

# underwater services



**ROYAL HASKONING**

thinking in  
all dimensions

# underwater services



*Clockwise from above: Axmouth Harbour, Devon, UK; Felixstowe Oil Jetty, UK; Environmental Survey, Grand Turk.*

## underwater engineering & environmental services

Royal Haskoning, through Posford Haskoning Ltd., and Haskoning Nederland B.V., offers professional engineering and environmental expertise in the underwater environment. Work can be undertaken on all coastal, maritime, estuarial, inshore/inland sites both in the UK and abroad. Established in 1989, the team comprises diving engineers and environmental scientists qualified in accordance with the UK Diving at Work Regulations 1997. The team also has the capability to carry out work in confined spaces. The company is a registered diving contractor with the Health and Safety Executive and a full member of the Association of Diving Contractors.

Underwater Services was established in response to the increasing demand for high quality inspection and reporting services required by clients. The team has a depth of knowledge and experience to carry out initial surveys, structural inspections, damage assessments and testing through to maintenance and repair recommendations, design of works, site supervision and project management. Team members are also experienced in baseline environmental surveys and monitoring studies to determine actual impacts relating to a number of activities including dredging, disposal, beach nourishment and reclamation.



Clockwise from above: Broughty Ferry, Dundee RNLI Station, UK; St. Katherine Dock, London, UK; Marmara Power Plant, Turkey; Jetty inspection, Erith, UK.

## diverse services

Engineering related work can range from small surveys to the supervision of large construction contracts and retention on inspection or engineering-support term contracts. Ecological surveys can vary from broad-scale baseline surveys to site specific surveys to establish the sensitivity of particular habitats or species.

In particular underwater and confined space activities can include:

- General visual inspections
- Dimensional surveys
- Corrosion(especially ALWC)
- Erosion inspections
- Videography
- Low-light photography
- Non-destructive testing
- Materials sampling
- Site supervision
- Project management
- Baseline ecological survey
- Site specific ecological monitoring
- Sensitivity mapping



*Clockwise from above: RM Turnchapel, Devon, UK; Port of Kamsar, Republic of Guinea; RM Turnchapel, Devon, UK.*

## effective planning

Effective planning is essential at all stages to take account of safe systems of work, tidal and weather conditions, shipping movements and co-ordination of contractors to enable us to work on many types of installations:

- Ports, harbours, docks and marinas
- Railway and highway bridges
- Breakwaters
- Dolphins and jetties
- Outfalls, tunnels and culverts
- Locks, weirs and sluices
- River and canal walls
- Dams and spillways
- Sea bed surveys
- RNLI stations



*Marmara Power Plant, Turkey.*

## worldwide, multidisciplinary support

The Underwater Services team members are located in the regional offices around the UK. Clients are drawn from both the public and private sectors and have included:

- Defence Estates
- Local Authorities
- Environment Agency
- Port of Felixstowe
- Royal National Lifeboat Institution
- British Waterways
- Berkley Homes
- Trinity House

- English Nature
- Scottish Natural Heritage
- Overseas Government Departments

In addition international work is supported on both a short and long-term basis. We have worked in countries including Cyprus, Greece, Republic of Guinea, Kuwait, Republic of Ireland, Malta, Pakistan and Turkey.

Royal Haskoning is committed to adding value to our clients through the development of flexible business solutions. As a multidisciplinary consultancy a wide

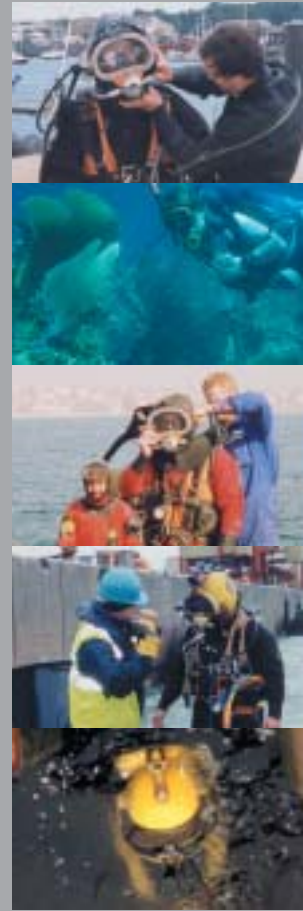
range of complimentary services can be provided and linked to our diving activities.

These include:

- Environmental impact assessments
- Interpretation of echo-sounding, side scan sonar and sub-bottom profiling surveys
- Structural analysis
- River and coastal studies
- Geotechnical investigations
- Contamination investigations and remediation
- Mechanical and electrical design

Royal Haskoning is an independent, worldwide operating consultancy that has its origins in a firm established in 1881 in the Netherlands. The consultancy now has a staff of 3,000 who together combine a wide range of knowledge and experience. Rooted in a technical background, our consultancy services focus on the broad field of the interaction between people and their environment, in the fields of spatial development, infrastructure & transport, architecture & building, mechanical & electrical services, environment, water, coastal & rivers and maritime. We are committed to working enthusiastically with our clients to achieve sustainable solutions in an increasingly complex society. The expertise and experience of our professionals in a variety of disciplines allow us to

consider all technical, logistical, architectural, legal, organisational, social, environmental and economic aspects of your project, in order to develop sustainable and practical solutions. Royal Haskoning has subsidiaries and partners throughout the world. Through our branch and project offices in Europe and overseas, we have access to all major international markets. This way, Royal Haskoning offers multidisciplinary and integrated services locally, based on experience built globally. With our personal service in consultancy, we contribute effectively to the successful planning, design, implementation, commissioning and operation of projects and programmes and enhance our clients' work with added value.



Royal Haskoning, through Posford Haskoning Ltd., and Haskoning Nederland B.V. is a member of:

- ACE The Association of Consulting Engineers
- BCCB British Consultants & Construction Bureau
- PIANC International Navigation Association
- ICHCA International Cargo Handling Co-ordination Association
- CIRIA Construction Industry Research Information Association British Section
- ICID International Commission on Irrigation and Drainage
- IEMA Institute of Environmental and Management Assessment
- FIDIC International Federation of Consulting Engineers

Royal Haskoning, through Posford Haskoning Ltd., or Haskoning Nederland B.V. is registered with: African Development Bank, Asian Development Bank, Caribbean Development Bank, European Bank for Reconstruction and Development, European Development Fund, International Development Bank, Islamic Development Bank, Kuwait Fund for Arab Economic Development, Department for International Development, United Nations Development Programme World Bank, and many other Funds and National Authorities.

# thinking in all dimensions

## PETERBOROUGH

Rightwell House  
Bretton  
Peterborough, PE3 8DW  
United Kingdom  
Tel: +44 (0)1733 334455  
Fax: +44 (0)1733 262243  
E-mail: [info@peterborough.royalhaskoning.com](mailto:info@peterborough.royalhaskoning.com)

## HAYWARDS HEATH

Burns House  
Harlands Road  
Haywards Heath, RH16 1PG  
United Kingdom  
Tel: +44 (0)1444 458551  
Fax: +44 (0)1444 440665  
E-mail: [info@haywards-heath.royalhaskoning.com](mailto:info@haywards-heath.royalhaskoning.com)

## EXETER

1 Alba Court  
Emperor Way  
Exeter, EX1 3QS  
United Kingdom  
Tel: +44 (0)1392 447999  
Fax: +44 (0)1392 446148  
E-mail: [info@exeter.royalhaskoning.com](mailto:info@exeter.royalhaskoning.com)

## NIJMEGEN

Barbarossastraat 35  
PO Box 151  
6500 AD Nijmegen  
The Netherlands  
Tel: +31 (0)24 3284284  
Fax: +31 (0)24 3239346  
E-mail: [info@nijmegen.royalhaskoning.com](mailto:info@nijmegen.royalhaskoning.com)

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Newcastle  
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