

BHR GROUP SERVICES



Our clients are at the heart of everything we do. We work closely with them to ensure their objectives are met at every level, across the following areas:

**Water & Wastewater | Oil & Gas | Nuclear | Decommissioning
Petrochemicals | Speciality Chemicals | Food & Beverage | Pharmaceuticals**

Product / Process Development

We support the entire project lifecycle, providing services such as:

- Design input & review
- Scale-up investigation
- Performance validation and optimisation of:
 - products
 - fluids
 - operations
 - designs
- Troubleshooting failing designs, operations and products

Pre-Construction / Front-end Engineering Design

We review and verify design parameters with regards to:

- **Flow characteristics:** pump, valve and line sizing; material choice and certification; insulation characteristics; thermal performance; static equipment and fluid mixing.
- **Performance characterization / product qualification:** testing fluid components and systems in terms of flow; pressure; fatigue; temperature.
- **Oil hydraulic systems:** design; review; troubleshooting; verification; data development.
- **Water hydraulic systems:** design; review; troubleshooting; verification; data development.

Existing Plant

We work with clients to reduce costs and increase efficiency by:

- Reviewing existing systems to increase facility life span, flow through and production.
- Investigating vibration, surge, flow and pressure variation issues.
- Identifying possible valve, line and pump sizing changes to improve production characteristics.
- Assessing seals and glands to increase plant life span;
 - Achieving increased uniformity to reduce maintenance, inventory and spare parts costs and decrease operations costs.
- Investigating vessel and boiler 'internals' to improve equipment efficiency and performance.
- Trouble shooting systems and reactor performance and issues.
- Undertaking optimisation studies on mixing and reactors to maximise effectiveness and value.
- Process improvement, scale-up, optimization and intensification of chemical and physical processes.

Abrasive Water Jetting Systems

Developed by BHR Group, DIAJET (Direct Injection of Abrasive Jet) is a cold-cutting technique that provides powerful and accurate cutting and cleaning. DIAJET excels in time and safety critical environments where customers are often operating under stressful conditions yet require controlled, accurate and reliable cutting or cleaning. Vital applications undertaken include:

- Cutting munitions for explosive ordnance disposal.
- Removal of structural steel and pipework for nuclear decommissioning.
- Cutting leg piles from offshore oil platforms.
- Surface contaminant removal.

Each DIAJET system is custom designed for the client application. We provide a full, end to end service: from system design, through factory acceptance, to on site proving and operation.