International
Competition
References
In recent years there has been an innovative change that allows now the hosts of major aquatic Championships to use even more appropriate structures to stage International Competition events. This is predominantly thanks to Myrtha Pools and its revolutionary technology, which has significantly contributed to this change.

In the past, competitions were held inside traditional swimming complexes, quite often not wide enough to host the great amount of enthusiasts wanting to attend. On the other hand, build brand new indoor swimming complexes suitable for accommodating such events as the Olympic Games would be very costly and, because of the wasted spectator space, very expensive to run afterwards. Myrtha Pools improved the right technological solution, allowing these competitions to be staged within existing stadiums by installing in some cases temporary swimming pools which can be removed and, at a later stage, permanently installed elsewhere.

Alternatively, is also possible to create unique venues anywhere and provide temporary seatings as well as covers. The legacy is not lost, and can be incorporated into a more appropriate community venue, designed to serve many needs. Myrtha technology allows this to happen, whith its flexibility, short installing time and micrometric precision. Myrtha Pools uses this same technology to build permanent inground pools all over the world. Suitable for all climatic conditions, Myrtha swimming pools and are installed in Iceland and on the mountains of Kazakhstan, as well as in the Sahara or in Western Australia deserts. There are Myrtha pools in the earthquake regions of Japan and in the high water tables of Florida: it is an extremely versatile and proven technology. The Myrtha system is based upon the use of sturdy modular stainless steel panels, permanently laminated with a hard PVC coating. At each panel joint, a buttress provides rigidity to the structure, which also makes it self-supporting. This same buttress allows millimetric adjustment of the structure both vertically and horizontally. The overflow gutter is also constructed of Myrtha material and is an integral part of the wall and buttresses system, providing the upper perimeter of the structure. The pool floor is lined with Myrtha Evolution, a reinforced PVC membrane which has exceptional characteristics of sturdiness and longevity. Using these same materials, the Company has developed RenovAction, a patented process for the refurbishment of existing pools, which doesn’t require any demolition work on the old structure. Myrtha Pools has also developed sophisticated equipment which is nowadays becoming more and more necessary for competition pools: movable bulkheads, movable floors, safety air cushions for training diving, removable headwalls and specific techniques for water treatment and devices for water circulation, that allow the athletes to not be disturbed while swimming.

Myrtha Pools is recognized as a specialist by F.I.N.A. and by many National Swimming Federations for its experience and contributions. Its competitive products are all built with precision, to correspond to the dimensional tolerance required by valid safety and competitive norms. The Myrtha structure can comply with any architectural design – even with the most complex and extremely odd-shaped – and the range of choices offered by the different types of gutter design makes Myrtha technology a perfect choice. Myrtha pools are not only suitable for competition pools, but for any project (hotels, fitness and thermal centers, leisure pools, water-parks) where an extremely durable structure is required, with very low maintenance characteristics.
July-August 2013. Exactly ten years later the 10th FINA World Championships edition, Barcelona was appointed to host the 15th edition of the Championships. For the 2003 Worlds Myrtha Pools built a permanent pool for water-polo competitions at Club de Natación and in 2013 the Company, proud FINA sponsor since 2009, installed two temporary pools within the Planeta Agua Village, the main Venue of 2013 Championships. The main pool (50x25x3 m) hosted both synchro and swimming competitions and was installed inside the Palau Sant Jordi, on the main central floor. The construction of the training pool for the 15th FINA World Championships started at the beginning of June, while the installation of the competition pool on June 17th, exactly one month prior to the Opening Ceremony.

### Technical characteristics

<table>
<thead>
<tr>
<th>Pool Type</th>
<th>Dimensions</th>
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<tr>
<td>Competition pool</td>
<td>50 x 25 x 3 m</td>
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<tr>
<td>Warm-up pool</td>
<td>50 x 20 x 2 m</td>
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December 2012. The 11th edition of the FINA World Swimming Championships (25 m) took place in Istanbul, the 2012 European Capital of Sport. The Sinan Erdem Arena, Turkey’s largest multi-purpose indoor venue and the third largest in Europe, hosted the event. The Arena, named after Sinan Erdem, Chairman of the Turkish National Olympic Committee from 1989 until his death in 2003, is usually used for concerts and basketball games. For this occasion it hosted the World Short Course Swimming Championships, thanks to Myrtha technology that allowed the installation of two temporary swimming pools inside it. The main competition pool was installed directly above the main basketball pitch, while the warm-up pool was housed in a purpose-built covered structure in the Arena’s car-park. Both pools, each 25 m long, was temporary installations, afterwards dismantled and permanently reinstalled at different locations.

Table: Technical characteristics

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<tr>
<td><strong>Competition pool</strong></td>
<td>Myrtha technology with overflow gutter</td>
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<tr>
<td>Dimensions</td>
<td>25 x 25 x 2 m</td>
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<tr>
<td><strong>Warm-up pool</strong></td>
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<tr>
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July-August 2012. The 30th Olympic Games, held in London, was the third Olympic challenge for Myrtha Pools, after Atlanta in 1996 and Beijing in 2008. Myrtha built seven pools for the London Olympics: five swimming training pools, installed in the Eton Manor Sports Complex, and two water-polo pools, one for warm up activities and one for the official water-polo games, both built in the Water-Polo Arena. All pools provided by Myrtha for the London Olympics were temporary structures, dismantled at the end of the event and permanently reinstalled in the 9 towns and cities around the United Kingdom that succeeded in the installation bids. For the entire length of the Olympic Games, thanks to Myrtha, the London Olympic Village has been able to host the world’s largest swimming complex, consisting entirely of rectangular pools. What’s more, during the London Olympics, Myrtha Pools introduced the new Water-Polo Visual System, that represents the biggest technological innovation in recent years for the water-polo game. The system is a high level spectacular tool that makes use of LED markings placed in specific areas inside and outside the pool. These LED markings help update players, referees, the jury, audience and television spectators on the progress of the game. It also helps the audience to understand more easily the game and ensures greater transparency concerning decisions taken by both referees and judges during the match.

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<tr>
<td>The Myrtha pools at Eton Manor</td>
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</table>
| **Synchro warm-up pool**
Myrtha technology with overflow gutter |
| Dimensions | 30 x 20 x 3 m |
| **Swimming warm-up pool**
Myrtha technology with overflow gutter |
| Dimensions | 50 x 25 x 2 m |
| **Swimming warm-up pool**
Myrtha technology with overflow gutter |
| Dimensions | 50 x 25 x 2 m |
| **Water-polo warm-up pool**
Myrtha technology with overflow gutter |
| Dimensions | 50 x 25 x 2 m |
| The Myrtha pools at the Water-Polo Arena |
| **Water-polo warm-up pool**
Myrtha technology with overflow gutter |
| Dimensions | 33 x 21 x 2 m |
| **Water-polo competition pool**
Myrtha technology with overflow gutter |
| Dimensions | 37 x 23 x 2 m |
| All seven pools were supplied with complete water treatment pre-fabricated equipement. |
June 2012, Myrtha Pools helped set the stage at the U.S. Olympic Swimming Team Trials with the brand’s swimming experts installing the two 50 m pools that transformed the state-of-the-art CenturyLink Center in Omaha into a world-class swimming arena. It marks the third time that Myrtha, a proud partner of USA Swimming since 2004, served as the Official Pool Manufacturer of the Olympic Trials. In just 10 days Myrtha Pools employed its industry-leading technology to construct the Trials main competition and warm-up pools, covering the lower bowl of the CenturyLink Center with more than 40 tons of Myrtha materials filled with 1.7 gallons of water. In the previous editions of the U.S. Trials, Myrtha built two pools in Long Beach, CA in 2004, allowing the event’s organizers to host the Trials at an outdoor temporary venue for the first time in history. In Omaha in 2008, nearly 16,000 spectators filled the then-named Qwest Center to watch the action unfold during the Trials’ 16 sessions. And more than 14,000 spectators filled the CenturyLink Center in 2012. After the 2012 Trials came to a close, the pools constructed at the CenturyLink Center have been moved to new, permanent homes, carrying the legacy of Trials to a new generation of swimmers.
November 2011. For the second time, after the 2003 Games
in Hanoi, Myrtha Pools was appointed as official supplier of the
pools for the 26th South East Asian Games edition, that was held
in Palembang and Jakarta. Within the Jaka Baring Aquatic Cen-
tre of Palembang, Myrtha Pools built one permanent competition
pool, while also refurbishing the pre-existing diving pool inside the
Center. The competition pool is a Myrtha overflow ceramic pool
(51.5x26x3 m), supplied with Strahlenturbulenz circulation system
and competition equipment for swimming activities and water-polo
games. The pre-existing diving pool was refurbished by Myrtha us-
ing RenovAction technology. The renovated 25x20x5 m overflow
ceramic pool was equipped as well with Strahlenturbulenz recycle
system.

**Palembang and Jakarta**

**2011**

**Jaka Baring Sport,**

**Gelora Sriwijaya Centre**

**26th South East Asian Games**

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<tr>
<td><strong>Competition pool</strong></td>
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<tr>
<td>Myrtha technology with overflow gutter</td>
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<tr>
<td>Dimensions</td>
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<tr>
<td><strong>Diving pool</strong></td>
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<tr>
<td>Myrtha technology with overflow gutter</td>
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<td>Dimensions</td>
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July 2011. The city of Shanghai hosted the 14th FINA World Championships at the Oriental Sports Center, one of the most interesting and innovative venues in the history of FINA World Championships. On the occasion of the World Championships, Myrtha Pools built two temporary pools within the Oriental Sports Center indoor stadium: a 50x25x3 m for swimming and synchronized swimming competitions and a 50x25x2 m warm-up pool. Both Myrtha pools have been installed in only a few weeks: the installation started on May 20th and was completed on June 14th. At the end of Championships, the two temporary pools have been dismantled. Shanghai FINA World Championships were one of the largest event, with a large number of participants: 5,000 athletes, judges and delegations from 180 countries, 2,500 volunteers, 1,500 media representatives from around the world and 3,5 billion people following the competitions on television.

### Shanghai 2011

**Oriental Sports Center**

**14th FINA World Championships**

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<tr>
<td><strong>Swimming and synchro competition pool</strong> (Myrtha technology with overflow gutter)</td>
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<tr>
<td>Dimensions</td>
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<tr>
<td><strong>Warm-up pool</strong> (Myrtha technology with overflow gutter)</td>
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August 2009. Myrtha Pools was appointed as Official Partner and Official Supplier of FINA for the 13th FINA World Championships. In 1994, Myrtha introduced the technology of temporary pools at the 7th FINA World Championships, held in Rome as well, providing a synchro pool installed on a tennis court within the Foro Italico complex. 15 years later, Myrtha Pools went back to Rome with a wide variety of experiences in temporary installations refined by careful research on materials, technologies, and assembly procedures. For the 13th FINA World Championships, Myrtha installed both the water-polo and synchronized swimming pools in less than three weeks. The water-polo pool (34x20.40x2 m) was installed on the main tennis court and provided with all the necessary equipment for both the men and women’s games. The synchronized swimming pool (34x21x3 m) was built on the tennis court named “Pietrangeli” in the “Pallacorda” Stadium.
Istanbul - 2009
13th European Championships (25 m)
Abdi Ipekçi Arena

The competitions took place in the Abdi Ipekçi Arena, one of the most prestigious multifunctional complexes in Istanbul. The indoor Arena can hold up to 12,500 people and it has been the site for concerts, conventions, international sporting events like basketball or volleyball Championships. Myrtha Pools placed two temporary pools within the Arena main court: the competition pool (25x26x2 m) and a warm-up pool (25x15x2 m), both supplied with water filtration and disinfection plants. After the Championships closing, the temporary pools were dismantled and transformed into a competition permanent pool (51x2x2 m), that was installed in Istanbul, at Tozkoporan Swimming Center.

Podgorica - 2009
FINA Water Polo World Championships
Morača Sports Center

The city of Podgorica in Montenegro was selected for the Super Final of the Men’s Water Polo World Championships. Within the Morača Sports Center, Myrtha Pools installed two new permanent outdoor pools: a pool for water-polo competitions (33x25 m), used for the Worlds’ Super Final, and a competition pool (50x25 m) to be used both for swimming competitions, training and warm-up activities.

Rijeka - 2008
12th LEN European Championships (25m)
Kantrida Swimming Complex

Three pools in the brand new and high class swimming center were permanently built by Myrtha Pools. All the competitions took place in the main swimming pool (53x25x2.10-2.30 m), equipped with 2 movable bulkheads to reduce the pool length to 25 m. 17 World records and 31 European were set in the pool during Championships. Other two permanent pools within the center are used for warm-up and training activities (25x10 m) and for leisure and learning purposes (10x5 m). The 10 m leisure pool was built thanks to a combination of both Myrtha and RenovAction technologies.

Beijing - 2008
Olympic Games
Ying Tung Natatorium

Inside the Ying Tung Natatorium, a wide structure originally built for the Asiatic Games in 1990, Myrtha Pools refurbished the swimming pool for the water-polo matches and the modern pentathlon competitions during Beijing 2008 Olympics. The pool (50x25x3 m) was refurbished thanks to RenovAction technology and was provided with ceramic overflow gutter on all sides, removable headwalls, 6 underwater windows, 4 recessed treads and mosaic marking lines.
Omaha - 2008
U.S. Olympic Trials
Qwest Center

US Swimming Federation chose once again Myrtha Pools for Omaha Trials 2008, after the positive experience in Long Beach 2004. As happened in Long Beach, also this event took place in two 50 m temporary Myrtha swimming pools, installed within the Omaha Qwest Center, that is commonly used for hosting events such as basketball or hockey matches and concerts. The two temporary Myrtha swimming pools, one for competitions (50x25x2.30 m) and one warm-up (50x23x2 + 25x13.70x2 m), were installed on the playing field inside the arena. 9 World records, 21 National records and 64 Championship and U.S. open records were set in the Omaha competition swimming pool.

Malaga - 2008
European Water Polo Championships
Malaga Water Complex

The Malaga Water Complex, named as the best European swimming centre, was inaugurated with the European Water Polo Championships in 2008. The architect Luis Millet, who designed the pools for the Olympic Games in Barcelona and proposed the ones for Madrid 2012, choose Myrtha Pools as an exclusive supplier for all the pools in the center. Three of the four Myrtha pools built in the complex are indoor: the pool for swimming and water polo (51.5x25x2.1 m), equipped with two bulkheads, a training pool (34.5x16.5x2.1 m) with a movable floor and a leisure pool (16.5x10x1.1 m) with hydromassage benches, geysers and fountains. The outdoor pool (50x25x2 m), that hosted the final water-polo competitions during European Championships, is used both for swimming and water-polo.

Melbourne - 2006
18th Commonwealth Games
MSAC Sports and Aquatic Center

The Melbourne Sports and Aquatic Center (MSAC) is the largest sport center in the Southern hemisphere and has a prestigious Myrtha pool, that hosted great competition events, among which the Commonwealth Games and the Australian Trials in 2006 and the 12th FINA World Championships in 2007. The pool (52x25x2.8 m) was permanently installed in the outdoor area of the center and was provided with ceramic overflow gutter and a bulkhead. During 2007 FINA Championships, the bulkhead allowed to reduce the pool length from 52 m to 33 m in order to use the swimming pool for the water-polo matches. Furthermore, at the beginning of 2008 a movable floor has been installed on the whole pool surface, the first one with such dimensions ever manufactured. The Myrtha pool at MSAC has credited 53 records, among which 6 are world records beaten during the 2006 competitions.

Montreal - 2005
11th FINA World Championships
Ile Sainte-Hélène

Myrtha Pools was among the official suppliers for this great event: all the swimming pools, three permanent and four temporary, that hosted all the competitions and training activities, were designed and constructed by Myrtha Pools. At the Pavillon des baigneurs, Myrtha built the three permanent pools: the competition pool (50x25x3 m) for swimming, equipped with removable headwalls and underwater windows, the diving pool (25x25x5 m) with air safety cushion, underwater windows and windowed wall, the warm-up pool (50x21x1.35 m), with zero-entry area, Softwalk mat and competition headwalls. Four temporary Myrtha pools were installed at different location within the Ile-Sainte-Hélène area: the water-polo pool (25x35x2.1 m), a warm-up (25x35x2.1 m), the synchro-swimming (30x20x3 m), a smaller warm-up (10x10x2 m).
Indianapolis - 2004
7th FINA World Championships (25 m) - Conseco Fieldhouse

To host the event, a sports structure among the most accredited of USA, the Conseco Fieldhouse, seat of the NBA basket team Indiana Pacers, was temporarily transformed into the world largest swimming centre, with more than 10,000 seatings. Two temporary pools, one for competitions and one for training, were built within the venue, thanks to the exclusive Myrtha technology. In one week only, both Myrtha pools were installed at Conseco Fieldhouse, where the course of the swimming competitions did not have to compromise anyway the calendar of the trainings and of the matches of Indiana Pacers. The competition main pool (25x25x2 m) was equipped with removable headwalls, starting blocks and 4 recessed staircases. The same equipment were present also in the warm-up pool (25x16x2 m). Both swimming pools had furthermore the exclusive Strahlenturbulenz water recirculation system, improved by Myrtha Pools.

Long Beach - 2004
U.S. Olympic Trials
Charter All Digital Aquatic Centre

Two temporary Myrtha pools were built in a complete temporary structure, the Charter All Digital Aquatic Center, located in the parking area adjacent to the Long Beach Arena. The complex was built in less than one month and hosted up to 10,000 spectators. Both competition pool (50x25x2 m) and warm-up pool (50x25x2 m) were dismantled after the Trials and shipped to their permanent destinations: the main competition pool was installed in the city of Yucaipa, while the warm-up pool in the Berkeley Aquatic Club in New Jersey.

Hanoi - 2003
22nd South East Asian Games
Hanoi Sport Complex

The Hanoi Sports Complex was built in 2003 especially for the 22nd edition of the SEA Games. Architectural structures and sports facilities were been completed in record times, thanks to the strong collaboration between a team of Italian architects and the technical staff of Myrtha Pools, that designed and installed three swimming pools within the venue. The competition indoor pool (51x25x2-3 m), with ceramic overflow gutter on the four sides, headwalls and bulkhead. The outdoor pool (50x25x2 m), as well provided with ceramic overflow gutter and headwalls. The indoor diving pool (25x17.6x5 m), equipped with safety air cushion for diving. In the diving pool, black Myrtha panels were chosen, instead the more common light-blue.

Barcelona - 2003
10th FINA World Championships
Club de Natació Barcelona

Myrtha Pools installed a new permanent swimming pool at the Club de Natació Barcelona, that hosted the water-polo competitions during Championships. The pool (52.5x25x2-2.6 m) was provided with a ceramic overflow gutter on all four sides, recessed safety ledge at 1.20 m depth from water level, Myrtha recessed treads, two headwalls and two moveable bulkheads, 10 large underwater windows for TV or coaching, Strahlenturbulenz system for water circulation. The pool was designed also to allocate a 25x7 m movable floor to be installed afterwards following the competitions.
Valencia - 2000  
European Championships (25 m)  
Palau Luis Puig Velodrome

For the Valencia Championships, Myrtha Pools installed two temporary swimming pools, in the central area of the Velodrome, delimited by the cyclism track. Both pools, the main competition pool (25x21x2.30 m) and the warm-up (25x12x2.30 m) were equipped with ceramic overflow gutter on the four sides and two removable headwalls, water filtration, recirculation and disinfection systems according to F.I.N.A. regulations. At the end of the Championships the two pools have been dismantled and afterwards reassembled to form one only 50x21 m pool, permanently installed in Valencia.

Palma de Mallorca - 1999  
World University Games - Son Hugo Aquatic Centre

On the occasion of the University Games, the new Son Hugo Swimming Center was built in Palma de Mallorca. Architect Joaquim Pujol, that designed the project, chose Myrtha technology for all the three permanent pools within the Center. The main indoor pool (50x25x2-3 m) was specifically designed to host international swimming, water-polo and synchro competitions. It was provided with ceramic overflow gutter on four sides and equipped with movable floor, two bulkheads and underwater windows. An outdoor competition pool (50x25x2 m), suitable for swimming and water polo competitions, was as well provided with ceramic overflow gutter, removable headwalls and underwater windows. The outdoor diving pool (25x17.6x5 m) was equipped with overflow ceramic gutter, underwater windows and the special safety air cushion system for diving. All the three pools have furthermore an inspection corridor.

Perth - 1998  
8th FINA World Championships  
Challenge Stadium

The Challenge Stadium, one of the most prestigious Australian swimming complexes, in 1998 was already equipped with four competition pools. The Organizing Committee, wishing to provide the complex with a new pool to be specifically used for water-polo matches, choose Myrtha Pools for that purpose. The new outdoor permanent Myrtha pool (33x21x2 m) was installed completely in ground and provided with ceramic overflow on four sides, as well as with all accessories for water-polo competitions. Still today the Myrtha swimming pool of the Challenge Stadium is appreciated by the swimming centre managers for its aesthetic value, easy maintenance and management costs saving.

Almaty - 1997  
1st Central Asia Games  
Central Swimming Pool

The swimming facilities of the Sports Center in the capital of Kazakhstan were built around Sixties and closed from time due to their bad conditions, despite repeated interventions for their accommodation. In that case Myrtha Pools took the field with RenovAction technology, allowing for the integral renovation of the outdoor competition pool without demolitions and without modifying its original dimensions. The pool (50x21x2 m), used for swimming competition during the Games, was completely refurbished with RenovAction stainless steel panels system, new filtration and disinfection systems, ceramic overflow gutter on the long sides, starting blocks and competition accessories. RenovAction technology was used afterwards to refurbish other two pools inside the Almaty Sports Center: a 25 m indoor pool and the outdoor diving pool.
Atlanta - 1996
Centenary Olympic Games
Georgia Institute of Technology

Myrtha Pools adds another important success to its already rich prize-record, building a temporary pool for the water-polo competitions on the occasion of the Centenary Olympic Games held in Atlanta. The swimming pool (33x25x2.2 m) was installed in only 12 days and afterwards disassembled and permanently re-installed at Lake Highland Preparatory School in Florida, where a 50x25 m pool has been built.

Rio de Janeiro - 1995
2nd FINA World Championships (25 m)
Copacabana beach

Two temporary Myrtha Pools were installed on Copacabana beach, the main one for competitions (25x25x2 m) and the second one for training activities (25x17.40x1.22 m).
Both pools were built using Myrtha technology with overflow gutter on two sides, starting blocks, accessories for competitions, water filtration and disinfection systems. Four world records were beaten in the Myrtha competition pool. After the Championships, both swimming pools were dismantled and used afterwards to permanently build three swimming pools with different shapes and dimensions.

Wien - 1995
European Swimming Championships
Prater Stadion

Having learned of Rome’s swimming pool, Myrtha Pools was chosen by the Municipality of Wien to build a water-polo temporary pool onto the athletics track of the Prater Stadion. The time available for the installation was very short, anyway the pool (33x21x2 m) was built in 12 days and equipped with complete water filtration and disinfection system, heating system and circular balance tank. At the end of the Championships the pool was immediately dismantled and its components were used afterwards for the realization of a tank, installed permanently elsewhere.

Rome - 1994
7th FINA World Championships
Foro Italico

Myrtha Pools installed a swimming pool unique in the world on the main tennis court of the Foro Italico, where the International Tennis Championships are disputed every year. Not being absolutely possible to make any masonry work, an above ground, completely self-supporting and removable pool was built in less than 30 days. The pool (33x21x3 m), used for synchro and women water-polo competitions, was completed with overflow gutter, water treatment system, heating system and underwater window for television broadcast. The “Marble Pool” was afterwards dismantled, and re-used to form two separate pools.