IRISH STEEL AWARDS 2025

in association with RFL STEELS LIMITED

Shortlisted Finalist // Voting ID: #6612

Finished Projects

Industrial Engineering - Equipment Manufacturing

Murray Engineering & Installation

Ground Mount Systems for Solar Panels

Voting ID: #6612 | Industrial Engineering - Equipment Manufacturing

Murray Engineering & Installation

Ground Mount Systems for Solar Panels

Project Story:

Ireland's renewable energy transition has accelerated recently, with solar power playing a crucial role in meeting climate targets. However, a significant gap existed: ground mount frames for solar panels were almost entirely imported from China or limited European manufacturers until 2024.

Murray Engineering & Installation (MEI), a Carrickmacross-based engineering company founded in 2017, identified this bottleneck. Initially specializing in laser-cut components and structural steel fabrications, MEI recognized the need for a reliable, flexible, Irish-made ground mount system. This led to their Modular Ground Mount System launch in March 2024. MEI's system prioritises modular design, structural integrity, and sustainability. Fabricated with Magizinc-coated steel for superior corrosion resistance, it meets ISO 9001 standards and complies with EN1090-1 structural steelwork and EN ISO 9606-1:2017 welding certification.

Unlike fully-welded imports with high shipping costs, MEI's flat-pack modular solution enables easy transportation, reduced carbon footprint, and rapid on-site assembly. The system accommodates various panel sizes in landscape or portrait configurations and scales from domestic installations to commercial solar farms. Ireland's uneven landscape poses unique challenges. MEI's patented adjustable foot system allows ground-level correction without extensive groundwork. Multiple fixing options include ground screw mounts requiring no excavation, pin systems for temporary applications, bolt-down feet for concrete bases, and pile driving for permanent large-scale installations. These options ensure structural stability across diverse ground conditions.

Manufacturing entirely in Ireland dramatically reduces transportation-related carbon emissions. Using recyclable materials and adhering to strict environmental standards, MEI contributes to a circular economy within Irish renewables. Domestic production strengthens Ireland's renewable infrastructure resilience amid global supply chain pressures, providing solar developers with a dependable local partner. This helps Ireland meet national and EU renewable energy targets.

The system has received strong interest from national solar developers and installers, praised for ease of use, robustness, and competitive pricing. Installers appreciate the simple design and reduced assembly time, while clients benefit from shorter project timelines.

The MEI Ground Mount System exemplifies Irish engineering excellence. Rather than simply entering a new market, MEI created a smarter, more sustainable alternative to imports, showcasing local craftsmanship and innovation.

Combining innovative steelwork techniques with smart modularity, the system reflects MEI's problem-solving ethos and represents a significant contribution to Ireland's steel and renewable energy sectors.

As solar adoption grows, MEI's modular frames will play an increasingly important role in Ireland's clean energy transition – powered by the strength and reliability of Irish steel.

Project Team:

Gerard Murray

Voting ID: #6612 | Industrial Engineering - Equipment Manufacturing

Murray Engineering & Installation

Ground Mount Systems for Solar Panels

The Nominee thinks this deserves to win an award because:

The MEI Modular Ground Mount System is a transformative innovation in Irish steel engineering, offering a locally manufactured, structurally certified solution for Ireland's rapidly expanding solar energy sector. It is the first ground mount solar frame system designed and produced in Ireland, providing a high-quality alternative to the predominately Chinese imported frames that have dominated the market.

Manufactured in Carrickmacross by Murray Engineering & Installation (MEI), the system demonstrates outstanding achievement in steel design, sustainability, and fabrication excellence. Developed in response to a clear market gap, the MEI system is fabricated using corrosion-resistant Magizinc steel, flat-packed for efficient delivery, and engineered for quick assembly with minimal tools — saving time, cost, and labour.

One of its most notable innovations is the adjustable foot design, which allows for installation on uneven Irish terrain without costly excavation or foundation work. This engineering feature makes the system adaptable, scalable, and ideal for both domestic and large-scale solar installations. With multiple fixing options including ground screws, pins, bolt-down feet, and pile driving, the system oers unmatched flexibility for Irish site conditions. This project also delivers substantial environmental and economic benefits. By producing the system in Ireland, MEI reduces transport emissions, supports the local economy, and enables a more sustainable supply chain. All materials are recyclable, and the system is backed by a 10-year warranty, ensuring durability and minimal environmental impact. The MEI system is fully ISO 9001 certified, compliant with EN 1090-1 for structural steel and EN ISO 9606-1:2017 welding standards, reflecting the highest levels of engineering quality and precision.

It represents what the Irish steel industry can achieve when driven by innovation, environmental responsibility, and national energy needs. This project deserves recognition not just for its technical merit, but for its vision and impact — showcasing how Irish steel engineering can directly support our country's renewable energy transition with local solutions, world-class standards, and smart design

To participate in the voting process for all of your favourite projects, click vote now

Vote Now