GLASGOW MUSEUMS RESOURCE CENTRE

With no less than eleven museums and galleries, Glasgow Museums is the largest local authority museums service in Britain. The Glasgow Museums Resource Centre (GMRC) is the first publicly accessible store for the city's museum service and was built to house the vast collection that exists, only 2% of which could be displayed at any one time. It is a new purpose-built museum storage facility and visitor centre on the south side of Glasgow and cost £12.8 million to build the second phase completed and opened to the public in September 2009.

This new facility includes 6,000 square metres of environmentally controlled storage space, housing approximately 1,000,000 objects covering an extraordinary range of collections across the four major disciplines of art, technology, history and natural history - collections which were previously on display and in storage at Kelvingrove Art Gallery and Museum and the Gallery of Modern Art. GMRC also housed the collections from Kelvingrove whilst it was undergoing refurbishment and continues to hold the 98% of objects not currently on display. GMRC is where the outreach service for Glasgow Museums is based and offers handling and reminiscence kits.

GMRC is not just a storage facility. There are free guided tours 7 days a week and group tours can also be organised, tailor-made to suit the needs of a particular group of people.

Within the buildings are several large storage rooms or 'Pods' of varying sizes. Each has been designed to house a particular collection or type of object. One variation is the height of these Pods - some have up to 4.5m of available headroom whilst others are restricted to 2.5m. The ability to use the 4.5m height in two of the Pods by utilising **Qubiqa's 2Tier Electronic**Mobile Shelving System was something which interested GMRC's Special Projects Officer, Alex MacLean. Having also considered a static solution on a mezzanine (not enough capacity in the area) and very high mobile shelving (access problems with large heavy ladders) this was a concept which he felt gave the best utilisation of space whilst providing a user friendly solution which the staff would enjoy and benefit from working with.

Qubiqa's 2-Tier system is an innovative form of high rise mobile shelving. Utilising SHADE E9000 Electronically operated carriages, it comprises ground level mobile shelving with double the usual amount of floor tracks to take the additional weight of the shelving on the first floor level. The uprights go through channels in a slim steel grid floor above and are continued above this to the height of the racking on the first floor level. The bays on the first floor are therefore attached to the bays beneath! This means that those bays on the first floor do not need a mobile base...all the weight is taken by the rails on the ground floor! However the bays can be moved by a user on either floor since control panels are on both ground and first floor units. The steel grid floor takes no weight of the stored items and is supported by the static bays set at intervals between the mobile units and also by columns outside the mobile units to provide a walkway at first floor level.

The 2Tier system is also ideal in new build situations and has been used in several very large repositories where it has saved considerable costs since there is no need to build thick and expensive first floor levels which have to be designed to withstand the deflections imposed by heavy mobile shelving. M & E costs can also be reduced due to the excellent circulation offered by the steel grid floors.







On the ground floor of the 2Tier system illumination is provided by Qubiqa's Integral Lighting which cantilevers over the open aisle to give light in the right place at the right time. Only the open aisle is ever lit and the light in this space can be programmed to switch off after a preset time of inactivity - truly a 'green' feature!

Security for valuable collections: GMRC has utilised two separate 2Tier installations in different Pods. One system was used to house boxed ceramics, general historical metals and precious silver, (which is kept locked using the SHADE E9000's swipe card Transponder facility - only staff carrying appropriately coded Transponder swipe cards can access these secure items). The other 2Tier system is used to store world cultural materials. Each of the 2Tier systems uses bays 600mm deep x 1200mm wide on mobile bases 12m long and in total these provide storage of almost 4000 linear metres/664 cu.m.

Peace of mind for fragile/delicate collections: The second phase of Qubiqa's work involved the fitting out of 5 areas.

Pod 8 is where the storage is mainly Pallet Racking for Bulk Transport Technology, along with Looms and Presses. There is also an area of 8m x 4m with Qubiqa's manual mobile shelving SHADE M9000, for the Industrial and Domestic Collections which includes old televisions and radios.

Pod 11 houses Transport Models which includes ships over 7' in length - these are stored on Qubiqa's Electronically controlled SHADE E9000 mobile bases with Longspan shelving mounted on top. The Electronic system was used to prevent any potential damage that could occur with manual mobile shelving units which can start/stop suddenly. The Electronic units are ideal for delicate collections and artefacts such as ceramics, glassware, pottery, etc., as they move in a 'cascade' fashion with gradual acceleration and they also stop without actually bumping into one another. The longspan shelving is arranged in a variety of depths and gaps between the beams to suit particular collections and models. All the bay configurations were worked out beforehand by Alex MacLean.

The other 3 areas are in a different building (The Archive Block) housing the Main Archive (including business archives and collection records), a reference library containing 30,000 books and the Special Collections. On the First Floor Qubiqa have installed 1,270 lin m of manual SHADE M9000 and static S9000 shelving, mainly 6 bays long and 6 shelf levels high. This system may be used by members of the public.

Above this on the First Floor is the Main Archive collection which is kept in 2 banks of 9 metre long Electronic SHADE E9000 mobile shelving, with a capacity totalling 950 linear metres. One bank comprises shelves 300mm deep and the other bank is made up from shelves 600mm deep. The last area is Special Collections which is stored on 240 linear metres of manual SHADE M9000 mobile shelving within the RL Scott Store.

The whole appearance, quality and function of the shelving installed by Qubiqa has impressed the staff and Alex MacLean who is delighted with what has been achieved. There have been numerous favourable comments by visitors and one thing that strikes most people is how clean and aesthetically pleasing the systems are on the eye - quite different from the usual 'grey' shelving seen in Museum Stores. Qubiqa see this project as a springboard to more success with Museums in future.









