



By Appointment to HM The Queen
Display Case Suppliers
ClickNetherfield Limited
Livingston

LINDISFARNE GOSPELS, DURHAM

One amazing book,
one amazing journey

04

MARY ROSE MUSEUM

How Mary Rose and rose
again after 400 years
under the Solent

06

BEHIND THE SCENES

Special 8 page pullout
about what goes into
making showcases

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SHOWCASE '14

*How
Mary Rose
and rose again*

CLICKNETHERFIELD

Welcome



From Jim Stewart, Managing Director

Welcome to the latest edition of Showcase; ClickNetherfield's annual magazine produced for our clients, our industry contacts, our ever widening network of distributors and of course our staff.

We've freshened up the look and feel of our magazine this year and as well as some fascinating articles on projects we've completed, I'm delighted to see articles focussing on what we believe to be the core values of our business; aesthetically beautiful cases, engineering excellence and high quality performance of our products. We're fully committed to innovation and also a right first time ethos and there's a remarkable feature in this magazine about a showcase sealed to the highest degree possible.

We've also had a hugely busy year for investing in new technologies (more of this inside) to keep our business at the forefront of our industry. Our industry is a complex and challenging one and we believe the only way to deliver the quality and service that our clients demand is constant investment in new technologies and continuous improvements in our products; it's what sets us apart from the herd.

We've also finalised and launched our latest range of products specifically aimed at museum storage; please get in touch if you'd like our new Heritage Storage Collection brochure.

Enjoy the magazine and please do give us your feedback, it helps us shape next year's magazine.

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For up to date news and case studies, visit clicknetherfield.com

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Gospel Truth

ELIZABETH BRANIGAN & EMMA HAMLETT
FROM DURHAM UNIVERSITY

“We asked for an air exchange rate of 0.01 and would have settled for 0.05. The final showcases came out with an AER of 0.01 over 24 hours. Remarkable.”

Can you tell me a bit about the exhibition and what it is about?

The centrepiece of the exhibition is the gospel book itself, written in honour of St Cuthbert and displayed alongside the relics from his shrine. The Lindisfarne Gospels is one of many national treasures now held in the collections of the British Library, one of the greatest libraries in the world. The Gospels are displayed and stored in optimum conditions and the British Library's conservation team have carefully assessed the pages that can be displayed in future and the pages are turned regularly to minimise the risk of damage to any specific opening.

What's going inside the showcases we've made you?

Manuscripts dating from the 7th to the 17th centuries and Anglo-Saxon metalwork objects associated with the cult of St. Cuthbert.

Does this bring any particular conservation challenges?

Parchment is extremely sensitive to changes in relative humidity, and can 'cockle'. If the parchment moves like this, it can destabilise the inks and pigments and precipitate losses.

We needed to achieve very tight environmental parameters which specified a temperature at a fixed point between 16-19C with no more than +/- 1C variation in 24 hours and a relative humidity of 50% with no more than +/- 5% variation in 24 hours for the loans. We wanted to control the RH in the cases themselves with prosorb silica gel. Using our previous experience of how display cases did or didn't perform with this method, we identified areas we wanted to improve, and working closely with ClickNetherfield's Technical Director and Project Manager we came up with a specification for the new cases. This included

much improved case seals, an air circulation method using an adjustable control fan which moved the air over the silica gel and into the showcase, a very large silica gel tray and a fan in the base of the case which comes on automatically when the lights are switched on to reduce the heat gain from the light projector and transformer.

We asked for an AER of 0.01 (air exchange rate, or the air leakage rate of the display case) in the hope of coming somewhere near and settled on an AER of 0.05. The final showcases far exceeded our expectations when they were tested as they came out with an AER of 0.01 over 24 hours. The cases have performed very well throughout the period of the exhibition and the environmental conditions in the cases have been beautifully stable.

Was security also a consideration?

In order to meet the requirements of the Government Indemnity Scheme and of some lenders, we needed a suite of showcases – a combination of desk and upright – that were fully framed. With the desk cases in particular, which were to show books and manuscripts, we wanted to ensure that the framing provided sufficient resilience whilst also affording a good view for the visitor. We worked with the National Security Adviser and ClickNetherfield to determine the optimum thickness and depth of the steel frame, as well as the extent of the rebate of the glass into this to prevent flexing. We also worked on how a greater degree of security could be achieved through different suiting of locks, secondary locks, access mechanisms, and physical securing of the whole unit.

Did you have any special requests for your project?

Yes. The schedule was tight - with sign-off needed from third parties for the specification and design of the showcases, and the showcases themselves being needed on site sufficiently in advance of the exhibition to allow thorough testing and monitoring. Aesthetic considerations were also important in the design of the cases as these were to be added to our existing suite - so our designers, Studio MB, had to match fabric colours and RAL numbers to those used in existing cases to give a consistent 'look' across the whole suite.

**LINDISFARNE GOSPELS DURHAM: ONE AMAZING BOOK, ONE AMAZING JOURNEY
RUN FROM 1ST JULY - 30TH SEPTEMBER AT
PALACE GREEN LIBRARY, DURHAM UNIVERSITY.**

How Mary Rose...

and rose again

For the first time, the ship has been reunited with the possessions of the crew and all the material of a Tudor warship, some 19,000 artefacts in total.

Article by
Sally Tyrrell,
Head of
Development,
Mary Rose
Museum

The Mary Rose Museum opened in May 2013 and demonstrates excellence, innovation and imagination. The museum displays the starboard section of the flagship that served Henry VIII for 34 years, before spending over 400 years under the Solent.

The Mary Rose and its unique collection are now housed in an extraordinary and elegant museum. The exhibition engages visitors through the wonderful collection of objects and the stories they tell of the people on board, providing a unique insight into Tudor life and death. Everything in the museum is original and is all from one archaeological site, capturing the moment when the ship and most of the crew were lost.

The interior architecture was based on the painstaking archaeological excavation and recording of the exact location of every find. A section through the ship from keel to upper deck allowed the project team to see inside the Mary Rose and reunite the original contents deck-by-deck at the moment before she capsized.

A 'virtual hull' represents the missing port side with all the guns on their original Tudor gun carriages, alongside cannonballs, gun furniture, stores, chests rope and rigging. Visitors walk between the conserved starboard section of the hull and the virtual hull, experiencing the exhibition in context, as if they were on board the Mary Rose. →

LEFT

The fragile objects' conservation requires very precise control of both humidity and light.

Showcases for the Mary Rose had to be large. And airtight. And beautiful.

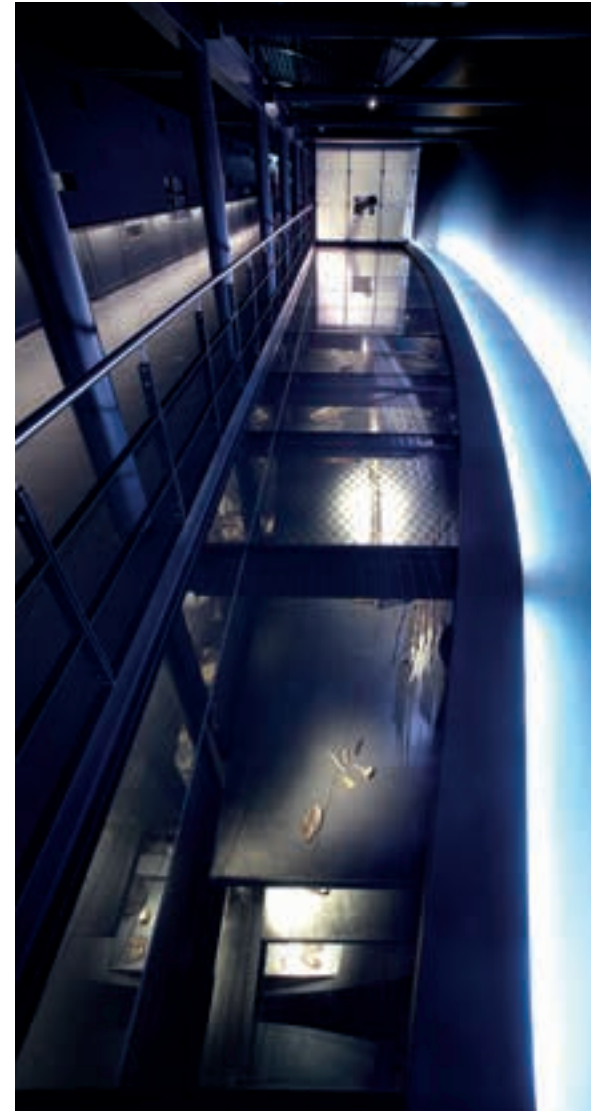


ABOVE

The Mary Rose Museum is a centre of excellence for maritime archaeology and conservation.

→ The atmosphere of being on the ship is further enhanced by the walkways following the shape of the deck from stern to bow, and low ceilings on the lower deck. The museum spaces are deliberately dark with daylight excluded, the only lighting either focused on the objects or concealed under the walkway handrail, lighting the space and re-creating the dark cramped spaces below decks.

After being under the sea for over 400 years, many of the objects are very fragile and are impregnated with salts so their conservation requires very precise control of both temperature and humidity in order to ensure the long term preservation of this wonderful collection. →



CENTRE

The museum spaces re-create the dark, cramped spaces below decks.

TOP RIGHT

Fully motorised doors for easy access.

BOTTOM RIGHT

Glazed floor allowing view down through the ship's decks.



MANY OF THE OBJECTS ARE VERY FRAGILE AND IMPREGNATED WITH SALT, SO THEIR CONSERVATION NEEDS PRECISE CONTROL.

→ The major challenges for ClickNetherfield were threefold: to produce an extremely large glazed gallery 35m long and four decks high that met the stringent air tightness required for precise environmental control; to construct the long walkways on sloping 'decks' that enabled the 'pull and slide' doors measuring up to 3.5m high to open easily, allowing installation and access to the collection; and finally to conceal the door operating mechanisms from the viewing public.

The museum is exceeding the Trust's expectation in terms of visitor feedback and is the fulfilment of the ambitions of thousands of volunteer divers, archaeologists, historians and dedicated staff and volunteers who have worked to create a legacy for future generations.

CREATING
A NEW
CHAPTER IN
THE STORY OF
THE WORLD'S
LONGEST-
RUNNING
VISITOR
ATTRACTION
- THE WHITE
TOWER AT THE
TOWER OF
LONDON.

The Line of Kings

Last summer, one of Britain's oldest museums - Royal Armouries - joined forces with Historic Royal Palaces to present the longest-running visitor attraction in the world to a modern audience - the White Tower's historic 'Line of Kings'.

This new exhibition is the final chapter in the redevelopment of the White Tower - Royal Armouries' ancestral and spiritual home - and arguably the most exciting challenge of all. It is the latest permanent exhibition in a series of new galleries within the White Tower: Treasures of the Royal Armouries; Power House; and the Storehouse displays in the basement.

The latest exhibition comprises over 500 objects which have formed part of this magnificent display during its 350 year long history. From the anachronistic 'armour of William the Conqueror' - to the addition of the last monarch George II - exhibits include not only historic armours worn by Henry VIII, Charles I and James II but also many of the original and unique 17th century wooden horses and kings' heads.

Housed within the oldest part of the Tower, the iconic White Tower, the new-look 'Line of Kings' completes the latest chapter in a story which dates back

almost four centuries and delivers a powerful statement about monarchy. Our forebears played little heed to historical accuracy and the line of wooden horses, carved heads and armours featured only the "good kings" of the realm and omitted queens - plus more infamous monarchs such as Richard III.

Evidence that survives to this day gives us a hint of what 17th century visitors made of this very visible testimony to enduring kingship.

For example, Lodewijk Huygens, a visitor to the exhibition in 1652, noted, "...we entered a room where horses' armour used in former times was stored on wooden horses with armed men on them. There were two suits of armour worn by Henry VII and two worn by Henry VIII; they were not very costly though".

Ned Ward, a visitor in 1699, wrote 'A visit to the Tower of London' in his humorous magazine, 'The London Spy', "As we gently mov'd along and viewed the princely scarecrows, he told us to whom each suit of armour belonged originally, adding some memorandums out of history to every empty iron-side; some true, some false, supplying that with invention which he wanted in memory".

Article by
Julia Lumley,
Communications
Officer, Royal
Armouries

RIGHT

The Line of Kings takes centre stage for its 21st century audience.



The Art in Hobart

Article by Philip Quartly,
Manager, Museum Projects,
Designcraft, Canberra



Images courtesy of Tasmanian Museum and Art Gallery, Hobart.



The Tasmanian Museum and Art Gallery (TMAG) is now the centrepiece of Hobart's vibrant and robust arts scene. The extensive \$30m Stage 1 redevelopment has transformed the Museum. Significant infrastructure and building works have created new galleries from previously unused or unusable exhibition spaces, including the Bond Store which is nationally recognised for its cultural and heritage significance, and which is one of Hobart's oldest heritage buildings.

Designcraft and ClickNetherfield were selected to develop and supply over 50 proprietary showcases along with various custom showcases, a large volume of exhibition furniture and tertiary fit-out product. High levels of customisation, strict heritage restraints and the requirement for high performance Museum Grade showcases which had to offer a sympathetic aesthetic to the restored heritage building made for a particularly challenging project. The

LEFT

Multi-bay Vision showcases.

CENTRE

Henry Hunter Gallery.

RIGHT

Beautiful minimalist Vision cases.

broad and diverse nature of the extensive collection required the most flexible product to be supplied, with the intention of future-proofing the investment in showcases and exhibition furniture.

Designcraft, the Museum Executive and the in-house design team at TMAG worked closely with the ClickNetherfield technical and design teams to develop the option of customised Vision showcases, which formed the backbone of the showcase requirement.

The suite of 35 multi-bay, multi-door Vision showcases, supplied with flexible and interchangeable tertiary fit-out including a tensioned shelving system, graphic, multi-media and exhibition content display options, offered a beautifully refined aesthetic complementing the grandeur of the Henry Hunter gallery.

High visitor numbers (over 550,000 in the first year) made TMAG the most visited tourism attraction in Tasmania and a large

number of National and State tourism awards along with the accolade of the main Museums Australia award (2013 MA Conference) are testament to the success of this high profile refurbishment.

Concept plans for Stage 2, including Travelling Exhibition galleries appropriate for international exhibitions, Public and Public Art spaces were released in February 2014, so watch this space for more news.



Theatre of War

Article by Emma Halford-Forbes,
Museum Manager,
The Blackwatch Museum

The origins of The Black Watch stretch back to 1725 with the formation of the Independent Companies to watch over the Scottish Highlands. The Black Watch was formally raised as the British Army's first regiment of Highland Infantry in 1739. Its history as an independent regiment came to an end in 2006 when the 1st Battalion The Black Watch became The Black Watch, 3rd Battalion Royal Regiment of Scotland.

The Museum has been housed in dramatic and historic Balhousie Castle since the 1960s and is home to a fine collection of

THE BLACK WATCH CASTLE &
MUSEUM RE-OPENED IN JUNE
2013 FOLLOWING A £3.5M
REDEVELOPMENT PROJECT.

artefacts spanning the whole history of The Black Watch.

The Museum project team worked alongside designers Studio MB to design stunning displays for thousands of objects. The exhibition cases, provided by ClickNetherfield, were many in number, and range in size from tabletop to epic scale. The end result is a high quality and engaging display. The concept and design has been faithful to the nature of the collection, and the Castle itself, making the most of the personal stories of generations of Black Watch men.



BEHIND

THE

SCENES

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EXCELLENCE, THEN, IS NOT AN ACT, BUT A HABIT.

More than two millennia have come and gone since Aristotle said that, and yet there is no better way to describe the difference between those that lead the way and those that copy.

Excellence can be found in many places, but there are always three common factors: a total commitment to delighting the client, and the further obsessions for detail and consistency. Becoming outstanding in any area requires an intimate knowledge of your client's requirements, along with the passion to be better than you were yesterday, and an absolute refusal to compromise.

Our colleagues are our biggest commercial advantage; they are highly skilled, care deeply about delighting our clients, are proud to work here and are obsessed with museum display cases.

The best people in the world would struggle without the right tools and materials. With hundreds of thousands of pounds invested in new equipment

and machinery in the last six months alone, we have redefined standards and expectations across the board. With this continual investment in our technology, our processes and our manufacturing capabilities, we are constantly strengthening our ethos of "right first time, every time".

Our team of design engineers use a combination of rapid prototyping technologies, including 3D printing and powerful computer modelling to ensure that our client's display cases not only look beautiful but are strong, resistant to attack and achieve industry leading performance.

Fast and accurate management information is essential for making the right decisions at the right time. The implementation of real-time shop floor data collection means our management team can identify opportunities for the continuous improvement of our processes both quickly and intelligently. Constantly developing from good to great is part of our organisational DNA.

In manufacturing and engineering there are numerous management systems: Six Sigma, 5 "S", Lean Manufacturing, FMEA - and so on. These systems, developed by competent and profitable businesses, all try to encapsulate and codify elements of excellence. However without cultural anchors, these approaches can drift and often disappoint. If you distil all of these fashionable approaches to their core, excellence is won through great strategy, highly effective management systems applied with the lightest of touches, and a pride that absolutely must fill the chests of all members of the business.

Excellence cannot be implemented piecemeal or calculated in a spreadsheet, it can't be pinpointed or measured. Graphs don't show a journey to excellence, nor can training impart it. Excellence is the measure of everyone's contribution. It is the dominant gene in all employees. It becomes the test of all decisions and can be heard in voices of the organisation.



Article by Alistair Williams, Operations Director

Alistair's energy is focused on enabling our people to be fantastic - his boundless enthusiasm and passion for manufacturing and engineering bring him great joy and enormous satisfaction. Through hundreds of small iterations, Alistair will make sure that we remain knowledge leaders in the museum display case arena.

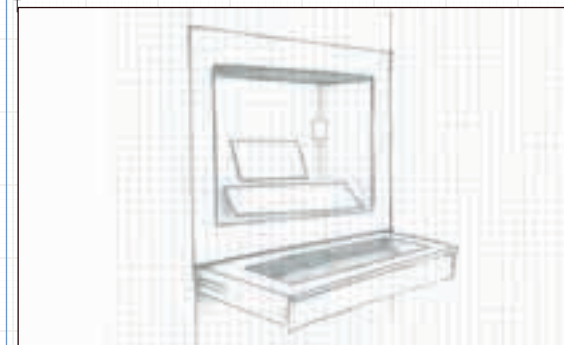
FAIL FAST, LEARN QUICK

THE SECRET LIFE OF A PROTOTYPE

It's great to see more and more people are allowing more time for prototyping. A few days in prototyping can save weeks in manufacturing. The four steps below tell the story of a prototype we created recently for Oman, taking one month from instruction to commercial product.

1

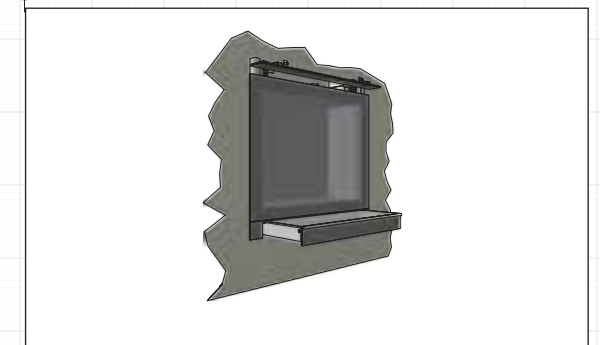
SKETCH



Start with pen and ink sketches to get to a concept untethered by manufacturing capability or cost.

2

MODEL



Make a digital prototype with 3D modelling software. Check that it can translate into a function design.

3

BUILD



Under construction.

4

IMPROVE



Keep iterating. In four days, over 20 improvements were identified, designed and implemented.

SHOW AND

Q How do you get awarded the Royal Warrant? Do you just apply for one, or actually work on Royal projects?

A By supplying high quality products and services on a regular basis to the Royal Households of HM The Queen, HRH The Duke of Edinburgh or HRH The Prince of Wales for not less than five years out of seven to include the year immediately prior to application. Amongst other things, suppliers are also required to demonstrate that they have a sustainable environmental policy and action plan.

We've held the Royal Warrant for five years, and are both delighted and extremely proud to have had it renewed for another five years. Recent projects we've completed for the Royal Household include Fashion Rules at Kensington Palace and The Line of Kings at the Royal Armouries.

p10

Read more about the Line of Kings exhibition

Q What's the biggest showcase you've ever made? And the longest?

A The Mary Rose showcase is the biggest in volume - at 32m long and 10m high, this is probably one of the largest combined museum display cases in the world. We have built one longer one - 43m long for the National Maritime Museum.

The challenges are plentiful but mostly lie on a practical level. How can we safely handle large glass panels? Will they even fit inside the building? How will the cases integrate with set works by others?

p6

Read more about the Mary Rose exhibition

Q What does "AER" mean and why does it matter?

A AER stands for Air Exchange Rate. High quality showcases are usually designed to achieve an air exchange rate of 0.1 per 24 hour period, but by applying our design and engineering excellence we have managed to achieve an incredible AER of 0.01 in our goal to exceed ever demanding conservation standards and to maintain one of the world's greatest books - the priceless and irreplaceable Lindisfarne Gospels. This (entire decimal place) reduction in case leakage approaches the theoretical barometric limit of case sealing and has seldom been achieved before without the help of NASA.

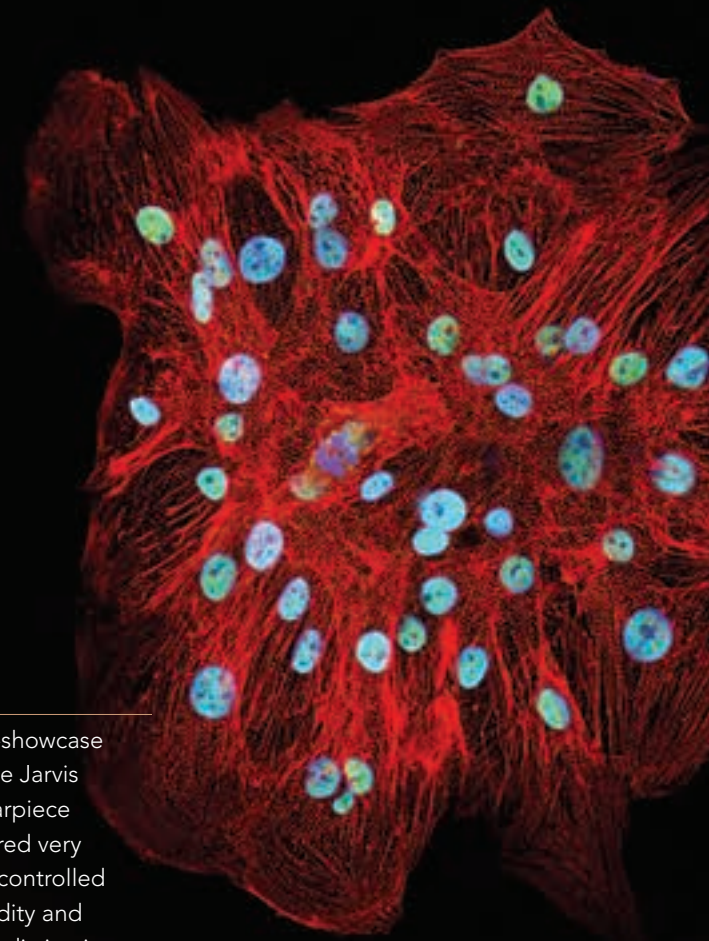
p4

Read more about the Lindisfarne exhibition

TELL

What's the most unusual show case you've ever been asked for?

A special commission of a non-showcase project from Bio-Artist Charlotte Jarvis to create an incubator-cum-altarpiece for living heart cells! This required very specific conditions with tightly controlled temperature, CO2 levels, humidity and lighting, all whilst following her distinctive altarpiece design aesthetic. We designed and produced a 'display incubator' the likes of which had never even been attempted before, successfully achieving the aesthetics, security and environmental control required - and most importantly, keeping the beating heart cells alive!



THE TOOLS OF THE TRADE

OVER THE LAST YEAR WE'VE BEEN BUSY UPGRADING THE TECHNOLOGY WE USE TO KEEP OUR PRODUCTION PROCESSES AT LEVELS OF QUALITY OF WHICH WE CAN BE PROUD.

From a manufacturing perspective, we committed hundreds of thousands of pounds in capital finance towards the purchase of state of the art Computer Numerically Controlled (CNC) equipment.

Our new CNC metal punch is a case in point. This year it could be heard thumping away on our factory floor, consistently and efficiently turning out a fine and wide variety of sheet metal components.

Another major acquisition in 2013 was probably the most advanced glass-mitring machine in the UK. This sophisticated machine tool can achieve phenomenal accuracy and surface finish. We have also invested significantly in our UV

glass bonding equipment, and these two developments combined to deliver truly beautiful joints.

And then there's our new CNC brake press. An as yet unsung hero in our upgrade plan, it quietly and efficiently bends and shapes sheet metal into intricate and accurate components. The press consistently produces high quality parts and has dramatically improved our assembly process, especially where welding is needed.

Finally – for now, at least – the latest member of our world-class machine centres is a metal-cutting and British-made superstar! It's improved our accuracy by an order of magnitude and reduced cycle times incredibly. Our old mills were taking well over an hour to machine a strengthening bar

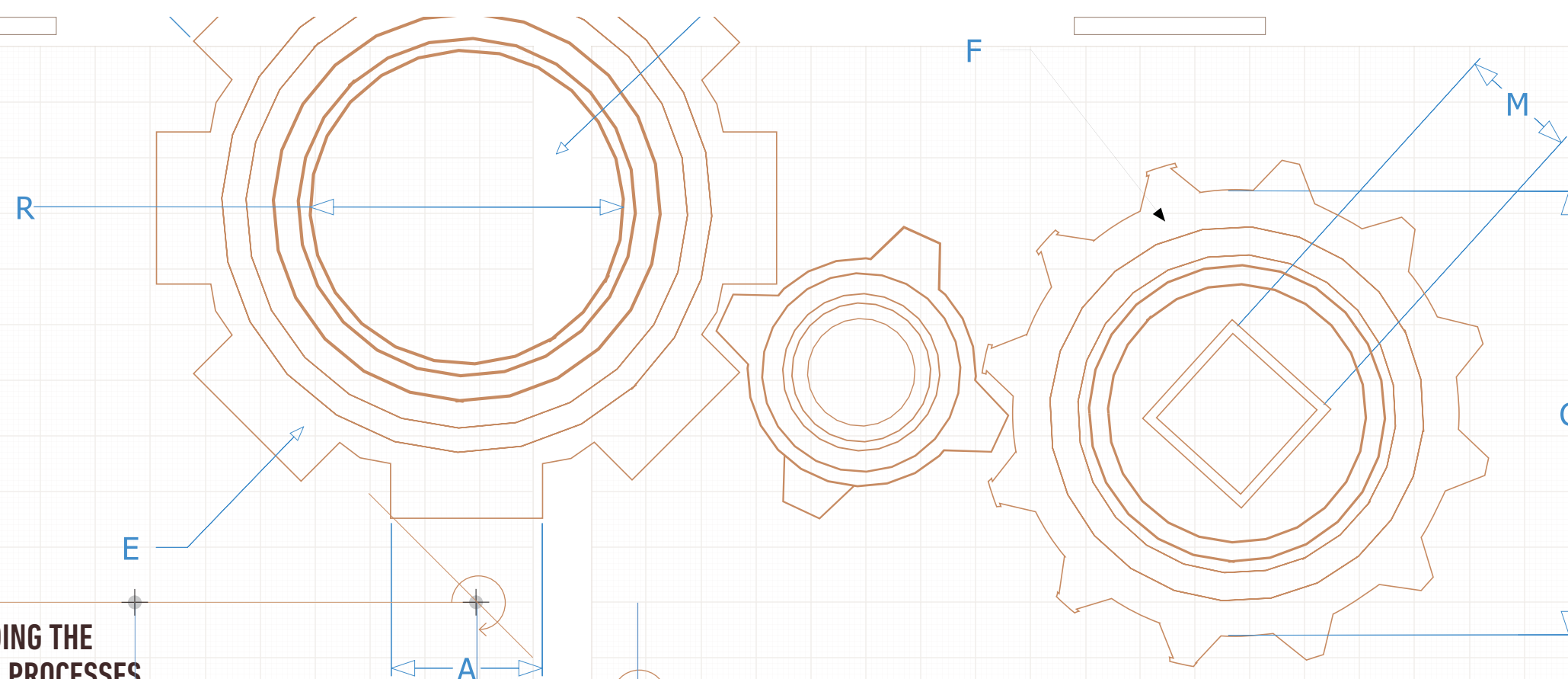
(used on pull and slide doors), whereas our new [XYZ] completed more operations in fewer than 15 minutes.

We're growing in knowledge, too. Recently Scott, our manufacturing engineer, revisited one previously written program and reduced the number of tool changes from 18 per cycle to just three!

In 2014 our experience will enable us to put all these new tools to even greater advantage – so we can achieve our goal of right first time, on time, every time whilst remaining competitively priced.

We are proud to own the most modern and technologically advanced museum display case manufacturing plant in the world.

COME TO SCOTLAND AND SEE FOR YOURSELF, WE WELCOME ALL CLIENT VISITS.



VERTICAL MACHINING

Our three axis CNC vertical machine center has increased our accuracy, precision and repeatability. Using the integrated tool, carousel changeover times have been reduced from 90 seconds to 4 seconds. This 20 horsepower machining center weighing in at 9 tonnes can accommodate workpieces up to 1600mm long and 600mm wide. The 8,000rpm spindle speed and the Titanium Nitride coated carbide tooling enables us to reduce machining time from 115 minutes to 17 minutes and run six components at a time.



CNC PRESS BRAKE

Our new CNC press brake has a beam length of over 2000mm and computer controlled backstop travel of 1900mm. With a positioning accuracy of +/- 100 microns coupled with 800kN of force, this essential metal working machine is both more sophisticated and more efficient than its two predecessors. Its 9kW connected load is only drawn during a cycle which has resulted in energy savings of more than 78%. This machine tool has enabled tighter tolerances and increased manufacturing capacity over a wide range of folded metal parts.



POLISHED MITRED EDGES

With the installation of the Bottero edge polishing machine, we can now produce the most accurate and precise angled edges in the world. With a track capacity of 150kG per 1000mm this machine can profile truly enormous sheets of laminated glass at a maximum speed of up to 6000mm in 60 seconds, although for the quality we now expect we run the machine somewhat slower. The machine is equipped with five super abrasive diamond impregnated grinding heads, each with a specific duty. How we care for these grinding tools is a closely guarded secret.

GLOBAL VIEW

WE'RE ALWAYS SURPRISED HOW DIFFERENT THE MUSEUM SHOWCASE MARKET IS IN DIFFERENT PARTS OF THE WORLD. FIND OUT WHY.

Australia

Reliability is key

A significant percentage of the market is "remote and regional" where non-museum professional staff run the Museum or Gallery. They rely heavily on our expertise, and their focus is on simple to use, maintenance free, versatile showcases. Reliability is key; freight and installation can easily cost more than the product, so it can be an expensive and logistical exercise to fix, resolve or retro-fit the showcases.

There are no national or industry standards, so institutions follow and develop different in-house protocols. However, high-grade museum quality products, high security, manageable and controlled internal display climates are all features that are becoming more and more the norm and expectation of our clients.

Find out more from Phillip Quartly,
Manager Museum Projects
www.Designcraft.net.au

Brazil

Bringing new solutions

It is no secret that financial sustainability is a big issue for museums worldwide and the Brazilian museum industry is not alien to those issues. However, Museums are a vital part of our culture and a number of cities have recently received investments for the re-development of their museums.

We face many challenges to transform the way the exhibitions in our museums are designed, and to bring new technologies to us. We understand the importance and necessity of modern solutions for 21st century museums and personally, I see the recently confirmed collaboration between my firm and ClickNetherfield as a logical step in the evolution both of my business and the modernisation of museums in Brazil in the coming years.

Find out more from Magui Kämpf,
M+E DESIGN, museus + exposições
Tel: +55 21 980678020
contato@medesign.art.br

Middle East

Huge successes in The Middle East over the last 8 years

The work that ClickNetherfield do in The Gulf countries such as Qatar, Kuwait, Sharjah and Abu Dhabi can differ enormously from some of the work done in the UK.

Qatar for example has been the site of two of the largest projects that the business has ever undertaken in the Museum of Islamic Art, which opened in 2008, the Qatar National Library under construction. In scale, both of these projects outstrip any recent projects in the UK, but a cohesive business strategy and management skill is required to enable ClickNetherfield to comfortably upscale and meet the challenges of the bigger projects when they are awarded.

Find out more from Khalid Qaissieh
Tel: +974(0) 466 7292
khalid.qaissieh@qatar.net.qa

UK

Changing Trends

It's been fascinating to see the trends change in our home market over the years. Whereas Optiwhite glass used to be aspirational, it's pretty much the norm now; and where low reflective glass used to be thought of as unaffordable, it's now aspirational. The requirement for tightly sealed cases with a low air exchange rate (AER) has become much more common and is requested regularly whereas previously, it was usually national museums that had this requirement. Interesting to also note that pretty much every UK museum insists on having only Abloy locks whereas that's not always the situation internationally. On top of this, ClickNetherfield are driving a trend to fully mitred cases more often than not.

Find out more from
showcases@clicknetherfield.com

USA

Working the American Way

Crossing successfully into our 13th year of business as ClickNetherfield USA, a joint marketing venture of ClickNetherfield and Kubik Maltbie, we have gained some unique perspectives along the way...

The vast majority of our work here in the States over the last 12+ years has been completely bespoke, architecturally integrated, and beautifully designed showcases created by the likes of Ralph Appelbaum Associates or Frank Gehry International's offices. The acrylic bonnets of the world are America's equivalent of "system" cases in Europe. In America, when a designer intends upon creating a bespoke approach, they start thinking of one of the four or five major international showcase builders, otherwise it's an off the shelf bonnet or "shop-built" enclosure by one of the Exhibit Fabricators.

Find out more from Ryan Skorch
Tel: +1 (0) 856 234 3448
r.skorch@clicknetherfieldusa.com

Denmark

Security or design? A classic conflict

The conflict between security and design is an issue that Scandinavian museums have to address actively and constructively. The National Museum of Denmark is setting a new standard in this area by demanding that the security is top notch – with firm framework and very thick glass.

Scandinavia and Denmark have security standards for showcases called Skafor. Skafor grading has four levels; red, blue, green and yellow; red indicating the highest level of security and yellow the lowest. Skafor-grading builds on the old standards of safety deposit boxes. Danish showcases have been designed and tested according to the same system. Norway and Sweden have also adopted this system. So, showcases produced in Scandinavia are characterised by solid constructions, thick glass and heavy framework.

Find out more from Arne Kvorning,
Kvorning Design and Communication,
Tel: +45 33 93 93 53
arne@kvorning.dk

Keep The Faith

THE MUSEUM OF METHODISM AND JOHN WESLEY'S HOUSE RE-OPENED IN MAY 2013 FOLLOWING A MAJOR INVESTMENT WHICH ALLOWED FOR CONSERVING AND IMPROVING THE HISTORIC STRUCTURE OF THE BUILDING AND HAS RESULTED IN A COMPLETE TRANSFORMATION AND A NEW LEASE OF LIFE FOR THE MUSEUM.

Located in the 18th century crypt of Wesley's Chapel at City Road (close to London Old Street), the space had originally been turned into a museum in 1984. At the time, its design was progressive, even cutting edge. However, almost thirty years later the space had become tired, the interpretation required revision and many objects needed a well-deserved rest.

With Barker Langham as Museum specialist consultants and architects John McAslan & Partners (well known in connection with the recent King's Cross Station redevelopment) as project architects, the Chapel embarked on an ambitious refurbishment project. Part of the challenge was to integrate and re-design a large meeting space next to the museum, to somehow tie this into the museum, to use the space better and encourage Chapel visitors and the congregation to use 'their' museum more extensively while also allowing for the display of more objects from the museum's collections. At the same time, a smaller meeting room and the curator's office – previously a small space carved from the museum – were to be integrated into the new space to create a larger, more open and capacious space. Last but not least, the refurbishment provided an excellent opportunity to rethink and put into place vital new infrastructure. This included a new collections store, a room for the volunteer

heritage stewards of the museum, new air-conditioning and heating piping and ducting, as well as a new exit to the Chapel's garden, so visitors could see and visit John Wesley's grave monument without having to walk through the entire building complex.

The 2012 refurbishment aimed to strip the space back to its original Georgian outline, revealing all wooden columns and ceiling beams as well as the very interesting floor. The new display was organised thematically, with individual themes presented in clearly separate areas. Display cases would be placed around the periphery of the space where possible, to emphasise the architecture, facilitate a more open space and create vistas throughout the museum. To draw attention from the comparatively low ceiling, ambience lighting was built into the showcases at the top and bottom, also around the periphery of the space; this way, only a few ceiling spotlights to highlight important objects and areas without showcases, were required.

Visitors can explore the history of the complex and the site, look at the early development of Methodism through a display case on preaching and publishing and another on the first Methodist Chapel in London, the 'Foundry' (housed in an old cannon foundry). They can also learn more about the chapel

Article by
Christian Dettlaff,
Curator,
Wesley Chapel

ABOVE RIGHT

Visitors can now use "their" museum more extensively.



ABOVE LEFT

The re-designed space allows for the display of more objects.

ABOVE RIGHT

Display cases are designed to blend into the environment.



building 'boom' of the late 19th and early 20th centuries and the life of important 20th century preachers. Alongside can be found displays on John Wesley, the principal founder of the Methodist movement, and a number of important 18th, 19th and 20th century paintings. Those who would like to explore Wesleyan hymns or sermons, as well as the burial records of the chapel and archival material from the museum's collection can do so by using interactive tablets. At the centre of the museum a multi-screen audio visual presentation brings alive the story of John Wesley, the site and the development of Methodism, and ties together the museum experience. In addition, a large new showcase containing Wesleyana, especially

ceramics, has been constructed which links the meeting room next door with the museum, encouraging visitors to explore the large ceramic collections of the museum – and enter the actual museum space next door.

Although funding is still required to put in place two more display cases and complete the refurbishment, the museum has had its busiest few months ever since re-opening in May 2013.

Working alongside museum designers, architects and fit-out specialists Conistain, ClickNetherfield supplied display cases, drawer units and lighting designed to blend into the museum environment and emphasise the original features of the architectural space with elegant simplicity.

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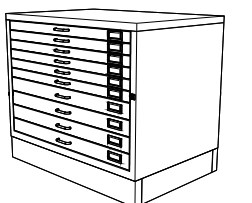
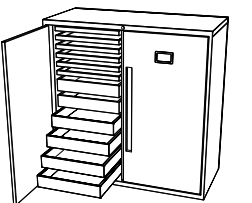
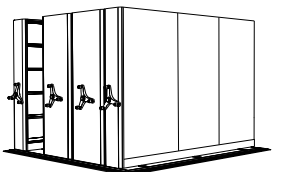
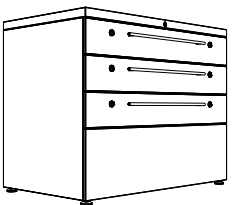
way thousands of customers around the world already trust our showcases.

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We recognise the importance of conserving and ensuring the safety of your precious objects and take into consideration the environment, material and lighting used.

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Lost & Found

DISCOVERING THE MYSTERIOUS
CHEAPSIDE HOARD
AT THE MUSEUM OF LONDON

The Cheapside Hoard was discovered by chance in 1912, buried beneath a cellar floor on Cheapside in London, having lain undiscovered for more than two-and-a-half centuries. It is the largest collection of Elizabethan and early Stuart jewellery in the world – an exquisite treasure trove of incalculable value.

It offers a wealth of insights on Elizabethan and early Stuart London – as a centre of craftsmanship and conspicuous consumption, at the crossroads of the Old and New Worlds in an age of global exploration. It also explores the mysteries that remain: who owned the Hoard, when and why was it hidden, and why was it never reclaimed?

Creating a compelling exhibition that did justice to the breath-taking qualities of the Cheapside Hoard – some 500 items of jewellery and

gemstones, tiny, exquisite, fragile – posed a great challenge to the Museum's project team, exhibition designers Ben Kelly Design, lighting designers Studio ZNA and mount-maker Tony Jones.

This challenge brought forth great creativity, innovation and craftsmanship in the conservation, mounting and lighting of the pieces. Intricate gold and enamel chains were painstakingly stitched by the Museum's conservation team, link-by-link, onto discreet wire frames and – like all of the jewels that would once have been worn pendant – were suspended within their cases from bespoke mounts, each individually lit, to bring them to convey a sense of how they would have been worn.

Showcase manufacturer ClickNetherfield supplied a range of display cases with internal lighting which were used to display

this outstanding collection of jewellery and other contextual objects, such as costume items, jewellery caskets and jeweller's tools that help to paint a picture of the fashions and culture at play in Tudor and early Stuart London.

Key partnerships enabled the Museum's team to create unusual displays around individual key pieces. Master perfumer Roja Dove created a unique fragrance inspired by an opulently-bejewelled scent bottle, using ingredients available in the 17th century, which visitors are able to smell in the exhibition.

Exhibition sponsor Gemfields loaned to the exhibition the spectacular Medusa emerald crystal, which is displayed alongside an exquisite emerald watch, lending understanding to the watch's form and the skill involved in creating it.

Article by
Elpiniki Psalti,
Major Exhibitions
Project Manager,
Museum of London

"I love the way the jewellery is displayed. It's breathtaking."



THE CHEAPSIDE HOARD: LONDON'S
LOST JEWELS, MUSEUM OF LONDON,
11 OCTOBER 2013 – 27 APRIL 2014.



LEFT

*The Brigg Raft
in its case at the
Heritage Centre.*

A spectacular Bronze Age raft has returned to a North Lincolnshire town having been locked away for nearly 40 years.

The 3,000-year-old flat-bottomed oak boat was found in 1888 by workmen digging for clay between the old and new River Ancholme.

The sewn-plank boat was being preserved and stored at the National Maritime Museum in London but in 2011 the museum agreed to loan the "Raft" to North Lincolnshire Council for conservation and display in the new Brigg Heritage Centre. Having now been fully restored by conservators at York Archaeological

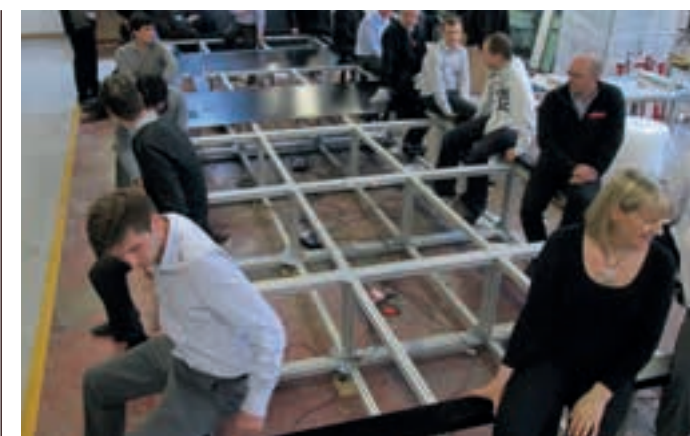
Trust, the "Raft" went on public display for the first time ever in May 2013.

The bespoke vertical lift showcase for preserving the "Raft" is one of the largest cases with motorised access we have supplied to date, with the vertical lift actuators capable of supporting a massive 2 tonnes in weight. The glass itself weighs in total 1.5 tonnes and required six of our strongest and most handsome technicians on-site to lift it into place. Some fun was also had in the factory when we asked for volunteers to sit around the case framework during construction to help test the lifting capabilities.

One of the largest motorised cases we've ever made, weighing 1.5 tonnes and capable of supporting a massive 2 tonnes in weight.

RIGHT

*ClickNetherfield
staff testing the
strength of the
case actuators
at our factory in
Livingston.*



Discovery Park of America

IN THE HEARTLAND OF AMERICA, IN THE STATE OF TENNESSEE, SOMETHING EMERGES FROM THE RURAL CORN FIELDS OTHER THAN THE MUSIC THAT MAKES THIS PART OF THE UNITED STATES FAMOUS.

Article by
Rob Kingrey,
Director of
Facilities
and Exhibits,
Discovery Park
of America

Located in the small northwest Tennessee town of Union City, comes a new \$100m Museum Park Complex. The Park centres around the modern architecture-inspired 100,000 square foot Discovery Centre designed by Vernor Johnson Architects in Boston, Massachusetts and is filled with ClickNetherfield cases. Discovery Centre is comprised of nine eclectic Galleries on three levels.

Children's Exploration Gallery: water tables, buildable structures, mind twisters and a trip down the giant metal framed human.

Energy Gallery: an energy tower (power source game) with a Jacob's ladder on top, which fires up when a champion is declared.

Native Americans Gallery: everything from pottery to a recreation of a French trader's cabin and a holographic storyteller.

Natural History Gallery: a giant projection globe simulates the surface of other planets alongside 22 recreations of dinosaurs.

Regional History Gallery: a 22,000 gallon aquarium filled with fish native to this region alongside local tools, crafts and stories.

Science Space and Technology Gallery: featuring the Starship Theatre which allows visitors to navigate the galaxy via the 180 degree wrap-around screen.

Transportation Gallery: innovative early vehicles, race cars, motorcycles, muscle cars and antique gas station equipment.

Enlightenment Gallery: a curious collection of exotic tribal carvings and artefacts, a statue of Buddha, and a vampire killing it.

Military Gallery: artefacts dating back to the founding of the United States up to modern day warfare. Armoured vehicles, a helicopter, and a suspended airplane.

When planning the museum complex, we made a commitment to quality, security, and artefact preservation. Ryan Skorch, our ClickNetherfield US representative introduced us to our remarkable cases. As soon as we saw the quality and craftsmanship of the artefact preservation cases, we were sold. Jim Finlayson and Angel came from Scotland with our product to install.

Jim and Angel went above and beyond their duty to meet our deadlines in a timely, neat, and professional manner. We are currently planning to add additional ClickNetherfield cases as the need arises to maintain the level of quality within our organisation.

DISCOVERY PARK,
TENNESSEE

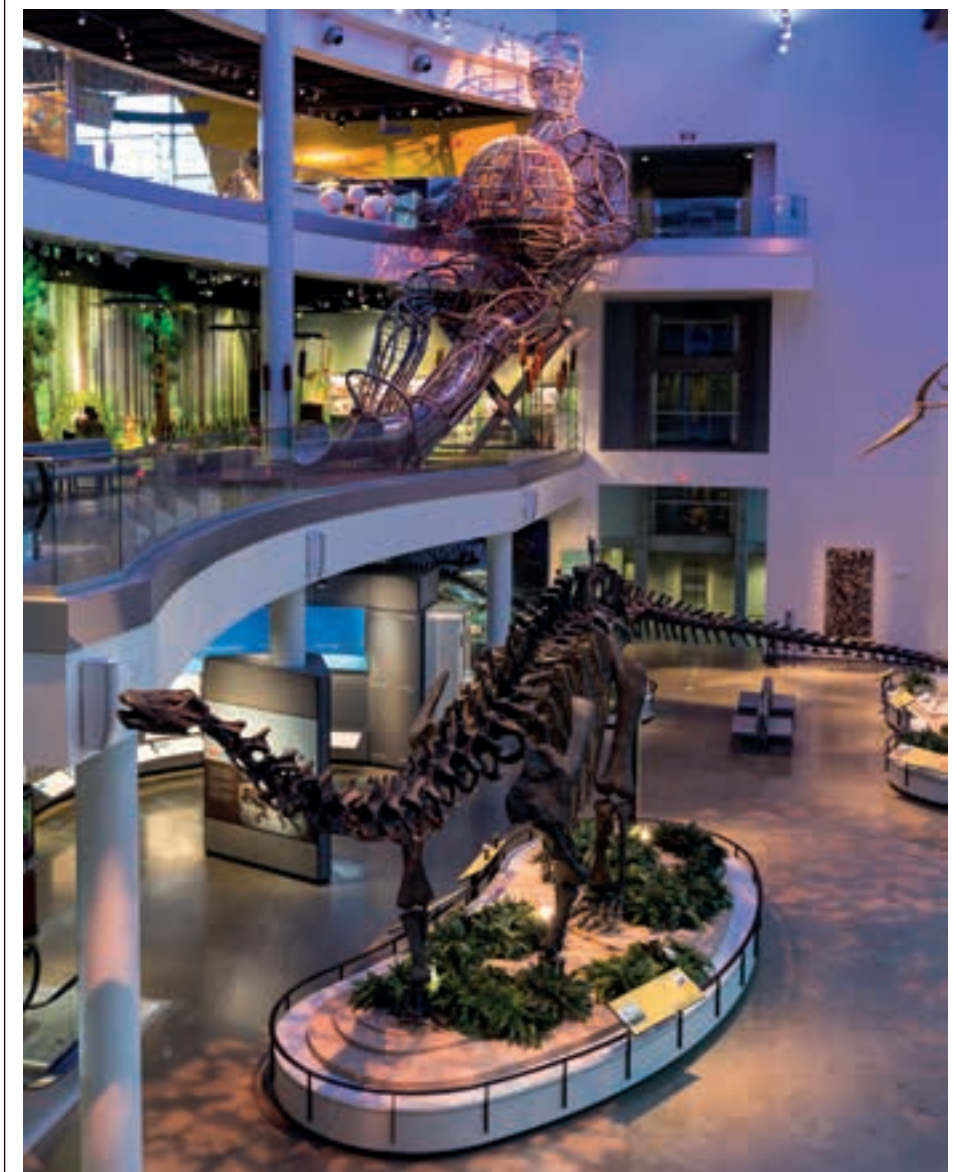


LEFT

A new museum and educational venue focused on nature, science, technology, history and art.

BELOW

Atrium with a dinosaur skeleton and a 50-foot-tall metal human figure.



The Real Philadelphia Story

by Karie Diethorn,
Chief Curator,
National Park Service,
Independence National Park

The Benjamin Franklin Museum in Independence National Historical Park (Philadelphia, Pennsylvania) reopened to the public on 24 August 2013 after a two-year renovation project that included ClickNetherfield among its team members. Independence National Historical Park, a unit of the United States Department of Interior's National Park Service, tells the story of the founding of the American republic to over five million visitors a year through the preservation and interpretation of historic resources like Independence Hall and the Liberty Bell.

museum in the internationally acclaimed Franklin Court features historic artefacts, computer animations, and interactive displays highlighting Franklin's life and character. Six exhibit galleries allow visitors to explore Franklin's most prominent character traits: sociability, ambition and rebelliousness, motivation to improve, curiosity, strategic and persuasive ability, and foresight.

ClickNetherfield supplied the Benjamin Franklin Museum with 23 glass exhibit cases of the Prism, Vista, and Vision types. These cases allow visitors an intimate view of the historic objects (like Franklin's chess set and the ink balls used in his printing office) on display. Designed to "disappear", these cases lend themselves well to the exhibit's scale and aesthetic that encourage visitors to discover the many facets of Franklin's life. The cases also support the museum's preservation standard for the fragile objects on display by managing interior conditions with passive humidity control (i.e. desiccant).

The new museum facility sits below ground immediately adjacent to the site of Franklin's last home. The site was first developed by the National Park

Designed to "disappear", these cases lend themselves well to the exhibit's scale and aesthetic that encourage visitors to discover the many facets of Franklin's life.

Independence National Historical Park's Benjamin Franklin Museum explores the life, times, and legacy of Benjamin Franklin, America's renown 18th-century printer/scientist/diplomat/statesman. The revitalized 20,000 square foot



IMAGE CREDIT: VISITPHILLY

Service in 1976 under the direction of the Philadelphia architectural firm of Venturi, Rauch, and Scott Brown. Robert Venturi's iconic "ghost structure" - an open frame steel sculpture that portrays the exterior dimensions of Franklin's home - is prominent in the site's landscape. In addition to ClickNetherfield, the principle firms involved in the new Benjamin

Franklin Museum were: QuinnEvans (architects), Daniel J. Keating Company (construction), Remer & Talbott (exhibit curators), CassonMann (exhibition design), Kubik Maltbie (exhibit fabrication), Memory Collective and Bluecadet (animation, computer design, and video).

ABOVE

The Electrical Apparatus designed by Benjamin Franklin.

THE BENJAMIN FRANKLIN MUSEUM IS OPEN DAILY ALL YEAR.



SERVICE & ACCESSORIES DIVISION OFFERS THE FOLLOWING SERVICES

SERVICE AND MAINTENANCE

- Lighting maintenance
- Replacement glass doors / panels
- Case relocation
- Case dismantle and reassembly
- Locks and keys
- Glass repairs (small chips or scratches)
- Cleaning equipment
- Replacement door seals

UPGRADES

- Showcase refurbishment
- Lighting upgrades
- New or upgraded dress panels (fabric or paint covered)

CONSERVATION

- Retrofitting of active environmental control equipment
- Air change testing (site visit with follow-up report)
- Monitoring equipment (humidity / temperature / light)
- Retrofitting of passive humidity equipment
- Supply of Art Sorb® / silica gel

ADD-ONS AND ACCESSORIES

- Internal display mounts / plinths
- Shelving
- Hanging rails & rods
- Case mover trolleys
- Internal case dividers
- Glazing suckers - various types
- Cleaning equipment