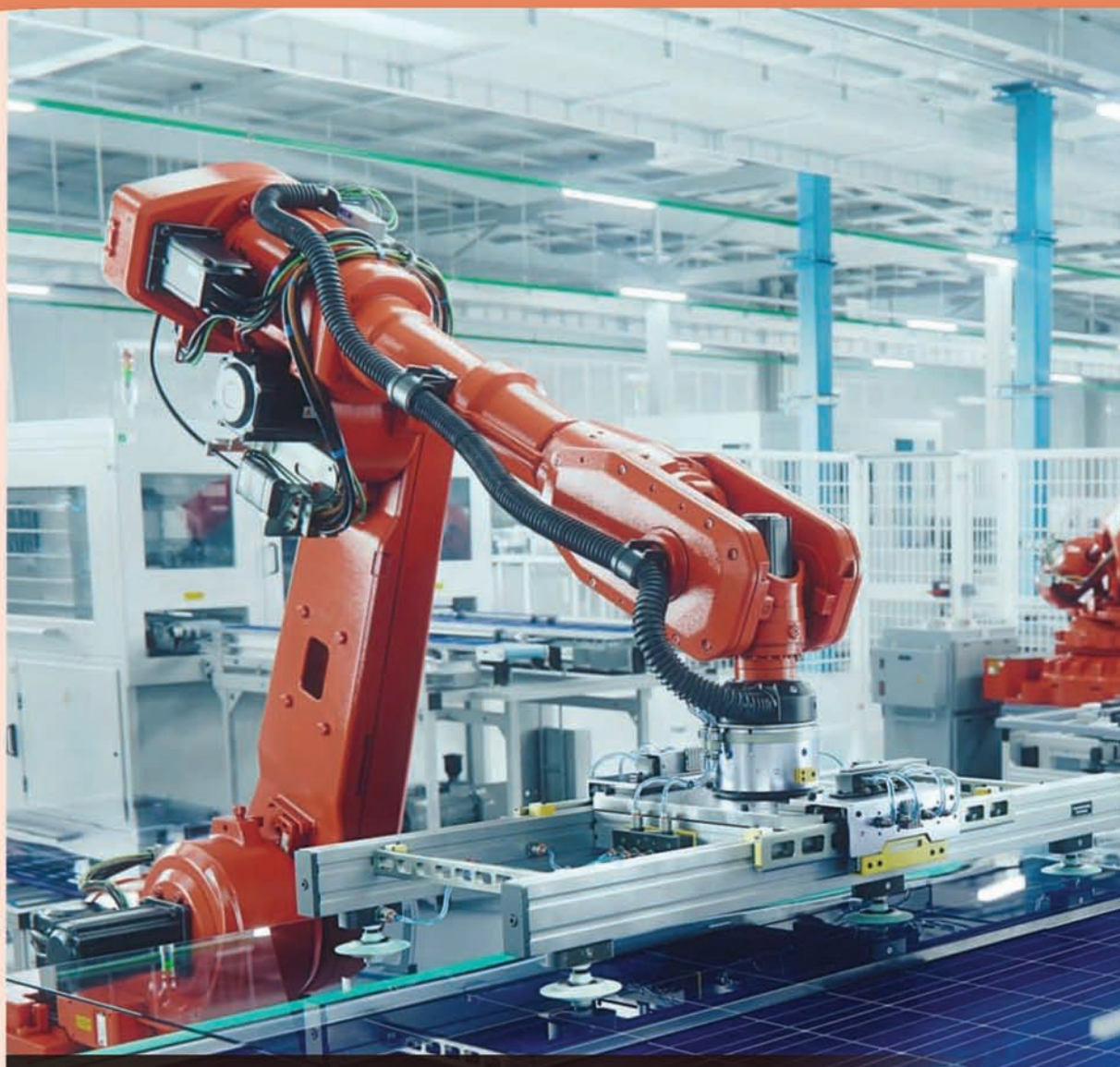
OmniMedia
#113 Mar-Apr 2023

POWER GENERATION MAGAZINE

energetica INDIA



ALMM Extension to Boost Growth of Indian Solar Industry but Slow Down Investments by Domestic Manufacturers

CONTENTS

#113

Mar-Apr_2023

SHASHI AMIN

CEO - Cable Solutions,
APAR Industries Limited

APAR Industries Limited is gearing up to tackle the biggest challenges of the 21st century, catering to the needs of the global energy sector through sustainable means. The company believes that with an innovation-first mindset, solutions that make anything possible can be found, shared **Mr. Shashi Amin**, CEO - Cable Solutions, APAR Industries Limited in an interview with **Anurima Mondal**, Associate Editor, Energetica India. Mr. Amin added that APAR's mission is to design & manufacture building blocks for energy infrastructure, transportation & telecommunication sectors that contribute meaningfully to make this world a more energy-efficient, environmentally sustainable and safer place.

Q APAR is one of the prominent cable manufacturers for renewables and speciality cable. Please tell us about your product portfolio for the RE sector along with your market footprint and clientele.

Shashi Amin: As India's economic growth is estimated to be 6.4 percent in the upcoming financial year as per RBI, we can expect a push towards more investments and a renewed focus on Atmanirbhar Bharat. For energy transmission, the focus lies on clean and sustainable energy. This is a significant development since catering to clean energy needs will be beneficial for industrial advancements as well as the overall growth of the country.

APAR Industries Limited is India's leading manufacturer of renewable and speciality cables with a wide range of products. With a market potential of more than INR 2,500 crore for the cable market, renewable energy is the future of power in the entire world. Below are some of our major product diversity in the renewable sector.

Solar Power

• International certification of the highest standards as per BS EN 50618, TUV 2007 & 2012, IEC 62930:2017 & UL 4703;

• High Di-electric strength, flame retardant; oil and chemical resistant, abrasion and crack resistant; Good cold flexibility, compatible to all popular connectors; ROHS compliant;

• 2.5 to 300 sq.mm cables powered by electron beam cross-linking technology;

• Electron beam irradiated LT XLPE cables are suitable up to 120°C operating temperature. These cables offer 15 percent extra current rating over conventional cables;

• Annealed tinned flexible copper conductor, electron beam cross-linked polyolefin (XLPO) insulation and sheath having UV & ozone protection properties and a life span of more than 25 years;

• Rated 1.8 kV DC operation. Cables are halogen free and can operate up to

120°C rated 1.5kV (Max 1.8 kV);
• Flexible aluminium conductor for solar AC and DC cables;
• Aluminium cables with steel tape/flat strip/round wire armouring for combiner box to Inverter;
• Solar PV cables with Rodent resistant features;
• Nylon jacketed cables, as per AS/NZ specs are also available for rodent protection
• A new CCV line for elastomeric cables up to 75KV is commissioned, which will help us supply smooth finish mining cable to the international market.

Wind Power

• Complete integral harness from nacelle to turbine;
• PLC/SCADA harness (presently being provided by the electrical contractor);
• LV Power Cables;
• LV Control and Supply cable kits;
• Sensor Harnesses;
• Patch Cord OFC;
• Sub Station/Transmission Cables;
• Complete integral harness from nacelle to turbine

Q Shed some light on the unique strengths of the product range with a particular focus on your solutions for the EV segment.

Shashi Amin: APAR is the first Indian cable manufacturer to enter the EV segment, geared up to meet the global standards of quality requirements and the continuously growing market demand. All production lines are high precision and automatic. Our plan over the next two years is to do harness for 0.3 lac passenger vehicles and 1 lac 3 wheeler.

The Credentials of APAR EV Wiring and Wiring Solutions:

• The manufacturing unit based at Khatalwada dist. Valsad, Gujarat is IATF certified;
• The manufacturing facilities are the most modern including 4 nos of E-beam accelerators. Cot tube manufacturing is also in house;
• All cables used in EV wiring solutions are electron beam cured, type D and rated for -40 °C to +150 °C, meeting international standards and ARAI approved;
• The EV charger cables are approved/certified by TUV & UK Cert for EN 50620 and EN 62893-4-1;
• APAR has successfully developed and launched a complete EV charger of rating up to AC 63 amp- 415 V/DC 1000V load 200 amp;
• APAR has successfully designed, developed and supplied large quantities of complete HV cable harnesses to EV passenger vehicles and 3 wheelers;
• As of date, the total number of EV passenger vehicles equipped with APAR wiring harness is over 1200.

Manufacturing Range of APAR for EV Segment

• Complete range of screened battery cables 0.5 sq. to 300 sq.mm – multi-strand copper conductor insulated with specially formulated e-beam cross-linked high-end polymers, screened using copper/aluminium/steel and sheathed with special XLPO polymers to withstand rugged conditions and temperature rating of -40 °C to +150 °C;
• Complete range of specially screened battery cables insulated with silicon rubber and teflon for temperature requirements above 150 °C;
• Complete range of cable protection system - special nylon cot tubes 12mm to 50 mm inner dia;
• Complete HV cable harness – PDU to MCU, MCU to TM, HVSS to Lenze, PSM to inverter, ACM to inverter, PDU to BMS, PDU to DC-DC converter;
• Complete range of EV charger composite cables;
• Complete EV charger assembly – CCS2 type, suitable for both AC & DC.

Q Are there any plans to diversify your portfolio for the renewable energy sector in the immediate future?

Shashi Amin: APAR Industries Limited believes in 'Tomorrow's Solution Today', and with this vision, we always look forward to exploring new opportunities, developing a new product and adapting the latest technology.

We have undertaken a project for adding a new CCV line for elastomeric cables upto 75KV, which will help us supply smooth finish mining cable to the international market and also focus on the high-margin export business in the wind energy segment. We are constantly developing new products and new markets across the globe to serve our customers with the best-in-class technological solutions.

Q APAR has recently signed a JV with Clean Max Rudra Private Limited to establish and develop wind and solar hybrid power generation facilities in the state of Gujarat. Tell us more about this project.

Shashi Amin: APAR signed a JV with

Clean Max Rudra Private Limited for the purpose of establishing and developing wind and solar hybrid power generation facilities in the state of Gujarat, having wind turbine generators of 3.3 MVA capacity and a solar capacity of 2.805 MWp (DC). The power generated from the project will be supplied exclusively to APAR and SPV (APAR – 26 percent in the SPV Company, Clean Max Enviro Energy Solutions Private Limited - 74 percent in the SPV Company) will be the operator of the entire project as generator. This will help to operate our cable manufacturing plant entirely through renewable energy. This project is under execution, and we will share further details subsequently.

Q What are your views on India's ambitious plan to install 500 GW of renewable energy capacity by 2030? Where do you place yourself in this growth story?

Shashi Amin: In the past decade, the demand for renewable energy alternatives within business practices has steadily increased, and consumers are beginning to care more about how products and services will affect the planet long term. The focus on cost-efficiency from a consumer's perspective has shifted dramatically, and companies are beginning to incorporate sustainable practices within their production and distribution due to this rapid change. In the current economic climate, a company's willingness to adapt to the demand of current market trends and adopt a green mentality may 'make or break' their overall success.

India is 3rd largest producer of electricity worldwide, with a target of 500 GW of renewable energy by 2030; With new Renewable Purchase Obligations – DISCOMs mandatorily need to purchase renewable power resulting in huge development for transformation from fossil fuel-based energy to renewable energy; so the cable market will naturally grow in synchronisation with the power industry. Further to this, INR 19,500 crore for solar PLI Scheme and multiple ongoing projects are there which will significantly increase the demand for sustainable & eco-friendly cables.

APAR Industries Limited (cable solution) has also grown significantly in the last few years with an average 17 percent CAGR. Also, our export revenue has increased significantly in the last few years, contributing 52-55 percent of the total revenue.

Over the past few years, our cable vertical has developed and introduced specialised OFC cables, tether cables, tactical cables, submarine pressure tight cables, torpedo cables, for defence and shipyards. Also, our e-beam powered APAR ANUSHAKTI house wire is a unique product that creates new insight on the consumers buying mentality and captures market at a very fast pace. APAR ANUSHAKTI is melt-resistant, fire-retardant and have 50 years of life.

Currently, our R&D team is developing high ampacity cables with high-temperature withstanding capability, improving the anti-rodent properties of cables and developing other specialised cables for specific applications in the field of defence, telecom, renewable energy and other industrial segments. We are also continuously working towards expanding our manufacturing capacity as well as our product range.

Q Sustainability is viewed as a key performance parameter for all industries; what is your perspective on the same and what initiatives have you taken on clean technology, energy efficiency and renewable energy?

Shashi Amin: Although APAR started its sustainability journey in April 2021, over the past few years, we have made significant progress in the areas of environmental performance, energy conservation and improved safety considerations in our product design features. Our eminent ESG initiatives include: setting the foundation for water conservation and reducing the consumption of fossil fuel-based grid energy, augment the rainwater harvesting capacities for sustainable water security at our various plants. Additionally, we have entered a definitive agreement with a leading supplier to jointly develop a 3.3 MWp hybrid power project (wind solar hybrid) under the group captive model. This initiative will reduce our requirement for grid-based electricity significantly and reduce GHG emissions by approximately 10,000 tCO2e per annum for the Khatalwada plant.

APAR Industries Limited has been rated among Top-3 in the 'Industry Segment' as per CRISIL ESG rating 2022 (report dated 19 May 2022) with a cumulative score of 59 (industry average 54).