



## MONTERREY'S LATEST RED-HOT ATTRACTION

While some dismissed Blast Furnace No. 3 as an ageing, industrial relic, Parque Fundidora envisioned a spectacular educational facility — part science center, part museum, part thrill ride — inside its crumbling walls. Today, that dream has finally become a reality. Monterrey's hottest new attraction, the Museo del Acero will be a highlight at the Universal Forum of Cultures, hosted by the park from September to December.

A hundred years ago, the park was the site of the country's first integrated steel mill: Fundidora de Monterrey. After it closed in 1986, the land was reclaimed to provide green space for residents, and educational, recreational, and business facilities for over two million visitors a year. A National Archeological Industrial Site, Parque Fundidora already boasts several beautifully restored heritage buildings.

Blast Furnace No. 3 dominates the Monterrey skyline as one of the city's most recognizable icons. A symbol of industry's importance in Monterrey's past and future, it seemed like an ideal fun and educational environment, where families and kids could discover steelmaking history, science, and technology.



Grimshaw Architects

To make this vision a reality, the Museo del Acero hired AldrichPears Associates, a Canadian interpretive planning and design firm, to develop the conceptual design and exhibits for the facility. The result is a range of unique and engaging experiences that highlight the importance of steelmaking in Mexico.

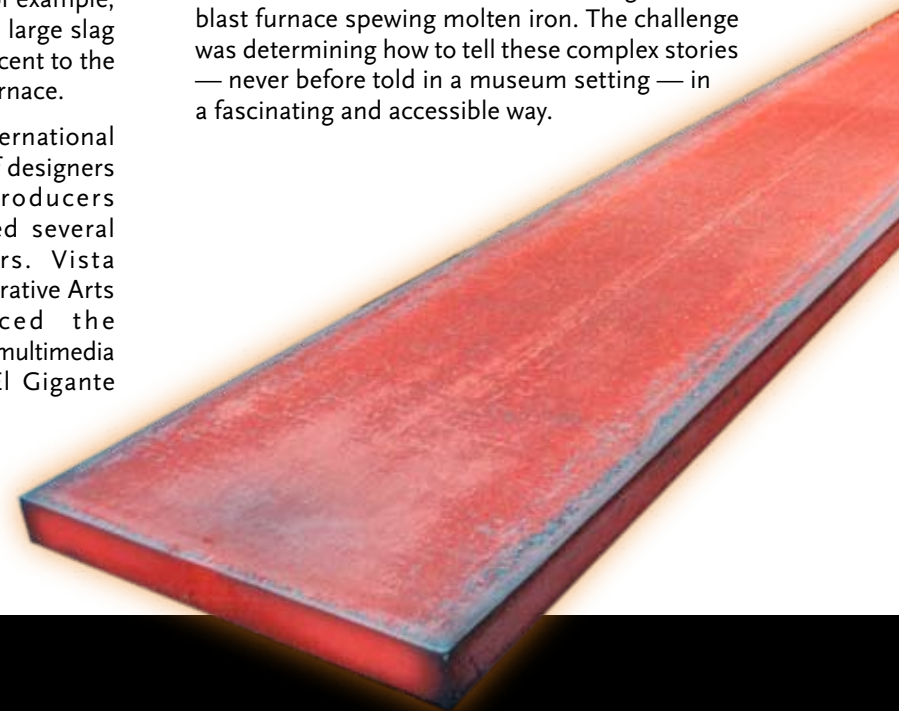
The museum's location inside the newly restored Horno No. 3 makes it particularly unique. Grimshaw Architects and Oficina de Arquitectura worked with AldrichPears Associates to ensure the building met the needs of a large museum while preserving its historical character. New additions were incorporated within the design. For example, the main gallery was carved out of the large slag pit adjacent to the blast furnace.

The international team of designers and producers included several partners. Vista Collaborative Arts produced the feature multimedia show El Gigante

Dormido, and Performance Solutions provided the special effects. The Taylor Group fabricated and installed exhibits, Unified Field developed computer interactives, Marjen Rojo produced audiovisual materials, and Doug Welch acted as lighting designer.

### GOALS AND CHALLENGES

The Museo del Acero strives to spark young visitors' interest in science and scientific exploration through steelmaking. Its main interpretive objectives are to tell Mexico's century-old story of steelmaking, explain the steelmaking process, and allow visitors the excitement of standing next to a blast furnace spewing molten iron. The challenge was determining how to tell these complex stories — never before told in a museum setting — in a fascinating and accessible way.



## DESIGN STRATEGIES

The design team used a number of strategies to meet this challenge.



### **Provide visitors with choices**

The Museo del Acero caters to diverse audiences through a range of experiences. Visitors can learn about Mexico's steelmaking history in the history gallery, México a Través del Acero; visit the playful, science-based steel gallery, La Acería; see the blast furnace come to life in the special effects show, El Gigante Dormido; or ride the ore lift to the top of the blast furnace to experience El Viaje a la Cima.

### **Preserve an industrial relic**

After assessing the crumbling Blast Furnace No. 3, the design team made every effort to preserve the building's historical integrity while using the space to its advantage. This massive undertaking required stabilizing the rusting steel structure, replacing the two-meter-thick cast hall floor and applying a special protective coating to all steel and machinery to prevent further decay. The incredibly detailed restoration process allowed for the conservation of the building's historical and industrial character.

### **Historical spaces transport visitors back in time**

Today, the furnace itself remains intact. The seventy-meter tall steel structure is now the centerpiece of the sound and light show, El Gigante Dormido. Audience members can experience an active blast furnace through sound effects, shooting sparks, bursts of flames, and a simulated river of molten iron. The history gallery is housed in the former load floor. Beautiful brick columns still line the space, and the torpedo car tracks remain visible in the floor. Visitors can ride to the top of the blast furnace inside what was formerly the ore lift, and walk along the same catwalks that workers once did. From there, they can peer down the throat of the furnace, or take in magnificent views of the site, the city, and beyond.

### **Make the content engaging**

Opportunities for hands-on interaction abound in the history gallery. Visitors can listen to workers' stories on telephones, watch images of steelworkers moving about in a model of Mexico's first skyscraper, and delve deeper into the story of steelmaking through computer interactives. Kids can slide down a giant cutaway model of a blast furnace or ride an elevator deep into a coal mine. Visitors of all ages can operate a model electric arc furnace, blast for ore in a mine, or design a futuristic vehicle with steel.

### **Use icons to anchor spaces**

Icons like the recreated torpedo car and full-size delivery truck draw visitors through the history gallery's exhibit areas. A large-scale, three-dimensional diagram of ironmaking, steelmaking, and milling forms the backdrop of the steel gallery and provides context for interactive exhibits.

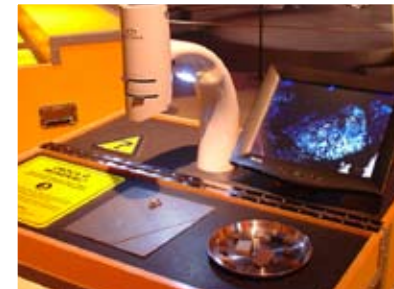
### **Provide a multilayered experience through multimedia**

Video and audio exhibits provide a multi-sensory experience to communicate moods as well as messages. The history gallery's archival audiovisual programming on an old-fashioned radio and television hint at a bygone era. An engaging show in the immersive Rhythm of Steel Theater introduces visitors to the steel gallery.

## CONCLUSION

The Museo del Acero represents the first time a blast furnace has been repurposed to function as a museum in Mexico, and the first telling of Mexico's story of steel in an interpretive facility.

The museum's unique approach of combining history, science center exhibits, a special effects show, and a thrill ride will connect visitors to Mexico's steelmaking history and inspire the country's future steel scientists and engineers.



**ALDRICH PEARS ASSOCIATES**  
Inspiring change by design

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