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Welcome to the Latest Edition of Our E-Connect

Welcome to this month's edition of the Warpp Connect Newsletter, where we bring you the latest from our world of innovation, insight, and impact. In this issue, we spotlight one of our cuttingedge products designed to enhance welding performance, followed by a TechTalks article exploring sustainability in manufacturing. We also take you beyond business with a story on how we're contributing to a greener future. Hear directly from our valued customers and dealers in our testimony section, and get to know the people powering our progress in this month's employee spotlight.

Our core values

Transparency

Responsibility

Innovation

Integrity

Empowerment



PRODUCT HIGHLIGHT

INMIG I Series

The INMIG I Series is a new generation of semi-automatic MIG/MAG welding machines with inverter-based enaineered soft switching technology. Designed for demanding industrial applications, these machines combine power, precision, and energy efficiency available in 400A, 500A, 600A, and 630A variants. What sets the INMIG I Series apart is its ability to deliver lowspatter, stable arcs, even under workloads. With advanced wave control. operators can fine-tune welding output using continuously adjustable voltage and current.



A slow-start function makes arc ignition smoother, while reduced molten ball formation at the weld's end minimises cleanup. Despite their output, these machines remain compact and lightweight, thanks to their high operating frequency. They are built to run efficiently, offering a power factor of 0.87 and 89% efficiency at full load, resulting in lower energy costs over time. Despite their output, these machines remain compact and lightweight, thanks to their high operating frequency. Operators will appreciate the continuous voltage and current adjustment, providing seamless control over welding parameters. A preset digital display further enhances usability, allowing precise parameter setting even before the arc is struck. Despite their high output capacity, the INMIG I Series machines maintain a compact form factor thanks to their high operating frequency. This results in a lighter, more portable system without compromising on durability or duty cycle. In fact, select models maintain a 100% duty cycle, making them ideal for intensive, long-duration welding operations. Energy efficiency is another cornerstone of the series, with a power factor of 0.87 and efficiency rated at 89% ensuring optimal energy use and reduced operational costs over time.

They are built to run efficiently.

Why Choose the INMIG I Series?

- Advanced technology for clean, stable welds with minimal spatter
- High efficiency and power factor for reduced energy consumption
- Compact and portable without compromising power
- Customizable features and accessories for tailored solutions
- Trusted performance across heavy-duty welding applications

With the INMIG I Series, you're not just investing in a welding machine you're investing in higher productivity, lower operational costs, and long-term reliability.

Contact us today to learn more or request a demo.



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Low Spatter Welding: Why It Matters

In the world of welding, spatter is more than just a nuisance it directly impacts the quality, efficiency, and cost of your operations. Whether you're working in fabrication, automotive, shipbuilding, or structural welding, reducing spatter should be a key priority. But why does it matter so much, and how can you achieve it? Let's break it down. What Is Welding Spatter? Welding spatter refers to the small droplets of molten metal that are expelled from the weld pool during the welding process. These droplets can stick to the workpiece, the torch nozzle, or surrounding surfaces creating rough finishes, requiring additional cleanup, and sometimes damaging components.

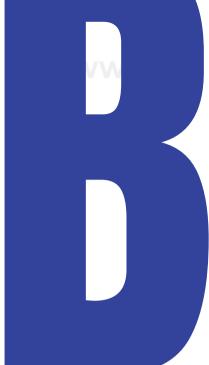
Why Spatter Is a Problem

- 1.Increased Post-Weld Cleanup
- 2. Removing spatter manually takes time, labor, and tools slowing down production and adding unnecessary costs.
- 3. Surface Damage
- 4. Spatter can leave burn marks, pits, or even compromise the surface integrity of delicate materials.
- 5. Poor Weld Aesthetics
- 6. Excess spatter results in a rough, unprofessional appearance that may not meet client or industry standards.
- 7. Higher Consumable Wear
- 8. Spatter buildup on nozzles and tips leads to more frequent replacement of consumables and interruptions in welding.
- 9. Quality Control Issues
- 10. Excessive spatter may indicate poor arc stability or incorrect parameters, both of which can lead to weld defects.

How to Achieve Low Spatter Welding

- 1.Use Advanced Inverter-Based Machines
- 2.Inverter-based welders (like our INMIG I Series) offer better arc control, soft-switching technology, and stable output resulting in significantly less spatter compared to traditional transformer machines.
- 3. Optimize Welding Parameters
- 4.Set the correct voltage, current, and wire feed speed. Incorrect settings are one of the leading causes of spatter.
- 5. Select the Right Shielding Gas
- 6. For MIG welding, using a mix of Argon and CO_2 (like 80/20) can dramatically reduce spatter compared to pure CO_2 .
- 7. Maintain Proper Stick-Out & Travel Speed
- 8. Excessive stick-out or too fast/slow travel speeds can destabilize the arc and increase spatter.
- 9. Keep Consumables Clean
- 10. Dirty or worn-out contact tips and nozzles affect arc performance. Regular maintenance is key.
- 11. Use Anti-Spatter Sprays or Coatings
- 12. While not a solution to the root cause, these can make post-weld cleaning easier.

Low-spatter welding isn't just about aesthetics it's about efficiency, safety, and profitability. Investing in the right machine and technique can save hours of rework and significantly improve overall weld quality.





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Sustainability in Indian Manufacturing: A Shift from Compliance to Competitive Advantage

India's manufacturing sector stands at a crucial crossroads. As the country rapidly climbs the global industrial rankings, the need for sustainable practices is no longer optional it's essential. With increasing global scrutiny, rising energy costs, and stricter environmental regulations, Indian manufacturers must transition from viewing sustainability as a compliance requirement to embracing it as a strategic advantage.

The Indian Context

India is currently the fifth-largest manufacturer in the world, contributing nearly 17% to the national GDP and employing millions across diverse sectors. However, this growth comes with environmental costs. The manufacturing industry accounts for over 30% of India's total energy consumption, and is a major contributor to greenhouse gas emissions, water pollution, and industrial waste.

To counter these challenges, government initiatives such as the Perform, Achieve and Trade (PAT) scheme, the National Green Manufacturing Policy, and the promotion of renewable energy adoption are guiding industries towards greener practices. But the real momentum lies in recognizing sustainability as a long-term driver of profitability, efficiency, and resilience.

What Does Sustainable Manufacturing Look Like?

Sustainable manufacturing involves integrating environmentally conscious decision-making into every stage of the production lifecycle from raw material sourcing to final product delivery. It is not limited to reducing emissions or waste; it encompasses energy efficiency, responsible resource usage, and digital optimization

1. Energy Efficiency

Energy efficiency remains a cornerstone of sustainable manufacturing. Upgrading to energy-efficient machines, such as inverter-based systems in welding and motor-driven operations, can significantly lower power consumption without compromising performance. Many manufacturers are now adopting real-time energy monitoring and automated process control systems to identify inefficiencies and reduce waste.

2. Renewable Energy Integration

Factories across India are installing rooftop solar panels, tapping into biomass and exploring green hydrogen for heating applications. As electricity costs rise, renewable energy not only reduces carbon footprint but also provides long-term cost stability. Government incentives and the availability of green financing further support this transition.

3. Water and Waste Management

India's water stress levels make efficient water usage critical. Manufacturers are investing in Zero Liquid Discharge (ZLD) systems, effluent treatment plants, and rainwater harvesting. Solid waste segregation, hazardous material handling, and recycling of metal and plastic components are also gaining traction.

4. Embracing the Circular Economy

The circular economy approach where products and materials are reused, refurbished, or recycled offers a blueprint for reducing dependency on virgin resources. This includes recovering scrap metal, reusing process by-products, and designing products that are easier to disassemble and recycle. While the benefits are clear, the path to sustainable manufacturing in India is not without its hurdles:

- High upfront investment in green technologies
- Lack of awareness or technical expertise among SMEs
- Fragmented regulatory landscape across states and industries
- Supply chain alignment, especially when dealing with non-compliant vendors

However, these challenges also present opportunities. For instance, aligning with global environmental standards can open access to international markets and improve a company's Environmental, Social, and Governance (ESG) score now a key metric for investors and global buyers.

Turning Sustainability into a Competitive Advantage

Forward-thinking manufacturers are already leveraging sustainability as a business differentiator. The benefits are tangible:

- Reduced operational costs through energy and resource optimization
- Improved brand reputation among environmentally conscious customers
- Access to green capital, subsidies, and tax benefits
- Enhanced export potential by meeting international compliance standards
- Long-term business resilience against environmental risks and supply chain disruptions

Companies that adopt sustainable practices are not just future-proofing their operations they're positioning themselves as leaders in a competitive, evolving market.

Getting Started: Practical Steps for Manufacturers

For businesses looking to begin or scale up their sustainability journey, here are a few practical starting points:

- Conduct a sustainability audit to identify areas of improvement
- Invest in energy-efficient machinery and renewable energy solutions
- Train employees on green practices and resource optimization
- Partner with sustainable vendors and suppliers
- Begin tracking and reporting ESG metrics transparently

In short, sustainability is no longer a "nice to have" it's a business imperative.

Customer testimony





1."Project Overview

The project focused on enhancing the wear resistance of critical components through hardfacing weld overlay using CORTHAL 59L consumable with the MAG (136) process. To achieve consistent quality and high productivity, the welding was carried out with the support of an SPM (Special Purpose Machine).

2. Experience with SPM

The requested SPM was delivered in line with the project requirements.

The machine ensured uniform oscillation & stable arc performance throughout the operation.

•Productivity improved significantly as compared to manual operations, while maintaining overlay integrity and thickness control.

The automation minimised operator dependency and enhanced process reliability.

3.Results & Achievements

Successful deposition of weld overlay as per project specifications. Confirmed integrity and metallurgical bonding of the hard-facing layer. Improved surface protection and wear resistance of components.

Achieved project objectives with efficiency and precision.

Mr. Makarand M Mahajan (Engineer Welding, EIPL)

Meet our team- behind the scenes





Working at Warpp has been a rewarding journey.
The support from the team and the focus on continuous learning have helped me grow both professionally and personally. I'm proud to be part of a company that values innovation, safety, and teamwork.

Priyanka Thakur, Executive Assistant