DERBY SPORTS ARENA SHOWCASES ARKONI **EXPERTISE**



The glazing and metalworking expertise of Arkoni could well provide the backdrop for Britain's next Sir Chris Hoy or Sir Bradley Wiggins at the distinctive Derby Sports Arena.

The glazing and metalworking expertise of Arkoni could well provide the backdrop for Britain's next Sir Chris Hoy or Sir Bradley Wiggins at the distinctive Derby Sports Arena.

Recently completed by contractors Bowmer & Kirkland, Arkoni's design, manufacture and installation capabilities are ably showcased in the 2 metre high structural glass wall that surrounds the track as well as a staircase and balustrades within the spectator areas.

The £27.5 million venue, situated next to Derby County FC's 'iPro' stadium in Pride Park, will feature a 250m cycling track, 12 court sports hall, gym and multi-function rooms as well as a café. The cycling arena, only the fifth of its kind in the UK, will also double up as a concert venue with a capacity of 5,000.

Managing Director Mark Prentice explained "We have worked with contractors Bowmer & Kirkland on a number of occasions with this particular project being one of our biggest to date and was valued at almost half a million pounds."

The glass wall around the track is constructed from 39.5mm thick, clear, low iron-toughened laminated glass panels set into a fabricated channel fitted around the full oval of the cycle track, with stainless steel fascia cladding to the infield side.

The design brief was that it has to withstand the accidental impact of the "derny", the motorised pace cycle.

There are also full height, glass double gates allowing access to the track from the inner area where cyclists assemble, fitted with bespoke locking systems.

As part of the design process Arkoni undertook simulated glass impact trials in a specially designed test rig to confirm that the system was fit for purpose.

The main public staircase took 3-4 months for full design, architects approval and manufacture within Arkoni's Brighouse-based workshops and was installed on site in spring 2014.

The staircase construction was from 400 x 200 structural hollow section stringers, folded steel plate treads with closed risers and screeded tread infill and landing support from a tubular steel 'V' support.

Staircase and first floor balustrade made from 1100 high full height clear glass panels with handrail mounted from the glass panels. The staircase and landing steelwork was covered with polished stainless steel pressings bonded to steelwork with structural adhesive.

Arkoni also supplied and fitted glass screen balustrade to the seating viewing areas, stainless steel tubular balustrade with glass infill to both full height staircases and various handrails and protection rails around the velodrome.







