Company Description

WHO WE ARE

We are an Organisation comprising:

- The Company: COLTRACO ULTRASONICS.
- Our laboratory, co-located with the Centre for Advanced Instrumentation, part of the Department of Physics, Durham University.
- The Durham Institute of Research, Development & Invention (DIRDI).
- The Centre for Underwater Acoustic Analysis (CUAA), Durham University.

We are a high-exporting British manufacturer of ultrasonic and acoustic systems and instrumentation.

- Our technologies are used across **25** diverse market sectors from shipping and safety engineering to offshore energy, renewables, and the built environment.
- Our instruments are aboard 17% of the world's commercial shipping fleet, the Royal Navy and most allied Navies, most offshore energy platforms in the North Sea & Gulf of Mexico.
- We are a Top 35 Global supplier to one of the world's largest Wind Renewable energy companies.
- Operating in **120** countries with distributors in **80** countries.
- We are proud winners of the Queen's Award for Enterprise in International Trade in **2019** and **2022** and have won numerous maritime safety, safety engineering and fire safety awards.
- We support our instruments globally, calibrating equipment types manufactured over 20 years ago.

The scientists, analysts, and engineers, in our laboratory and research institute conduct interdisciplinary research to deliver world-leading technology. Whilst our commercial team provide world-class customer service, maintenance, repair, and calibration certification.

WHAT WE DO

We design, manufacture, and certify scientific instruments capable of monitoring your environment with exceptional accuracy and reliability.

Safesite™ on land: from monitoring the airtightness of an ICU hospital ward, to ensuring energy efficiency in the home.

Safeship™ at sea: from ensuring the watertight integrity of a ship or offshore platform to the monitoring of the gaseous extinguishing system contents, providing protection against fire.

We do this through our science-led instrumentation and systems in:

- Level – Non-invasive contents monitoring of fluids, such as transformer oils or liquefied gases e.g., CO2, NOVEC™1230, FM-200™ in cylinders and tanks.
- Tightness – Identification and quantification of airtightness & watertightness in structures on land for room integrity & airtightness and watertight and compartment integrity at sea, generating air and water flow rates respectively.
- Flow – Non-invasive flow measurement in process control including the monitoring of flow, volume, mass, and energy rates in a variety of pipework.
- Thickness – NDT corrosion monitoring instruments for measuring thicknesses of various materials.
- Pressure - Non-invasively monitoring the contents of pressurised, non-liquefied gases contained in fire cylinders, such as Inergen®, based on changes in pressure.

WHY WE ARE THE PARTNER OF CHOICE GLOBALLY

We are dedicated to operating with the utmost scientific and commercial integrity to provide manufacturing and technical excellence.

We respond and pivot to global change and demand. The Portascanner™COVID-19 was developed alongside Innovate UK and UK Research Innovation, to support the NHS during the pandemic by enabling them to monitor negatively pressurised ICU wards and prevent infection spreading from them to the rest of the hospital.

Our talented Research, Development, Design and Ergonomics (RDDE) Team adapted the principals of fluid dynamics to air flow, creating the world's first portable instrument capable of locating, and measuring air leaks.

We continue to innovate. Our RDDE team have since applied these principals to the built environment and developed the Portascanner™ AIRTIGHT to monitor the airtightness of buildings to prevent energy loss. For which we are proud winners of the Innovate UK research and technology grant award as part of the Net Zero heat programme.

OUR RESEARCH EXCELLENCE

In every part of the organisation, we are committed to:

- Undertaking research into the fundamental physical laws of the universe for the benefit of humankind.
- Undertaking applied research to diversify the company and enable the public to lead safer lives.
- Identifying and nurturing brilliant minds and creating a unique research environment at Durham University.
- Supporting ordinary people to realise their potential by connecting them with world class academics and UK Industry.

Our team is led by our chairman and founder, Dr Carl Stephen Patrick Hunter OBE.

Carl Stephen Patrick Hunter OBE is Chairman of Coltraco Ultrasonics, a high-exporting advanced manufacturer exporting to 120 countries, Chairman of the British Exporters Association, Director-General of the Durham Institute of Research, Development & Invention at Durham University, Director of the Centre of Underwater Acoustic Analysis, his "gift to the nation" and specifically to the Royal Navy's Submarine Service, Professor-in-Practice at Durham University Business School, Chairman of the Council on Geostrategy Forum, which recently hosted the First Sea Lord's Sea Power Conference at Lancaster House, Visiting Fellow of the Royal Navy Strategic Studies Centre and Fellow of the Royal Aeronautical Society and of the Institute of Marine Engineering, Science & Technology. A former Green Jacket Officer, he was Managing Director International Markets for TIMCO Aviation Services in NC USA, the largest independent aircraft maintenance, repair and overhaul organisation in the world. Prior to that he was Senior Advisor to United Airlines/United Services, San Francisco CA USA, the largest B777/B747-400 wide-body operator in the world. He was a member of the Government's COVID19 Economic Recovery Taskforce at BEIS and advises several Government departments, such as the SME Action Group at DBT, and is co-Chair of External Engagement to the Director of SONAC at the MoD, where he also supports Director Defence Innovation and Director UKDSE. His company has won the Queen's Award for Enterprise, in International Trade twice, in 2019 and 2022. During COVID19 his company did not place anyone into furlough, instead established a new laboratory, co-located with the Centre for Advanced Instrumentation, part of the Department of Physics, Durham University, and developed via Innovate UK the first instrument to be able to check that negatively pressurised ICU Wards in NHS Hospitals were containing infection rather than spreading COVID19 into the rest of the hospital. His manufacturing company's instrumentation is aboard over 10,000 ships, equating to 17% of the world's shipping fleet. He holds an Honorary Doctorate in Science from Durham University and the University Senate's highest Dunelmensis Award, for his contribution to undergraduate development and scientific research. Carl was recently honoured in with the OBE for Services to Business and International Trade.