

Nuclear Underwater Laser Scanner



Newton Labs has developed and deployed a laser scanning product specifically designed to operate underwater, in-vessel, within either PWR or BWR reactors. The device, the NM200UW Nuclear Underwater Laser Scanner, designed in partnership with a major US nuclear utility, produces a point-cloud output so detailed that when utilised with industry-standard three-dimensional software a full measurable CAD model can be generated.

“This is a very exciting new product for the nuclear industry,” stated John W. Bramblet, president and CEO of Newton. “The need has existed for some time to be able to produce precise measurements and dimensions in-vessel. The NM200UW, when used in conjunction with 3D software, provides fully measurable CAD models of the internals. In addition, its ability to provide precise dimensioning of features, cracks, welds and other areas allows trending that was never before possible.” he added.

According to Justin Everly, vice president of Development at Newton Labs, the capability of the laser scanner is important to nuclear utility operators because they often question the accuracy of as-built reactor blue prints created many years ago. “The only real-world evaluation available to operators today is via video cameras which cannot take precise measurements.” Everly said.

The NM200UW Nuclear Laser Scanner, along with its sister product the NM200E PWR Fuel Assembly Mapping system, are the latest additions to the Newton line of nuclear advanced technology measurement devices.