engineers worked hand in hand with ISC to develop a custom design for their IntelliVue SRR short range radio which allowed patients to be mobile in a hospital and still send critical information to the nurse's station.
- The part had a custom 6 pin connector which ISC Engineering also tooled and molded in-house. The connector had a dual slotted insert and achieved an IP67 seal.
- The part in total had 4 separate molding steps which made it incredibly unique. These molds included a molded connector, pre-mold, over-mold and plugs to seal the holes of the locating pins.
- The original plan was to have ISC Engineering help with the design, prototype and development of the parts and transition it to China but Philips decided to keep the production of the part at ISC for 7 years until it went EOL.

### CHALLENGE:

ISC and Philips engineers worked together to design, prototype, and develop parts meant to be manufactured in China.

### SOLUTION:

The part required perfection in every step-in order to achieve this PFMEA's, PPAP's and control limits were developed.

### OUTCOME:

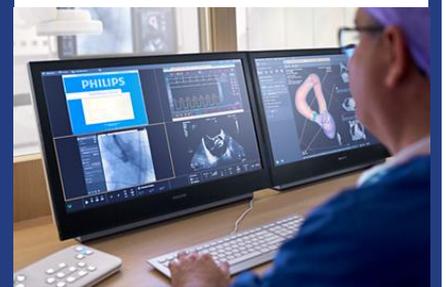
Became the primary vendor to build the IntelliVue SRR assemblies.

### FUN FACTS

Started in 1891, Philips began by making carbon-filament lamps.

In 1933 the company started production of medical X-ray equipment in the United States.

In 2006, Philips launched the first commercial 3D scanner, providing high quality CT scans.



Encapsulated smart PCB using a two step overmold process to ensure rugged design



Integrated strain relief assembly for installation in handheld device



Supply chain solution for other assemblies – Build to print and custom



Complete handheld device solution and assembly

## CHALLENGE:

The part required perfection in every step, to achieve this PFMEA's, PPAP's and control limits were developed. To reach the level of quality needed there were custom go no go gauges, countless checks, tests, measurements, and signoffs. In addition each machine and operator needed to be approved and validated to work on these assemblies.

## SOLUTION:

ISC was a one stop shop for Philips Medical, we had design, prototype, and development features for the parts Philips Medical required.



## OUTCOME

Due to our high quality and efficient production of the IntelliVue SRR assemblies, Phillips Medical decided to keep production with us instead of going with the original plan and transition production out to China. ISC had overseen production for the parts assemblies for seven years until the product hit its EOL.