

Bulkheads – they have to be the way forward

In an exclusive technical paper Janet Cornthwaite, managing director of Suntrap Systems (Birmingham) Ltd looks at the implications on the construction and development of bulkheads for the swimming pool industry

The design, construction and use of swimming pools has changed considerably over the years and is still continuing to develop. The biggest boom in terms of swimming and leisure provision in the UK took place in the 60s and 70s when the number of pools grew dramatically. Swimming is the UK's largest participation exercise sport and this, combined with the current requirement for all children to be taught to swim, brings to the forefront the need to add to and improve facilities with the result that more people now take part in water-based activities that at any time in the past.

The limitations on local authority budgets and cost of new-build centres has led to a wide-ranging review of the current provision of pools and the need to upgrade, refurbish and extend existing facilities to make the most of many pools which were first built in the 60s and 70s. At that time, different ideas of design, the size and use of pools, fittings and equipment installed were limited to products then readily available on the market. And it must be said, the UK did not look as widely as it does now at the facilities in other countries to see if any ideas there could be adapted successfully to our own industry. The installation of laterally moving bulkheads in swimming pools in the United States, where many pools are 50m long, has long been accepted as the best way of providing this adaptability of use. In the past these bulkheads – otherwise known as booms, pool dividers or swim walls – were originally constructed of wood or concrete, with the obvious disadvantages of both, then later of aluminium and later still of stainless steel. These had greater stability but other problems occurred with corrosion, and deflection in particular with regard to competitive swimming events.

CONSTRUCTION

The development by Stark Aquatic Systems of a fibreglass bulkhead without any internal stainless steel, aluminium or other framework some 30 years ago was unique in this field. The advantages of the structure it created were its inert characteristics, that it is stronger and lighter in weight and more aesthetically pleasing than others on the market.

Even more importantly, the use of fibreglass also eliminated the in-built problems of corrosion, deflection and difficulty of movement which up until then had been a cause for concern and disappointment with other types of structure. Since the production of its earliest units, Stark Aquatic Systems has continued to refine and develop the design and manufacture of its bulkhead – by incorporating moulded fibreglass buoyancy tanks to make it easier both to inflate and move, by adapting the non-slip finish on the top of the unit and on the targets to give improved grip, by including a cable tray in the top of the bulkhead for swim timing cabling and many other features.



Above: 25m long bulkhead, 1.5m wide being lifted into Tollcross Park Leisure Centre, Glasgow



REPUTATION

Stark is the largest manufacturer of fibreglass bulkheads in the world – it has supplied more bulkheads than all the other companies combined and it is this experience which allows it to give its unique 25 year warranty.

It is justifiably proud of its reputation for the quality and strength of its booms, the superb easy-to-clean finish which reflects the care and dedication to detail which characterises all its products. Its extensive plant facilities allow complete control of production, from the design of each bulkhead to suit individual pool, through the moulding process to the finished article, with any modifications which may be needed to suit each country's requirements. The 25m long bulkheads which form the most important part of its range are sold all over the world.

Two units were used for the Olympic Games at Atlanta this year and 3x25 Stark bulkheads have been specified for the 1998 Goodwill Games in New York. Its bulkheads have also been used for all the major swimming championships including the Commonwealth and Goodwill Games, the Canadian and Australian Championships etc.

Suntrap Systems of Birmingham has worked with Stark for a number of years and has completed several installations making this currently the largest selling bulkhead in the UK. These include the first unit installed at Crawley Leisure Centre in West Sussex where the manager, Jeff Dobbelar says "The Stark bulkhead we installed has revolutionised our pool programming and given us a tremendous boost by allowing greater flexibility in use." Suntrap Systems has just completed the installation of a 25m bulkhead for the East End Leisure Centre in Tollcross Park, Glasgow. While the majority of bulkheads are 1m or 2m wide, this unit measures 1.5m wide with moulds specially created by Stark for this project. It is 1.5m deep and this has been increased by the addition of skirts (panels) to form an overall depth of 2.2m. It is believed to be the biggest bulkhead in the world, but is built to a weight which allows it to be moved easily by only two people without the assistance of motors. An outstanding achievement and one which sets the standard for all future installations, whether large or small. Moves initiated by the Sports Council and the Amateur Swimming Association are currently being developed to provide better and more extensive swimming facilities. These are intended to encourage the participation and training of increasing numbers of youngsters in competition swimming, who will eventually become the most important part of our country's attempt to provide excellence in swimming as a worthwhile target for the Olympics in the year 2000 and beyond. To this end, bulkheads and electronic swim timing can do much to provide the necessary competition training facilities and equipment needed to give our swimmers the ability to succeed.

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Top: Ease of movement of 25m long bulkhead. Above: Example of corrosion on stainless steel bulkhead.



