

APAR INDUSTRIES

ENGINEERING THE NEXT GENERATION OF HIGH-PERFORMANCE CABLE SOLUTIONS



CS Shrotri
CEO

The industrial wires and cables industry is undergoing one of its most significant transformations in decades. As economies invest aggressively in renewable energy, electrified transportation, smart manufacturing, digital infrastructure and critical utilities, the expectations from cable manufacturers have fundamentally changed. Cables are no longer viewed as passive components that simply transmit power or data. They are expected to deliver thermal stability, fire safety, mechanical resilience and long-term operational reliability under increasingly demanding conditions. This shift is redefining competition within the industry, placing greater emphasis on engineering capability, material science, testing infrastructure and application-specific innovation.

APAR Industries has steadily strengthened its position as one of India's leading manufacturers of electrical and specialty cables. Rather than expanding its portfolio in response to market demand alone, the company has consistently anticipated structural changes across sectors such as renewable energy, railways, industrial automation, defence, marine infrastructure and data connectivity. Today, with exports reaching more than 140 countries, APAR has established itself as a technology-driven engineering company that delivers high-performance cable solutions for some of the world's most demanding operating environments. Its evolution reflects a clear

philosophy - creating long-term value through innovation, engineering precision and uncompromising quality rather than competing solely on manufacturing scale.

Building Capability Beyond Conventional Cable Manufacturing

APAR's growth story is defined by strategic diversification into technologically intensive segments. Having built a strong foundation in overhead conductors, the company progressively expanded into low- and medium-voltage power cables, instrumentation and control cables, elastomeric cables, railway and metro solutions, marine and offshore cables, mining cables, Solar PV cables, communication cables, and specialised products for defence and nuclear applications.

"What distinguishes this expansion is not the breadth of the portfolio, but the engineering depth behind it. As industries began demanding higher safety standards, greater thermal endurance and enhanced operational reliability, APAR invested in advanced manufacturing capabilities that enabled it to address increasingly complex applications. The introduction of electron beam (e-beam) cross-linking technology marked an important milestone in this journey, allowing the company to manufacture high-temperature cable systems with superior mechanical strength, electrical performance and service life", says CS Shrotri, CEO.

Equally significant has been APAR's focus on developing import-substitute technologies across several specialised cable categories. By strengthening indigenous engineering capabilities, the company has reduced dependence on overseas suppliers while supporting India's broader manufacturing and infrastructure ambitions.

Where Material Science Meets Engineering Excellence

The cable industry is rapidly shifting from standardised manufacturing towards application-led engineering, and APAR has aligned its innovation strategy accordingly. Its research and development initiatives extend beyond incremental product improvements to include advanced insulation systems, specialised sheath compounds, fire-survival technologies, high-flex cable constructions and low-loss conductor designs that respond to evolving industrial requirements.

“A defining differentiator is the company's ability to combine application engineering with advanced material science. Every cable solution is developed with a strong focus on lifecycle performance, recognising that customers increasingly evaluate products based on reliability, operational efficiency and total cost of ownership rather than initial procurement costs alone”, mentions CS Shrotri.

This engineering philosophy is supported by a comprehensive qualification ecosystem. APAR's NABL-accredited laboratories conduct extensive electrical, thermal, mechanical, fire, environmental and endurance testing in accordance with national, international and customer-specific standards. In sectors such as defence, railways, renewable energy and industrial automation, where product qualification is often as critical as product performance, this capability enables the company to meet stringent technical requirements with consistency and confidence.



As infrastructure projects become increasingly sophisticated, APAR is sharpening its focus on segments where engineering expertise creates the greatest value

Manufacturing Reliability Through Digital Transformation

Manufacturing excellence at APAR extends far beyond production capacity. The company has embedded Industry

4.0 practices across its operations, integrating automation, real-time process monitoring, digital traceability and data-driven quality controls into its manufacturing ecosystem. These technologies help maintain tight dimensional tolerances, ensure consistent extrusion quality and deliver repeatable performance across complex multi-layer cable constructions.

However, APAR's manufacturing philosophy is centred not merely on process efficiency but on operational discipline. “Quality assurance begins with raw material qualification and continues through compound verification, in-process inspections, comprehensive product testing and final validation before delivery. This integrated approach enables the company to consistently deliver products that perform reliably across challenging environments, whether in power transmission networks, offshore installations, industrial facilities or transportation infrastructure”, shares CS Shrotri.

Positioning for the Future of Global Infrastructure

As infrastructure projects become increasingly sophisticated, APAR is sharpening its focus on segments where engineering expertise creates the greatest value. The company continues to expand its presence in high-growth sectors such as renewable energy, railways and metro systems, data centres and other critical infrastructure while investing in advanced testing capabilities, localisation of specialised cable technologies and sustainable manufacturing practices.

Its international strategy is equally focused on increasing the share of high-value specialty products across global markets while strengthening participation in regulated economies through enhanced certifications and technical qualifications. Simultaneously, investments in automation, energy efficiency, responsible sourcing and digital manufacturing reflect APAR's commitment to building a more sustainable and resilient manufacturing ecosystem.

Looking ahead, APAR Industries is positioning itself not simply to participate in this growth, but to help shape it. By combining advanced engineering, rigorous quality systems and continuous innovation, the company is redefining what customers can expect from industrial cable solutions - strengthening its standing as a globally competitive manufacturer while contributing to the development of safer, more reliable and future-ready infrastructure. 