

**VOL.07** 

### WARPP ENGINEERS PVT LTD

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## In this newsletter:

- >> Product Highlight
- >> Techtalks Article
- >> Beyond Business Article
- Solimpse To the latest event
- >> Employee Spotlight

# Welcome to the Latest Edition of Our E-Connect

Welcome to this month's edition of our newsletter, where we bring you a carefully curated mix of updates, insights, and stories from across our organisation. In this issue, explore our Product Highlight to see the innovations driving our industry forward, and dive into TechTalks Articles for expert perspectives on emerging technologies and trends. Our Beyond Business segment shares thought leadership on strategy, purpose, and the changing business landscape, while our Event Glimpse takes you behind the scenes of latest industry interactions our exhibitions. Finally, in Employee Spotlight, we celebrate the people whose dedication and talent make our success possible. This edition reflects our commitment to keeping you informed, inspired, and connected with everything that shapes our world of work.

#### Our core values

**T**ransparency

**R**esponsibility

**I**nnovation

**I**ntegrity

**E**mpowerment



# PRODUCT HIGHLIGHT

### TANDEM SAW SYSTEM

The Tandem SAW (Submerged Arc Welding) system is a two-wire, one-arc process that utilises both DC and AC power sources for enhanced performance. Designed with advanced inverter-based technology, this system delivers superior deposition efficiency compared to conventional single-wire SAW systems.

Each power source—one DC and one AC/DC—is IGBT inverter-based and equipped with soft-switching technologyfor precise control and high energy efficiency. The AC power source can operate in either DC or square-wave AC mode, offering adjustable parameters for frequency, wave balance, and bias to achieve optimal weld quality.



#### **Key Features**

- Dual IGBT inverter-based DC and AC/DC power sources with latest soft-switching technology.
- Microprocessor-controlled operation for precision and consistency.
- High energy efficiency, compact design, and reduced power consumption.
- Improved power factor and stable output ensure exceptional weld quality.
- CC/CV functionality on both power sources for flexible operation.
- Square-wave output with adjustable AC frequency, wave balance, and bias.
- Digital control panel with displays for voltage, current, and trolley speed.
- Wire size selection options for process flexibility.
- Data memory channels for storing and recalling welding parameters.

Engineered for modern fabrication environments, the Tandem SAW system combines power, precision, and process intelligence, delivering consistent, high-quality welds with maximum efficiency. Built for modern fabrication demands, the WRAPS Tandem SAW System delivers the perfect balance of speed, quality, and efficiency making it the ideal choice for high-performance welding applications

#### Why Choose Warpp's Tandem SAW System?

~Higher Deposition Efficiency ~Superior Weld Quality ~Energy Efficient & Compact ~Smart Control ~Versatile Operation ~Reliable Performance



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# Automation & Robotics: Transforming India's Welding Landscape

India's welding industry is experiencing a significant technological transformation. Once characterised by manual operations and craftsmanship, the sector is now being reshaped by automation and robotics as manufacturers pursue higher precision, productivity, and global competitiveness. Across industries from automotive and railways to infrastructure and energy the demand for faster, safer, and more consistent welding processes is driving a decisive shift towards automated systems.



#### The Rationale Behind the Shift

Traditional welding, while versatile, is constrained by human fatigue, varying skill levels, and limited productivity. Manual operations typically achieve an arc-on time of only 20–30%, as much of the workday is spent on preparation, inspection, and rework. In contrast, automated and robotic welding systems can exceed 60–70% arc-on time, delivering substantial gains in consistency, efficiency, and safety. The advantages of automation include:

- Enhanced and uniform weld quality through precise control of parameters.
- Reduced rework and material wastage, improving overall cost efficiency.
- Improved operator safety by minimising human exposure to heat and fumes.
- Lower long-term production costs through process optimisation and continuous operation.

Recent industrial reports indicate that Indian manufacturers adopting robotic welding have achieved efficiency gains of up to 40%, alongside improved export readiness and compliance with international quality standards.

#### **Evolution of Welding Automation in India**

1. Industrial Expansion and Technological Integration

The automotive and general engineering sectors are at the forefront of automation adoption, implementing multi-robot welding lines for body, chassis, and component fabrication. These systems deliver precise, repeatable welds essential for high-volume production and global competitiveness.

2. Rise of Collaborative Robots (Cobots)

Small and medium-sized fabricators are increasingly turning to collaborative robots, or cobots, to automate operations without major capital expenditure. Designed to work safely alongside human operators, cobots handle flexible job requirements, improve throughput, and help micro, small, and medium enterprises (MSMEs) modernise without compromising agility.

3. Emergence of Smart Welding Technologies

Advances in artificial intelligence (AI) and vision systems are giving rise to "smart welding." These intelligent systems can automatically adjust welding parameters, track seams in real time, and detect potential defects before they occur. Such technologies enhance both process reliability and resource utilisation.

4. Indigenous Automation and Innovation

Local innovators are developing modular, affordable robotic welding systems suited to Indian manufacturing environments robust, easily upgradable, and aligned with national initiatives promoting self-reliance and technological independence. This development supports the broader objectives of Make in India and Atmanirbhar Bharat, positioning India as a future-ready manufacturing hub.

#### **Workforce Transformation**

Automation is not replacing welders—it is redefining their roles. The modern welding professional must now blend traditional mechanical expertise with digital proficiency. Operators are evolving into robot programmers, maintenance technicians, and process analysts, overseeing automated cells rather than performing manual welds

Training and education are central to this transition. Technical institutes and vocational programs are introducing dedicated modules on robotic and automated welding, ensuring the workforce is equipped with the necessary skills to adapt to advanced manufacturing systems. This upskilling drive will be pivotal in maintaining India's industrial competitiveness in the coming decade.

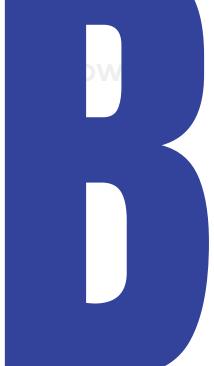
#### Strategic and Economic Implications

According to market research projections, India's smart welding equipment segment is expected to grow at a compound annual rate exceeding 6% through 2033. The expansion is underpinned by automation-driven improvements in quality, waste reduction, and energy efficiency.

Beyond operational advantages, welding automation enhances India's strategic position within global supply chains. As manufacturers adopt advanced technologies, the nation is gradually transitioning from a base for low-cost assembly to a center for high-value, precision manufacturing. This transformation not only supports export growth but also contributes to sustainability goals through optimised resource usage and reduced emissions.

Welding, once symbolic of manual craftsmanship, now embodies the synergy of human expertise and robotic precision. As automation continues to advance, it will play a pivotal role in shaping the future of Indian manufacturing one where efficiency, innovation, and sustainability operate in seamless alignment.







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# Profit with Purpose: Why Values Are the New Competitive Advantage

In an era defined by rapid technological disruption, shifting consumer expectations, and growing environmental and social awareness, the very definition of business success is evolving. For decades, profitability stood as the primary measure of achievement. Today, however, a growing number of organizations are discovering that profit alone is no longer enough. The enterprises that thrive in the modern economy are those that align commercial success with a clear sense of purpose where values, ethics, and responsibility become central to competitiveness.

Values as a Strategic Asset

Values are not merely statements on corporate websites; they represent a strategic framework for decision-making. When authentically embedded into business models, values influence every layer of an organization from leadership behavior and culture to operations and customer experience.

- 1.Trust and Reputation: In a world where information travels instantly, reputation is a fragile yet powerful differentiator. Organizations that consistently act in line with their stated principles build credibility that competitors cannot easily replicate.
- 2. Employee Attraction and Retention: A growing share of the workforce, particularly younger generations, seek employers whose values align with their own. Companies with strong purpose-driven cultures experience lower turnover and higher motivation levels.
- 3.Innovation through Responsibility: When businesses commit to ethical sourcing, environmental sustainability, or community development, they often uncover new efficiencies and product opportunities. Responsible innovation frequently leads to market leadership.
- 4. Resilience in Crisis: Values provide stability amid uncertainty. During periods of disruption, organizations anchored in a clear sense of purpose can navigate challenges with clarity and maintain stakeholder confidence.

Thus, values are not in opposition to profit; they are an enabler of it. Purpose-driven strategy integrates financial success with positive societal impact, proving that doing good and doing well can coexist.

#### The Economics of Purpose

Empirical evidence increasingly supports the business case for purpose. Studies across global markets indicate that companies with strong ESG performance tend to achieve higher financial returns, lower risk exposure, and stronger brand equity over time.

Consumers are also driving this shift. Modern buyers are more informed and discerning than ever before. They demand transparency, ethical sourcing, and accountability. Organizations that align their operations with such expectations not only capture market share but also command pricing power and brand loyalty that purely cost-based competitors struggle to achieve

Investors, too, are recognizing the financial logic of purpose. Sustainable and impact investing are among the fastest-growing areas of asset management globally. Funds that incorporate ESG principles are attracting significant inflows, reflecting confidence in the long-term stability of purpose-led enterprises. In this environment, values have become a measurable economic variable influencing valuations, capital access, and partnership opportunities.

#### Embedding Purpose in Practice

Adopting a purpose-driven approach requires more than public commitments or marketing campaigns. It demands authentic integration of values into the organization's DNA. This can be achieved through several deliberate steps:

- Define a Clear and Genuine Purpose: The organization's purpose must extend beyond profit motives. It should articulate how the company creates value for society while achieving business success.
- Align Leadership and Culture: Leaders must model the values they promote. Culture is shaped not by slogans but by daily behavior, ethical decision-making, and transparent communication.
- Integrate Values into Strategy and Operations: Purpose should influence corporate strategy, supply chain decisions, and innovation priorities. Metrics and incentives must reinforce ethical and sustainable outcomes.
- Engage Stakeholders Continuously: Meaningful dialogue with employees, communities, and partners ensures that purpose remains relevant and grounded in real impact.
- Measure and Report Progress: Accountability transforms purpose from intention to action. Transparent reporting on ESG and social outcomes reinforces
  credibility and builds trust.

When values are operationalized in this way, they become a living component of the business model guiding growth, mitigating risk, and generating competitive differentiation.

The evolution from profit-centric to purpose-driven business represents one of the most profound transformations of modern capitalism. In this new paradigm, values are not a supplement to success — they are its foundation.

Organizations that lead with purpose cultivate trust, inspire employees, attract loyal customers, and withstand volatility. They recognize that financial performance and social responsibility are not conflicting goals but complementary forces that, when aligned, create sustainable advantage.

In an age where choices define corporate identity, the companies that will lead the future are those that stand for something larger than profit. Purpose has become the new currency of credibility, and values when lived consistently are the ultimate measure of true business excellence.



#### **FABEX 2025**



A Great Platform for Innovation, FABEX 2025 was a wonderful opportunity for us to connect with industry professionals and showcase our latest technologies. Events like these give us valuable exposure and allow us to present our products directly to the market.

Here's a quick glimpse from the event!

## **Meet our team- behind the scenes**





Prasad Khule, Design Engineer, Automation

I want to express my appreciation for the seamless collaboration that is evident across our departments. The efficiency with which the design, manufacturing, and quality assurance teams work together is a key factor in our successful project execution. It's inspiring to be part of an organization that so effectively transforms intricate designs into real-world, high-quality engineering products.