



COMPANY INFORMATION

Established in London, in 1947 as a Defence contractor, today Defence at Hale Hamilton means professionally engineered solutions, project managed from inception to delivery, manufactured and tested in-house, to strict customer controlled quality assurance standards, with equipment supported and developed through-life.

Hale Hamilton's primary strength and significant track record is in the provision of valves and systems used on board Submarines and surface warships worldwide at typical supply pressures from 6,000psi (414bar) down to <100psi (7bar).

Hale Hamilton products, systems and support services for the containment, control, distribution and application of compressed gases and fluids are also widely used in other military equipments. Hale Hamilton operates a quality management system and is accredited to ISO9001:2008.

RECENT MAJOR NEW BUILD SUBMARINE PROJECTS include:-

- **ThyssenKrupp HDW (Germany)** – U214 – Boats 1-6 – for Republic of South Korea Navy and other navies
 - Various specialist valves & pressure regulators, BIBS, HIS system valves
- **Navantia (Spain)** – S80 Class – Boats 1-4 – for Royal Spanish Navy
 - In-line valves, Reducing Stations, Blackwater valves, Solenoid valves, HIS system valves
 - Calzoni Spa – Stores & Flares Ejector system – manifolds & integrated valves
- **BAE Systems Submarine Solutions (UK)** – Astute Class – Boats 1-7 for UK RN
 - Hull valves, Hydraulic manifolds & valves, In-line valves, Reducing Stations, Manifolds, BIBS, HIS system valves
 - Babcock Integrated Technology – Weapons Handling & Weapons Discharge pneumatic & hydraulic valves, SSE valves
 - Rolls-Royce – Various specialist control valves

CONTACT DETAILS

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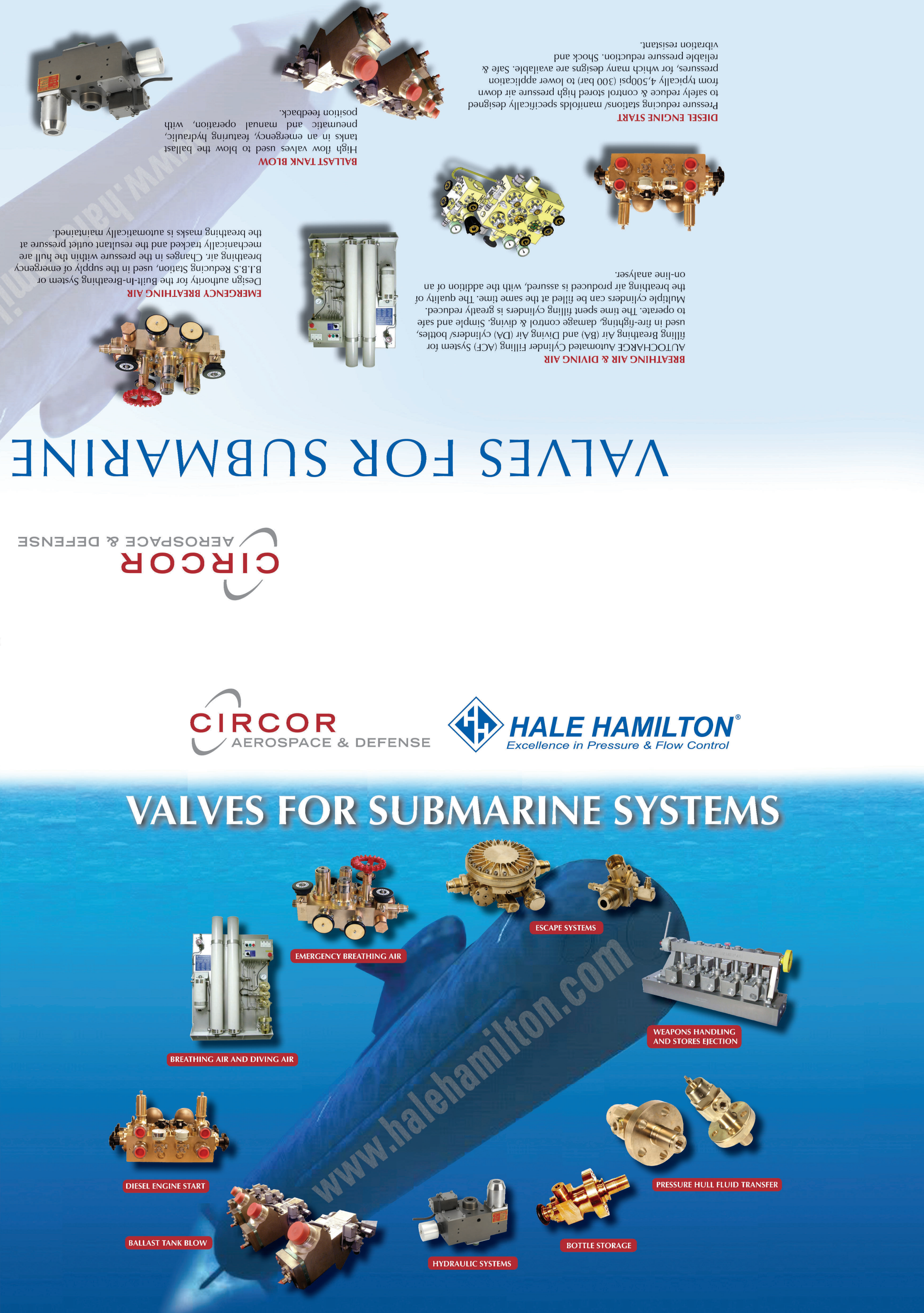


PREVIOUS SUBMARINE PROGRAMMES SUPPLIED (BY NAVY/ CONTRACTOR) / CURRENTLY SUPPORTED include:-

- Australian Navy (ASC) – Brazilian Navy (HDW)
- Canadian Navy (ex-UK) – Chilean Navy (HDW) – French Navy (DCNS) – German Navy (HDW/ NSWE) – Hellenic Navy (HDW/ HSY) – Indian Navy (MDL/ GRSE/ HDW) – Indonesian Navy (HDW) – Israeli Navy (HDW/ NSWE) – Italian Navy (Fincantieri) – Japanese Naval Self-Defense Force (MHI & KHI) – Malaysian Navy (DCNS) – Netherlands Navy (RDM) – Norwegian Navy (NSWE) – Polish Navy (NSWE) – Portuguese Navy (HDW) – Singapore Navy (Kockums) – South African Navy (HDW/ B&V) – South Korean Navy (HDW/ DSME/ HHI) – Spanish Navy (Navantia) – Swedish Navy (Kockums) – Taiwanese Navy (WF) – Turkish Navy (GNS/ PNS) – UK Navy (BAE Systems) – US Navy (GD EBC/ NGN)



VALVES FOR SUBMARINE SYSTEMS



DIESEL ENGINE START
Pressure reducing stations, manifolds specifically designed to safely reduce & control stored high pressure air down from typically 4,500psi (300 bar) to lower application pressures for which many designs are available. Safe & reliable pressure reduction. Shock and vibration resistant.

BREATHING AIR & DIVING AIR
AUTOCARGE Automated Cylinder Filling (ACF) System for filling Breathing Air (BA) and Diving Air (DA) cylinders/bottles, used in fire-fighting, damage control & diving. Simple and safe to operate. The time spent filling cylinders is greatly reduced. Multiple cylinders can be filled at the same time. The quality of the breathing air produced is assured, with the addition of an on-line analyser.

EMERGENCY BREATHING AIR
Design authority for the Built-in-breathing System or B.I.B.S Reducing Station, used in the supply of emergency breathing air. Changes in the pressure within the hull are mechanically tracked and the resultant outlet pressure at the breathing masks is automatically maintained.

ESCAPE SYSTEMS
Design authority for the Hood Inflation System Pressure Controller, known simply as the H.I.S Pressure Controller and the associated Stole Charging Valve or SCV. Changes in the pressure within the escape tower during flooding and pressurisation are mechanically tracked and the resultant outlet pressure to the escapees suit is maintained at between 0.9psi – 2.5psi (set according to suit deployed) above the pressure in the tower.

HYDRAULIC SYSTEMS
Range of SW3P, 4W3P, 4W2P, 3W2P, and 2W2P electrically actuated and manual directional control/selector valves, used for the safe, leak free control and direction of high pressure hydraulic systems. Individual valves are usually mounted on a sub-plate, or multiple manifolds. The Hale Hamilton design offers minimal inter-port leakage, meaning a greatly reduced power consumption. The design is compact, light-weight, robust, responsive and reliable through-life.

PRESSURE HULL FLUID TRANSFER
A range of hull valves, designed to transfer fluids and gases under pressure across the pressure hull, for which many designs are available. Typical applications include; compressed air, nitrogen and oxygen, potable water, sea-water, grey/black water, hydraulic oil, fuel oil, and others. These valves are high integrity designs, resistant to shock and vibration, and are safe and reliable. Remote operation is an option.

WEAPONS HANDLING & STORES EJECTION
A range of hydraulic valves and manifolds is supplied to other defence contractors world-wide for use in their weapons handling and ejector systems e.g. Babcock Integrated Technology, Calzoni.

BOTTLE STORAGE
Air from the main high pressure air reservoirs/bottles is typically distributed from the bottle storage through a Hale Hamilton bottle head assembly. A range of robust, safe, secure, shock and vibration resistant assemblies is available, with flange or screw thread mounting options.

A full range of reducing stations/ manifolds, valve chests/ distribution manifolds, stop/ isolation valves, non-return/ check valves, back pressure maintaining valves, safety/ pressure relief valves, pressure regulators, in-line filters, pressure gauges, pressure gauge read & vent valves, pipe couplings and adaptors, is available. A full engineering design, development & qualification testing service, to meet our customer's exacting requirements is offered.