

## Furtherance of anesthesia techniques



Aditya Kohli, CFO and Director – Sales, Allied Medical Limited

**P**RIMARY EQUIPMENT that the anesthesiologist uses in the operation theater is the anesthesia machine. Safe use of anesthesia machine depends upon an interaction between the basic design of the machine with its safety features, ease of use, and operational readiness. The original concept of continuous-flow machines was popularized by Boyle's anesthetic machine, invented by the British anesthetist Henry Boyle at St Bartholomew's Hospital in London, United Kingdom, in 1917, although similar machines had been in use in France and the United States.

General anesthesia, basically a reversible, medically induced coma, is one of the marvels of modern medicine. Carefully calibrated drugs, ventilators, and other technology keep patients breathing and comfortable during their most vulnerable moments – and gratefully unable to recall what transpired on the surgical table. From their perspective, it is

simple – breathe in, breathe out, wake up in a recovery bed.

But for the healthcare providers, it is a delicate art as well as science. Since last four decades, Allied Medical Limited (AML) has developed a new line of advanced anesthesia machines that help doctors deliver high-quality patient care, while also gathering oodles of detailed data about what



is happening with the device and the patient during surgery. The end-product is the Neptune Prime, a fully digital anesthesia machine with Neptune legacy insights, along with an advanced feature like fresh gas flow optimizer. Combined, these tools help clinicians deliver the right levels of anesthetic gas for their patients, more safely and efficiently. Electronic flowmeters developed by AML for Neptune Prime anesthesia workstation are scrupulous and do not have the disadvantages of having multiple mechanical parts, which are prone to leaks and breakages. Neptune Prime is equipped with electronic gas mixing that facilitates digital setting of the fresh gas flow, with measurement of delivered gases both in digital and virtual forms. Built in digital hypoxia guard controls, the oxygen to nitrous oxide setting is such that the patient does not get gas flow of nitrous oxide concentration beyond the permissible range.