

Underwater Diamond Cutting - Hydraulically

Reproduced from Concrete Cutter - Volume 2 Issue 1 (June 2000)

Diamond cutting tools are increasingly being used on a whole variety of civil engineering & construction projects and now underwater projects are no exception.

Much of the hydraulically powered machinery currently available works equally well in water as on land. This brings the advantages of diamond cutting to the underwater contracting industry.

Hydraulically powered sawing, drilling, grinding, polishing, chipping & breaking tools are now readily available off the shelf from, for example, specialist manufacturers such as Xcalibre Equipment Ltd of Coventry. This provides the facility to diamond saw, grind & polish or drill underwater.

Swimming Pools

Swimming pools, as with any structure, require general maintenance and repairs. Historically this has been a costly process involving draining the pool, carrying out the works and then refilling. It can take a week just to drain and fill an average sized public swimming pool resulting in loss of revenue and inconvenience to customers.

There is also a serious risk of structural damage as the weight of water is removed. There are many reports of walls and floors cracking, especially on older pools, as the water is drained.

Specialist diving contractors, such as Professional Diving Quality from Oldham for example, now cut out and replace broken tiles, drill for fixings for lane markers and replace pump inlet or outlet covers during the night with no disruption to pool opening hours.

Piers and Harbours

Due to general wear and tear such as ships colliding with piers, there is a requirement to saw and drill for strengthening and renewal of existing harbour structures. These works are now carried out underwater utilising the hydraulic diamond cutting tools.

Other examples of the use of diamond cutting in underwater work are drilling and sawing on sub-sea oil extraction and investigation structures, and canal refurbishment for the Environment Agency etc... Whenever there is a need to cut construction materials such as concrete or stone then the advantages of diamond cutting make it the obvious first choice for any contractor both above and below the water.

This article was provided by Shayne Major of Xcalibre Equipment Ltd, Coventry, UK.

DRILLING AND SAWING ASSOCIATION

Suite 5.O, North Mill, Bridge Foot, Belper, Derbyshire DE56 1YD, United Kingdom
Tel: +44 (0) 1773 820000 - Fax: +44 (0) 1773 821284

E-mail: dsa@drillandsaw.org.uk