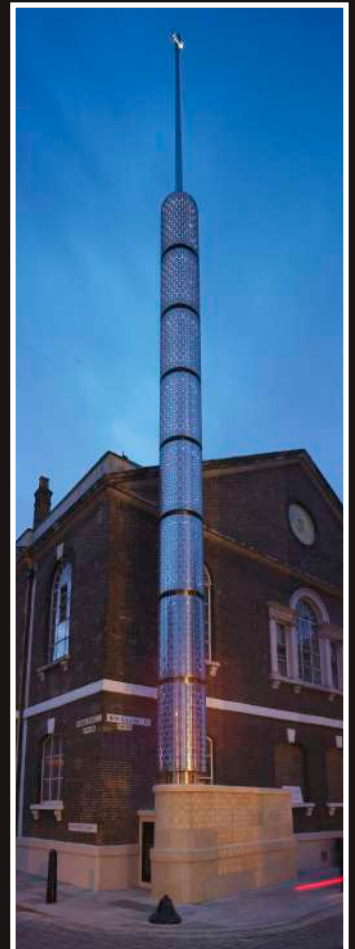


# m-tec

Specialist metal fabricators and consultants

## Case Studies



# ARCHES OF OMAN



**Project:** Arches of Oman Sculpture

**Artist:** Giles Rayner of GR Sculpture Ltd

**Location:** Muscat, Oman - UAE

m-tec has manufactured a stunning 12 metre high sculptural water feature which now stands proud in the private gardens adjacent to the Royal Opera House in Muscat, Oman.

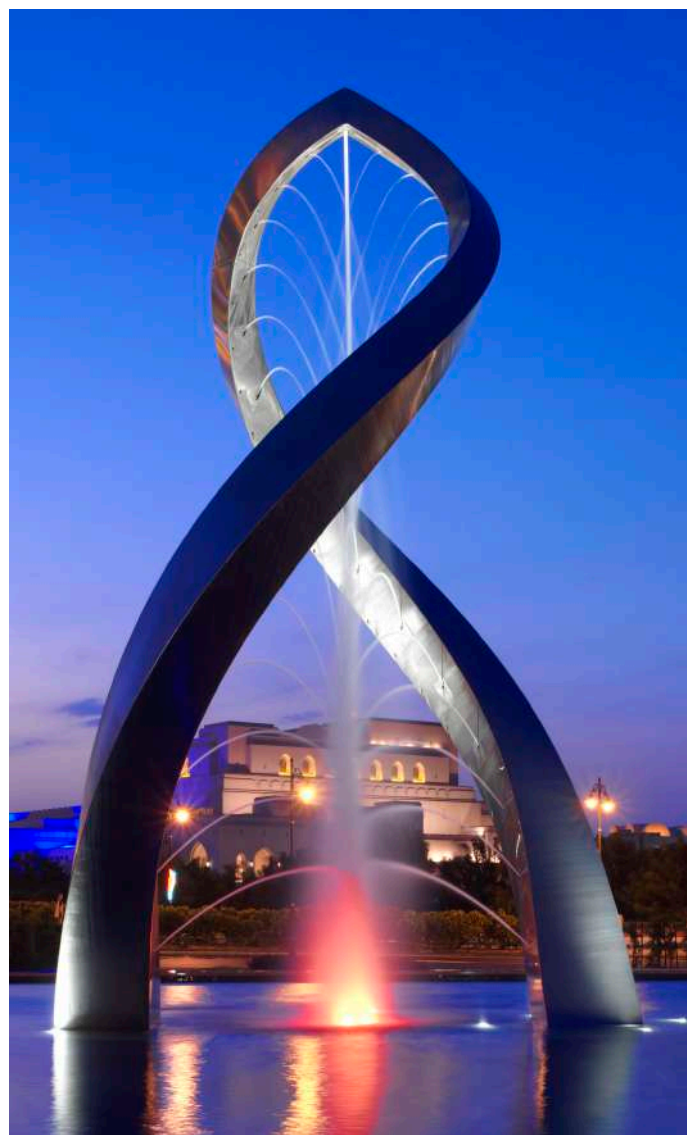
The Arches of Oman took three and a half years to complete, from the initial concept to the on-site installation of the final piece.

The shape of the sculpture is highly complex and features graceful curves to represent the iconic Islamic arch symbol. The two entwined polished stainless steel tusks flow sinuously around one another, containing dozens of high pressure water jets which have been built into the piece and erupt from the inner surfaces to create an eye-catching water feature.

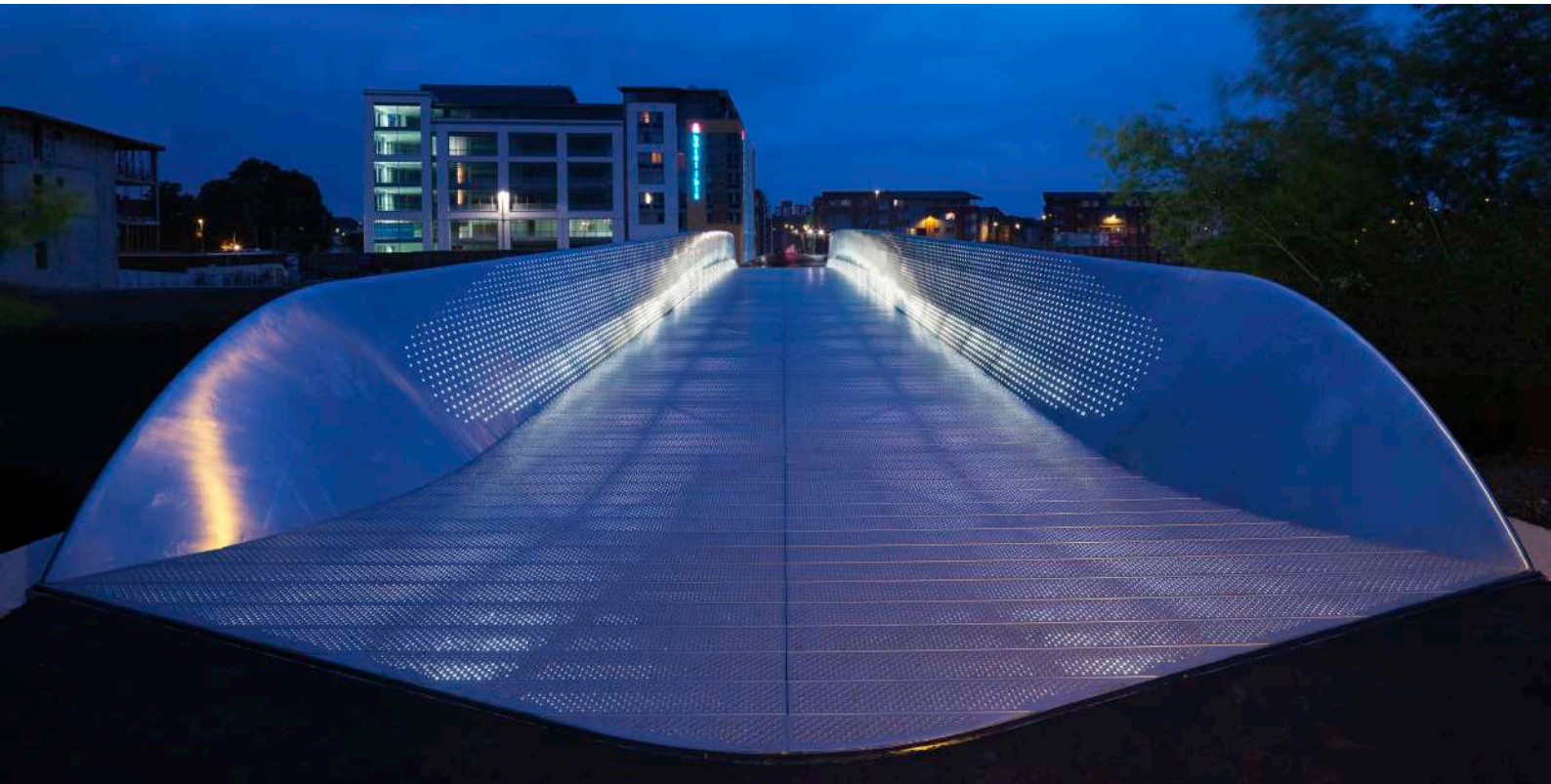
Designed by artist Giles Rayner of GR Sculpture Ltd, the Duplex water feature has been fully fabricated and polished by m-tec's team of skilled engineers at the company's UK headquarters.

The process was a collaboration of in-depth design meetings and consultations with Commission Director, Julian Glyn-Owen, who was pivotal in ensuring the project met GR Sculpture's expectations of high quality standards and stringent deadlines.

From the initial concept stage to shipping and on-site assembly, the whole project has involved a multi-functional team of skilled design engineers, structural engineers, steel fabricators and hydro specialists to ensure the sculpture has been manufactured to the UK's highest standards.



# MEADS REACH BRIDGE



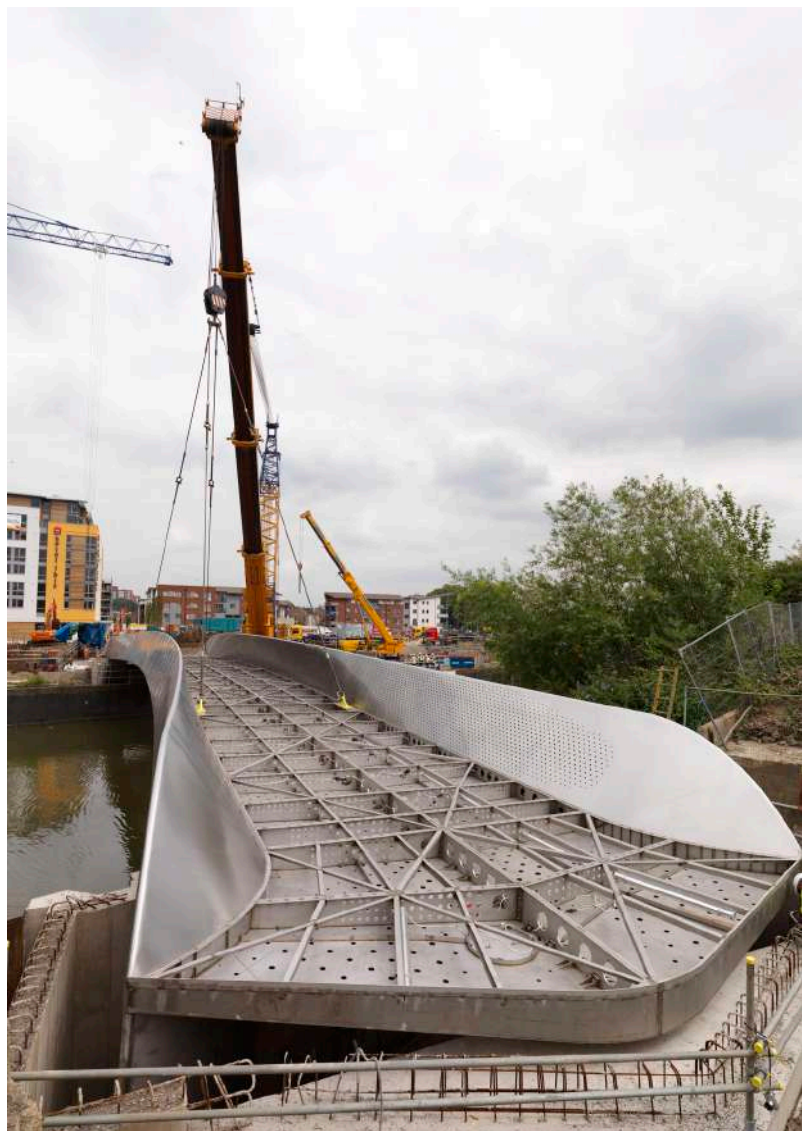
**Project:** Meads Reach Bridge  
**Architect:** Niall McLaughlin  
**Location:** Temple QUAY II, Bristol

The Meads Reach Bridge was a joint project between Niall McLaughlin Architects, Cyril Swett, Gleeds, Price & Myers, Dean & Dyball and m-tec for Castlemore Securities to renovate Temple QUAY II in Bristol.

m-tec fabricated the 55 metre, 75 tonne stainless steel pedestrian walkway in-house from 2205 duplex stainless steel. Its construction was made from eight sections which were delivered individually to the Bristol location. This was then reassembled and fully welded together to make one complete structure.

The arc of the bridge picks up light from the sky and water, changing with the weather and the time of day. The interior of the bridge also holds LED lights which make the whole structure glow at night, revealing the hidden ribs of the internal skeleton.

The final polishing was undertaken in-house and the completed pedestrian walkway was craned into place in one piece, making the Meads Reach Bridge of m-tec's most prestigious projects to date.



# SUN MOON & TWO HEARTS



**Project:** Sun Moon & Two Hearts

**Artist:** Jephson Robb

**Location:** Glasgow

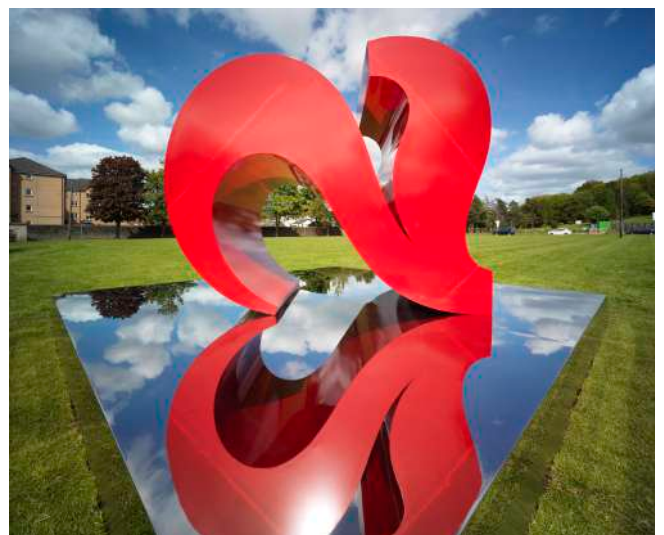
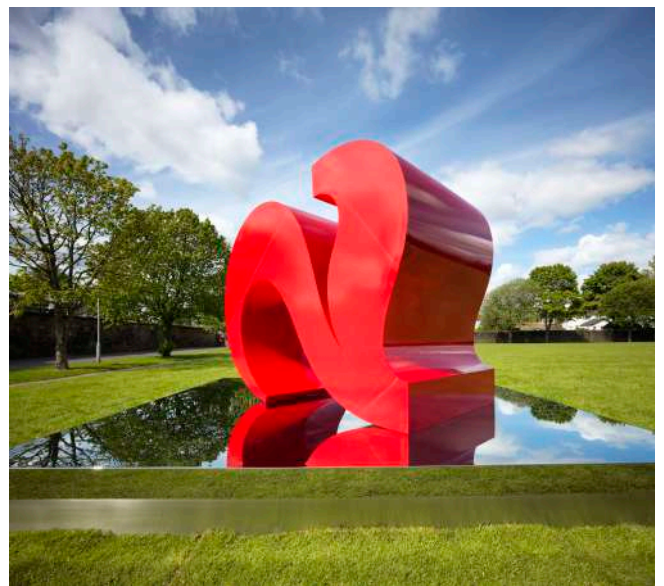
m-tec were chosen by public artist Jephson Robb to manufacture two eye-catching sculptures which have now taken pride of place outside Gartnavel Royal Hospital in Glasgow. The monuments reflect the experiences and stories of those using the hospital's mental health services.

The Sun-Moon sculpture is made up of a two and a half metre convex diameter circle with two different sides to represent the contrast between the Sun and the Moon. It draws its inspiration from the hospital motto 'Let there be Light Again'.

One blasted stainless steel side features highly polished dished sections to reflect the shape of the Moon, and the opposite side is made of a highly reflective, polished mirror to represent the Sun.

The Two Hearts sculpture, which is made from 316 grade stainless steel and was powder coated in-house sits on a four metre mirror-polished reflective platform to support it.

These sculptures will serve as a legacy to the past 200 years of the hospital, and point forward to 21st century mental health care and the role which the arts has to play in supporting and promoting the recovery of those living with ill mental health.



# THE ABERTILLERY GATEWAY



**Project:** The Abertillery Gateway  
**Artist:** Blaenau Gwent County Borough  
**Location:** Abertillery, South East Wales

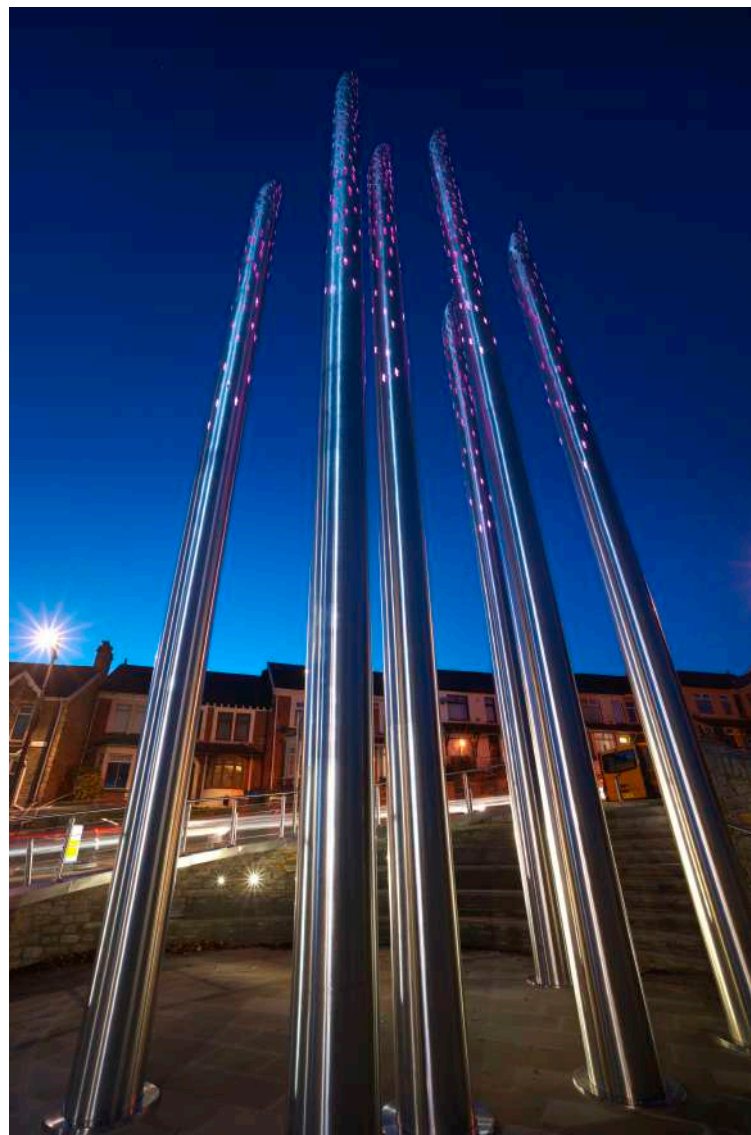
m-tec manufactured the six super satin finished stainless steel spires as part of the Abertillery Gateway Feature to represent the historic locations of former colliery sites from the surrounding area.

Working alongside Dawnus Construction who prepared the foundations for the project, we fabricated the six 8mm thick spires in two sections which were then welded together to create heights ranging from fourteen to seventeen metres.

The spires, which are made from grade 316 stainless steel with a diameter of 450mm are also fully fitted with IP 67 LED colour changing luminaires – supplied by Anolis Lighting – to create the stunning effect which penetrates through the cut outs and adds to the ambience of the project.

Each spire also has a stainless steel base plate which has been engraved with the name of the colliery it is representing.

As part of a competition, local schools were given the opportunity to produce sketches, poems or short stories to represent past and present memories. The winning designs were then engraved onto sixteen stainless steel plaques on the stone retaining wall.



# SOUSSE BARDO MEMORIAL



**Project:** Sousse Bardo Memorial  
**Architect:** George King Architects  
**Location:** Cannon Hill Park, Birmingham

The Infinite Wave memorial sculpture, designed by George King Architects and meticulously fabricated by m-tec, was commissioned to honor the 31 British nationals who tragically lost their lives in the Sousse terrorist attacks of June 2015 and the Bardo Museum attack of March 2015.

Unveiled by HRH The Duke of Sussex at Cannon Park in Birmingham, the memorial serves as a striking and poignant reminder of those events. Crafted over a period of four months from 316 stainless steel schedule tubes, the structure was a highly complex project, no two tubes were identical, and each section required precision engineering, specialist jigs, and expert polishing to achieve a mirror finish. Transporting and installing the sculpture was equally challenging, as the irregularity of each section demanded exceptional care to ensure the parts aligned seamlessly on site. Despite the technical difficulties, the finished piece is not only a remarkable example of bespoke craftsmanship but also a deeply meaningful work of public art.

The wave-like form symbolises continuity and remembrance, embodying both resilience and reflection. At its heart, the Infinite Wave places the memories of the victims, survivors, and their families at the center of its design, offering a space for contemplation and ensuring that their legacy endures for generations to come.

# BIRMINGHAM 21

**Project:** Birmingham 21 Memorial  
**Architect:** Anu Patel  
**Location:** New Street Station, Birmingham

The memorial to the victims of the Birmingham Pub Bombings was created in collaboration with Network Rail and artist Anu Patel, with m-tec fabricating and installing the design on the 44th anniversary of the attack. The installation features three 15ft trees crafted from Corten and stainless steel, set in iroko wood planters for a striking contrast of textures. Each tree carries seven steel leaves, laser-cut with the names and ages of the 21 victims as a lasting tribute. Produced over 24 weeks by m-tec's skilled craftsmen, the trees now stand outside Birmingham New Street Station and Grand Central. At the unveiling, Anu Patel shared her hope that the memorial would comfort families and inform future generations. More than public art, the installation is a poignant and enduring symbol of remembrance that m-tec is proud to have helped bring to life.





**Project:** Uganda 50: Sculptural Gateway.

**Artist:** Anuradha Patel

**Location:** Leicester City

Commissioned by Leicester City Council as part of the Uganda 50 commemorations, Sculptural Gateway marks the 50th anniversary of the expulsion of Asians from Uganda in 1972 and their resettlement in Leicester. It serves as both a memorial to a difficult chapter in history and a celebration of the resilience, courage, and enduring contributions of the Asian communities who rebuilt their lives in a new country.

The design features two interconnected steel forms, symbolising the two communities affected by the expulsion, with their meeting point representing hope, continuity, and the passage of a generation. Flowing, intertwined curves evoke movement and interconnection, inviting viewers to reflect on shared histories, displacement, and renewal.

Crafted from vibrant powder-coated mild steel, the work was meticulously produced in-house by m-tec, a long-term collaborator of Anuradha Patel. Advanced fabrication techniques overcame the challenges of complex curves and intertwined sections, resulting in a structure that is both visually striking and enduring.

Sculptural Gateway stands as a testament to creative skill and a symbol of Leicester's rich multicultural heritage. It celebrates the strength and unity of communities, the continuity of cultural identity, and the power of art to commemorate history and resilience.



# FOLKESTONE WAR MEMORIAL ARCH



**Project:** Folkestone War Memorial Arch  
**Architect:** Foster Gearing  
**Location:** Folkestone, Kent

m-tec were commissioned by educational charity Step Short to manufacture the iconic stainless steel arch and bespoke seating that was unveiled by Prince Harry.

Designed by specialist architectural company Foster Gearing, the memorial arch overlooks the harbour where ships waited to take millions of soldiers to France during the course of the war. This project marks the centenary of the outbreak of World War 1.

The associated seating made from marine grade 316 stainless steel and Iroko slats were designed and manufactured by sister company, Goose Foot Street Furniture to fit seamlessly into the recesses. They create a timeless feature within the town centre and blend into the surrounding area perfectly.

Thousands of people turned out for the ceremony to commemorate the millions of men and women who travelled to and from the Western Front during the 1914-18 conflict, and the project was delivered to international property company Lend Lease ahead of schedule.

Together, the projects create a timeless feature integrated to complete the renovation of the Road of Remembrance.

# IRVINE TRINITY MIRROR

**Project:** Irvine Trinity Mirror  
**Architect:** Peter McCaughey  
**Location:** Irvine Town Centre

m-tec were selected to manufacture the nine metre, mirror polished sculpture which stands proud in the recently developed town centre of Irvine.

The sculpture was fabricated using 12mm thick grade 316 stainless steel sheets which were then welded together to form the unique shape. There is granite text lain into the ground below which is written in reverse, but when you read it using the mirror finish on the sculpture you are able to read the text which is based on the history of the town.

The project was a joint venture between artist Peter McCaughey, Irvine Bay Regeneration, Land Engineering and m-tec.



# THE SWIRL



**Project:** The Swirl  
**Architect:** Maria Rosa Kramer  
**Location:** Didcot Orchard Centre, Oxfordshire

m-tec were selected by architect Maria Rosa Kramer to manufacture The Swirl sculpture for Didcot Orchard Centre.

Standing at eight metres high and supported by three vertical legs, the 316 grade stainless steel sculpture is mirror polished and finished with red paint on one of its sides to represent the colour of an apple.

Inspired by Oxfordshire's great apple growing tradition, Maria's vision for the stunning sculpture was for it to resemble the peeling of an apple and refers to the name of the town centre and surrounding area.

The owners of the shopping centre and the public in Didcot have given great feedback on this stunning sculpture and they are delighted to have it as a centrepiece for their shopping area.

# STAINLESS STEEL CANOPY

**Project:** Stainless Steel Canopy  
**Architect:** RH Partnership  
**Location:** Napp Pharmaceutical, Cambridge

The bespoke stainless steel canopy was fabricated in-house from 316 grade stainless steel and installed at Napp Pharmaceutical in Cambridge.

The custom built canopy is over 22 metres long and has a striking shape which was designed by RH Partnership Architects. It also features a remote sun shade which is operated electronically depending on the weather conditions.

This project was a joint venture between m-tec, Napp Pharmaceutical, RH Partnership, and VINCI Construction Levlux.



# DARWEN SPITFIRE MEMORIAL



**Project:** Darwen Spitfire Memorial

**Location:** Darwen, Lancashire

The stunning stainless steel spitfire memorial sculpture, that was unveiled on Remembrance Day 2012, was overseen by m-tec and manufactured by WEC Group Training Academy apprentices.

Darwen was the smallest town in the UK to finance a spitfire during WWII, and the Spitfire memorial is a lasting reminder of the Town's contribution to the War Effort. The sculpture took two years to complete and cost around £175k. The sculpture has been 100% funded, manufactured and donated by the WEC Group to the people of Darwen.

The motivation behind the donation is to recognise and remember the massive contribution the people of Darwen made when they managed to raise the cost to purchase a spitfire for use in the WWII R.A.F.

The 3:1 ratio stainless steel sculpture, with a wing span measuring 3.8 meters and standing 6.9 meters high was hand crafted by the apprentices.

This fantastic sculpture is the town's legacy to the people of Darwen who made the contribution to the country's war efforts.



**Project:** The Wave  
**Artist:** Lucy Glendinning  
**Location:** St Johns Square, Blackpool

The Wave sculpture was created by m-tec in a joint project between Blackpool Borough Council and sculptor Lucy Glendinning. The sculpture, located in St Johns Square, Blackpool, weighing 17 tonnes and standing 10.3m tall.

The Waves' complex shape was a challenge for the fabrication team at m-tec. It is made from stainless steel and curved to represent a wave breaking. The studded resin inserts in the design are internally lit by colour-changing LEDs, to give the structure a constantly changing appearance.



# THE BRAID



**Project:** The Braid Sculpture  
**Artist:** Simon Watkinson  
**Location:** Blackburn, Lancashire

The Braid Sculpture was a joint project on behalf of Blackburn with Darwen Borough Council, artist Simon Watkinson, Capita Symonds, Stage Electrics and m-tec which were responsible for the fabrication and attachment of specialist lighting to the Braid Sculpture. The metal section was fully fabricated and bead-blasted at the m-tec headquarters. m-tec were also responsible for the delivery and installation of the Braid Sculpture to the Blackburn town centre location.

## Artist's Vision

In simple terms the Braid draws on the notion of a multi-stranded element creating strength and dynamism. Within Blackburn it obviously draws upon the textile history of the area, along with an implied reference to diverse elements binding together. Visually the sculptor wanted to make something that appeared to emanate from the floorscape without the need for a mediating plinth. The LED lights in the granite suggest further strands that have been cut, as if the whole structure is in fact a fat fibre-optic cable harness emerging from the hard landscaping. The top plates are like the cards used in Jacquard looms for 'programming' the design.





**Project:** The Minaret Sculpture

**Artist:** David Gallagher

**Location:** Brick Lane, London

The Brick Lane Minaret Like Sculpture represents new standards in stainless steel public art sculpture, featuring cutting edge architectural metal fabrication techniques. With the Brick Lane Minaret Like Sculpture, m-tec have brought dga architects' vision to life in a stunning piece of bespoke metalwork architecture.

The Minaret Like Sculpture is part of the extensions to the Brick Lane Jamme Masjid (Brick Lane Mosque), a Grade II listed building dating from 1743, and the centrepiece of the Brick Lane Cultural Trail.



# m-tec projects



Air Burst - BAE Systems HQ



Minaret - Brick Lane, London



Concorde Nose



The Swarm - O2 HQ



The Wave - Blackpool



Wind Shelter - Blackpool



Skyramp - Birmingham



The Braid - Blackburn



Discovery - Northampton

# m-tec

Specialist metal fabricators and consultants

Britannia House | Junction Street | Darwen | Lancashire | BB3 2RB  
t: +44 (0)1254 773718 | e: architectural@wecl.co.uk | www.m-tec.uk.com