



Inside the Cover

The Olympic Spectaculars

What’s the first thing that springs to mind when you say “Olympics”?

Unless you’re thinking of a particular sporting triumph, perhaps it’s the Olympic and Paralympic Games Torch, followed by the “Spectaculars” — the five interlocking rings recognized as the Olympic symbol the world over — and the Agitos, the iconic symbol of the Paralympic Games.

For the 2024 Paris Olympic and Paralympic Games, ArcelorMittal was entrusted to create all of the iconic symbols — the Olympic and Paralympic Games Torches and the Spectaculars — and was also responsible for installing the Spectaculars at two of the most iconic landmarks in Paris — the Eiffel Tower and the Arc de Triomphe.

ArcelorMittal’s relationship with one of the world’s most iconic sporting events started when it became a sponsor of the 2012 London Olympic and Paralympic Games. In London, ArcelorMittal created a transformational piece of art — the ArcelorMittal Orbit, a striking 114-m-tall steel sculpture designed by artist Sir Anish Kapoor and designer and engineer Cecil Balmond, that stood as a centerpiece on the Stratford site where the Games took place.

The Orbit challenged perceptions of what is possible with steel, demonstrating its versatility, functionality and beauty as a construction material. It also framed ArcelorMittal’s discussions with Paris 2024, and its ambition to deliver an event that would be “more responsible, more sustainable, more united and more inclusive” than any previous Games.

Enter Mathieu Lehanneur, whose designs are inspired by nature yet push the limits of design by exploring new technologies. Lehanneur worked with ArcelorMittal to develop the iconic torches that intended to symbolize



peace, harmony and equality, in keeping with the Olympic values. His design also gave a respectful nod to the host city, with the rippled profile of the lower part of the torch taking its inspiration from the River Seine.

While Lehanneur was creating the design for the torch, the challenge for ArcelorMittal was to ensure the steel it was making for the torch was responsibly and sustainably produced and contributed to Paris 2024’s ambition to halve the carbon footprint of the Games compared with the average of the 2012 London Games and the 2016 Rio Games.

ArcelorMittal had already made a start, having launched XCarb® recycled and renewably produced steel in 2021. This is steel made in an electric arc furnace which uses high levels of recycled scrap as its metallic input and 100% renewable electricity as a power source. For the Torches, however, “high levels” was not enough.

Instead, 100% recycled scrap was used to support Paris 2024's sustainability ambitions.

As a result, the steel for the Torches has a carbon footprint of 1 metric ton of CO₂ per metric ton of steel, compared with a World Steel Association EU LCA average of approximately 2.2 metric tons of CO₂ per metric ton of cold-rolled coil.

Together with select partners, ArcelorMittal manufactured 2,000 torches at its French facilities including Châteauneuf, Florange and Woippy.

Similarly, the giant Spectaculars began life as steel scrap before being rolled, cut, welded and then painted according to the Olympic color specifications.

The Olympic Rings that sit on the Eiffel Tower each measure 9 m in diameter and together measure 29 m wide x 15 m high. This 30-metric ton structure is positioned approximately 84 m off the ground, in between the first and second floors of the Eiffel Tower. The rings appear in their five iconic colors during the day but at night are illuminated, employing innovative lighting techniques in bright white.

On the other hand, the Agitos on the Arc de Triomphe, that sees 110,000 vehicles circulate around it daily, measure 12 m x 9 m, with each arc at 7 m x 3 m and weighing 1.5 metric tons. The Agitos, unlike the Rings, is illuminated using digital mapping techniques.

The Spectaculars showcase an incredible feat of engineering both in terms of manufacture and erection. The mastermind behind the Spectaculars project was Professor Pierre Engel, the same man who ran the project to build the ArcelorMittal Orbit in 2012.

To learn more about ArcelorMittal's involvement in the Paris 2024 Olympic and Paralympic Games, visit the company's YouTube channel to watch the three-part "The Steel and the Torch" video series.



Photo credit: Mark Mercer



Photo credit: Géraldine Bruneel

"Being an Official Partner of the Olympic and Paralympic Games Paris 2024 and supplier of the Torch gives ArcelorMittal an incredible opportunity to showcase the beauty, flexibility and potential of steel. ArcelorMittal is proud to be an official partner," said Aditya Mittal, chief executive officer of ArcelorMittal. ♦