





The team at Devin is passionate about water. Whether we are working on the design for an olympic 50m competition pool, or a small water feature, our goal is to provide our clients with water engineering solutions that exceed expectations.

Do we succeed? Well, we believe we do, but we are happy to leave the final word to our wide client base.

*by*  
John Devin



# Devin is a specialist water engineering design consultancy with an extensive portfolio of water treatment commissions for swimming pools and other water based projects.

Professional experience	Independent expert advice	Design and specification
<p>Devin has completed over 200 water engineering projects working alongside some of the world's leading architects, engineers and project managers. Our team of specialist engineering design consultants has extensive experience, and design to the latest international standards. Our aim is to deliver high quality projects, on time and on budget. The company is a member of the Association for Consultancy and Engineering (ACE) and the managing director is a technical advisor to the Pool Water Treatment Advisory Group (PWTAG).</p>	<p>The practice offers a unique combination of independence and specialist expertise in this niche market. The specialist engineering sectors advised upon include:</p> <ul style="list-style-type: none"> <li>• Water treatment</li> <li>• Water and air features</li> <li>• Hydrotherapy and wellness</li> <li>• Movable floors</li> <li>• Movable booms</li> <li>• Aquatic design</li> <li>• Ice rink engineering</li> </ul>	<p>Specialist water engineering projects, for swimming and recreation, include:</p> <ul style="list-style-type: none"> <li>• Olympic &amp; Commonwealth pools</li> <li>• 50m, 25m &amp; learner pools</li> <li>• Leisure pools and waterparks</li> <li>• Health spas &amp; wellness centres</li> <li>• Hydrotherapy pools</li> <li>• Outdoor &amp; paddling pools</li> <li>• Interactive water features</li> <li>• Decorative water features</li> <li>• Ice rinks</li> </ul>

### Integrated Design Solutions

Construction projects involving swimming pools and other water oriented facilities require specialist engineering design input to ensure that public health and safety and other fundamental requirements are met.

The key to meeting these requirements, and in ensuring that such buildings eventually perform to a satisfactory standard, is to involve all professionals at an early stage in the design process.

Devin welcomes the opportunity of early involvement in projects and believes that this results in a more efficient design process, more cost effective engineering and better building design.

Professional water systems' design is important in the development of pools and buildings where the integration of architectural, structural, mechanical, electrical and drainage elements is necessary. Water engineering is our business.

### Concept and Outline Design

Early involvement in a project is essential for the effective integration of plant rooms, pumping stations, holding tanks, hydraulic systems, safe chemical storage, and water recovery systems. This crucial design input will avoid disruptive and abortive design costs at a later stage.

### Detailed Design and Specification

In a highly competitive construction environment, comprehensive water engineering solutions will only be achieved if they are carefully specified. Devin provides carefully crafted specifications to meet project needs, backed by a schedule of engineering drawings, all fully interfaced with other design professionals. This information levels the playing field to enable competitive tendering on an equivalent basis, resulting in the right product at the best price.

### Competitive Tendering and Selection

With over twenty years experience of the specialist water engineering market, Devin has extensive knowledge of subcontractor selection. This is essential to ensure that appointed subcontractors are capable of working to the standards specified. Devin also evaluates tenders and provides detailed tender reports with recommendations.

### Site Monitoring

With an appropriate design, an appropriate subcontractor and an appropriate price, the installation works can commence, with the reassurance that risk has been minimised. Devin then carries out regular site inspections to check that the installation works are in accordance with specification, and are properly co-ordinated with other trades.

### Commissioning

Comprehensive and effective commissioning is a key part of a successful installation. Bespoke commissioning documents are prepared for each design, which are then independently verified by Devin. Important mechanical, hydraulic, chemical and microbiological criteria must be satisfied to enable completion.

Manchester Aquatic Centre.  
Built for the Commonwealth Games.



swimmingpools

Devin's portfolio of over 200 pool projects range from small hydrotherapy pools to the competition pools of the London Aquatic Centre for the 2012 Olympics. Water quality is of paramount importance on all clients' projects and Devin has extensive experience in providing systems design and specifications for a wide range of pool types and sizes - 50m, 25m, diving, water polo and learner.

Swimming pools are highly complicated buildings that require specialist engineering expertise to ensure their success.

Movable floors and movable booms provide the essential flexibility in all of our 50m pools and many of our 25m pools - again with the systems designed and specified by Devin.

Sunderland 50m Pool.



Killingworth Leisure Centre -  
Community use and ASA standards.

Sportslink Pool, Dublin -  
Sport & Leisure Club.

The English Institute of Sport,  
at Loughborough University.

## leisurepoolswaterparks

The water treatment design considerations in a leisure pool - with high bather numbers, low water volumes and high levels of activity - are more onerous than any other pool type.

Water treatment systems must address high pollution loads resulting from the concentrations of bathers, while maintaining a safe and comfortable leisure environment.

Hydraulic engineering of water features should provide the right balance between excitement and safety - whether it is a series of small finger jets for kiddies or a tipping bucket dropping a tonne of water in one go!

Alton Towers Waterpark.



Horsham Leisure Centre.  
Water is a key part of the ambiance.



Alton Towers Waterpark.



Fleming Park Paddling Pool.



waterfeatures

“Crystal clear” was the brief for the water quality from water sculptor, William Pye, for his innovative new Vortex Water feature at Seaham Hall Hotel - County Durham. Aesthetic water quality is of paramount importance on decorative water features.

On interactive water features, where there will be high levels of contact with the water, both aesthetics and safety are key issues. PWTAG guidelines require a stringent approach to water quality on all types of water features.

“Crystal clear” water at the Vortex, Seaham Hall.



Peace Gardens, Sheffield.  
Interaction with the decorative water.



“The Grand Cascade” (bottom image)  
Alnwick Garden, Northumberland.



healthspas



Luxuriating in the ozone treated water at Seaham Spa or bathing in the mineral rich natural spring waters at Bath Spa or simply relaxing in the hotel spa - all require water of the highest quality.

Professionally designed and carefully executed water treatment installations are behind every Devin project - Wellness and water quality go hand in hand.

Neck and shoulder massage, at Bath Spa.



Outdoor spa experience, Seaham Hall.



Rooftop mineral water pool, at Bath Spa.



The Spa, Hodson Bay Hotel.



## movablefloorsandbooms

Movable Floors and Movable Booms provide essential flexibility in modern swimming pools. 50m and 25m pools can now be designed to cater for a whole spectrum of uses, from international competitions to a wide range of community uses.

Movable floors provide variable water depth, typically from 0.0m to 5.0m, over a part or all of a pool water area. Movable booms, either traversable or submersible, subdivide a pool into two or more separate pools.

With a wide range of floor and boom options, proper design, specification and integration by independent specialist consultants is essential from the earliest stages of a project.

Private House, Dublin. The pool hall is also a function room, with a matching stone floor.



University of Stirling. A flexible 50m pool.



Loughborough University. The traversable boom design allows for speedy movement.



## icerinks

Ice quality is the result of good ice rink engineering. Many factors need to be addressed to ensure a uniform sheet of quality ice including control of heat loads onto the ice, the design of the refrigerated floor, the refrigeration plant and the resurfacing using specially treated water. Independent specialist advice is central to the design process.

The Devin portfolio of ice rink projects includes both formal and leisure ice pads, throughout the UK and Europe.

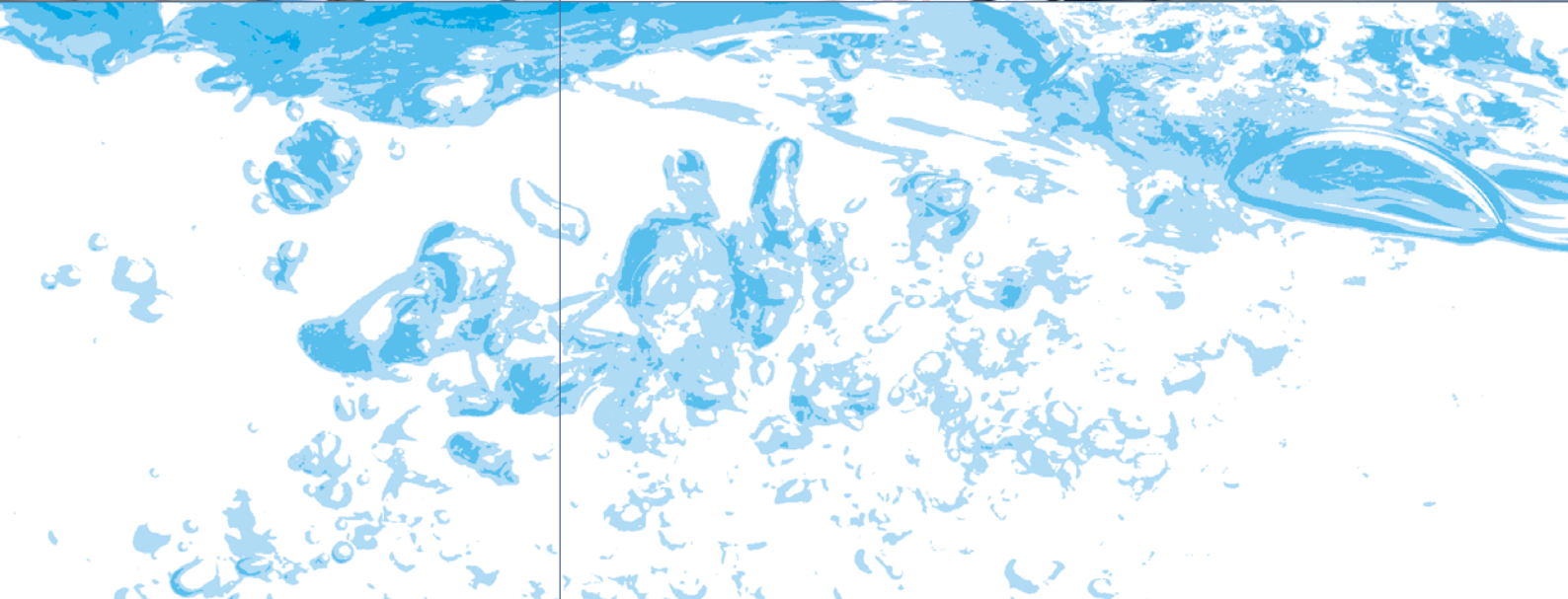
Malta Ice Rink used sea water for heat rejection.



Leisure Ice at Cholet, France.



National Ice Centre, Nottingham.  
60m x 30m Community & Arena Pads.



projects

**50m Pools**

Dubai Aquatic Centre  
London Aquatic Centre 2012  
National Aquatic Centre, Dublin  
Sunderland 50  
Wales National Pool, Swansea  
Manchester Aquatics Centre  
University of Stirling  
Uxbridge Lido  
University of Surrey  
Loughborough University  
MLDP Cricklefields

**25m Pools**

Stafford Leisure Centre  
Finglas Pool, Dublin  
Dublin City University  
Harpurhey L.C. Manchester  
Clondalkin Pool, Dublin  
Sunbury Leisure Centre  
Killingworth Leisure Centre  
Galway University  
University of Leeds

**Leisure, Waterparks**

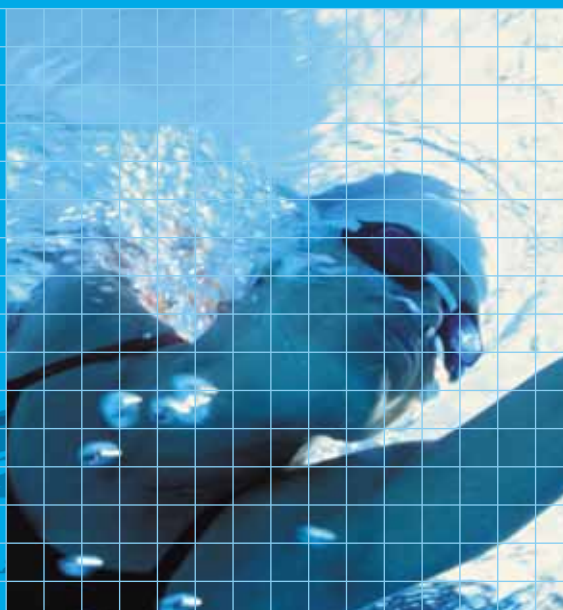
Alton Towers Hotel Waterpark  
Sportslink Pool, Dublin  
London Aquatic Centre 2012  
Horsham Leisure Centre

**Health Spas and Wellness Centres**

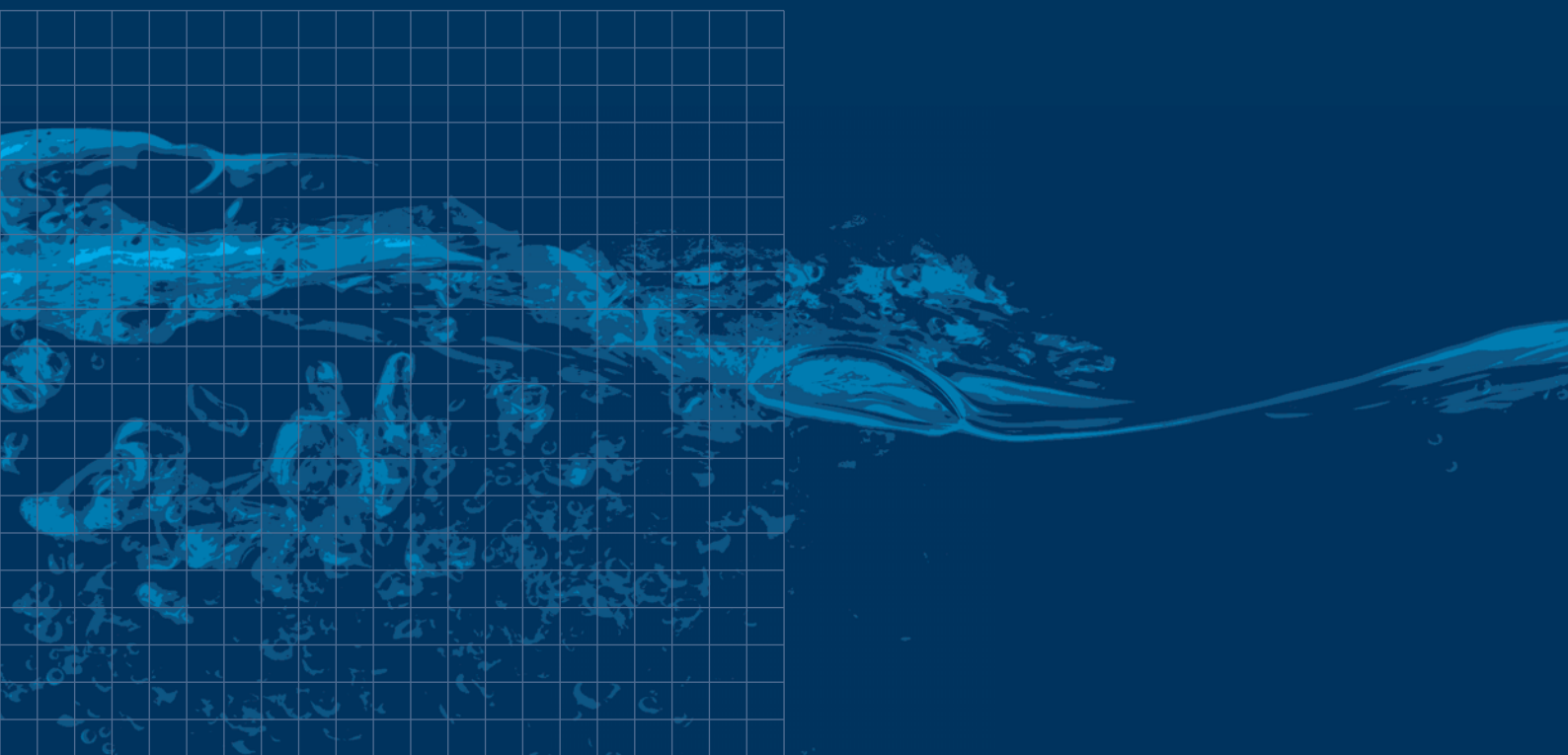
Bath Spa  
Pan Peninsula, London  
Hodson Bay Hotel  
Sheraton Hotel, Athlone  
Westin Hotel, Birmingham  
Seaham Oriental Spa, Durham

**Water Features**

Alnwick Garden  
Kingsbury Square, Aylesbury  
Sheaf Square, Sheffield  
Seaham Hall



puretechnology



england

devin consulting limited  
85 howard street  
north shields  
newcastle upon tyne  
NE30 1AF

eire

devin consulting limited  
22 northumberland road  
ballsbridge  
dublin 4

**T** +44 (0)191 258 1653  
**F** +44 (0)191 258 1992  
**E** [info@devin.be](mailto:info@devin.be)  
**W** [www.devin.be](http://www.devin.be)