“I think that the Indian wire and cable business is slowly starting to understand that only technology can benefit their processes, productivity, and quality of manufactured products,” says Mr. Anuraag Mahajan, Managing Director, Kemtech International Pvt. Ltd.

Established in 1986, Kemtech provides products, services and customized solutions with the aim of achieving customer satisfaction in the Indian industry. The company has expanded its reach from the Indian sub-continent, sourced mainly from China, to the Middle East and additionally from South Africa.

Kemtech says it has established itself as a pioneer in supply of ‘special purpose machines’ for niche applications in the Indian subcontinent. Tell us more about the special purpose machines and its potential market.

AM: We offer special purpose machines for manufacturing wire, cable and tube products used in various applications related to aerospace, automotive, railways, construction, housing and medical industries to name a few. The machines are used for the production of specialty shaped wire and cable, wire and cable products

WCI: As a close associate to the wire and cable industry, your comment on the Indian wire and cable industry and its future?

AM: The Indian industrialists are starting to recognize that quality process, productivity and end-product are a pre-requisite for entry into foreign markets. This expansion into foreign markets remains absolutely critical for the growth of India and its people. With the climbing GDP growth in the country by cutting edge of technology and moving away from the traditional pricing model of acquiring capital equipment. The machinery acquisition is purely based on low pricing and cannot have the latest research and development trends built into its offering; also, it cannot have the same reliability and longevity of more price and respected brands of machinery suppliers.

Quality must have its price, and machines made by globally reputed manufacturers show this for decades as the best long term investment. Once the target is to produce higher quality, with less maintenance and repair cost and possible machine downtime, longer durability or gaining a competitive advantage based on superior technology, purchase price should play a tangential role when choosing the machine supplier.

Also, it is very critical to understand that investment in lower technology lowers the entry threshold for new price based competition thereby increasing the risk to one's business. The understanding of what we have achieved and our quality thinking makes us conquer the future!

WCI: What are you satisfied with the technology deployment by the Indian wire and cable industry as a whole? What more, according to you, needs to be done?

AM: Well, I am of the view that if the Indian companies want long-term insurance for their businesses against global competition. They need to scale up to target higher production capacities with high level of automation to reduce their dependence on high man-power and have better economics of scale for long term survival.

I think that the Indian wire and cable business is slowly starting to understand that only technology can benefit their processes, productivity, and quality of manufactured products. India still remains essentially a domestic market as most of what is produced in India is consumed in India. In order to take advantage of the massive market outside of India and to be a respected player on the world stage, these requisites of productivity, quality and quality of final product are critical to break into, and maintain new markets.

In order to embrace these principles, the Indian industrialist has to embrace plant and machinery that represents the cutting edge of technology and move away from the traditional pricing based model of acquiring capital equipment. The machinery acquisition is purely based on low pricing and cannot have the latest research and development trends built into its offering; also, it cannot have the same reliability and longevity of more price and respected brands of machinery suppliers.
ultimately will not sustain business in the international markets. The only regret is that this realization is slow and implementation of best practices in procuring great machinery remains a stumbling block when the pricing of such machinery is considered.

Future is bright only if the aspects of importance in the process of buying are taken into consideration and more investments with better quality products are used in order to increase the efficiency and profits simultaneously.

**WCI: Any new development on the product and process front?**

**AM:** The manufacturers of machinery that we represent in the Indian market, represent the pinnacle of the machine makers within their categories. We represent them simply because they understand the importance of continued improvement in their machinery through research and development. I should give you an idea of a few new developments.

The first one is CLIFFORD which was the first to produce an automated machine capable of manufacturing high precision security fencing mesh with under and over cross wires welded at different pitches. They have also recently introduced Inverter based electrical supply control ensuring that their grating welding machines are significantly more efficient in electrical consumption.

ENKOTEC, the second development has the last years focused on in-line nail production from wire coil to finish collated nails in order to meet a growing demand for automatization, high uniform quality output with less scrap - in order to have an efficient and cost effective nail production.

Furthermore, at IDEAL, development and improvement of the BAS300 series (IDEAL BAS series is a result of over 90 years of experience in the field of band saw joining) as well as our wire mesh systems like GAM400 or CSR102 etc. offers high flexibility by modular design and perfect welding results through 1.000 Hz medium frequency technology.

**Another development is with** KIESELSTEIN, a leader in wire shaving technology who now offers solutions for even high tensile materials like titanium or difficulty transformable materials like memory alloys which can now be treated with shaving. Besides materials like aluminium, copper, steel (especially spring steel). They now also extended their know-how in hot drawing of wire.

EURODRAW Wire Equipment (Ex-GCR) with more than 40 years of experience in the design and construction of plants and machinery for the production of strand and rope for every application has developed new technologies in two sectors essentially – The first covers a complete range of double-twist machines and plants for the production of steel cord to reinforce tires. The second includes double twist, skip and tubular machines for the production of strands and ropes made of bare, galvanized or stainless steel wires. Further they have developed machines for the production of flexible shafts, flexible shafts with a metal and fabric wrap for screw drives as well as special ropes to meet specific customer’s requirements, with particular characteristics of resistance and fatigue that are mainly used in the automotive industry.

And, last but not least, Eurodraw Wire Equipment offers tubular closing machines for the production of wire rope; and high productivity plants for the production of P.C. strand for the construction industry, with Eurodraw skip stranders. The only, self-imposed limitation is the maximum diameter of the finished product, which does not exceed 30 mm.

CHANT a global engineering company that designs, manufactures, services and calibrates testing machines and systems used to tension test or proof test, wire rope, fiber rope, chain, lifting slings and other types of lifting gear has developed a new international line of products called the ECO Series as affordable testing machinery. They wanted to offer overseas customers the ability to only buy what they need. We price the base machine and all the features are optional, so the customer only spends what he needs to spend. The end result being a very economical machine tailored to the end user’s specific requirements.

REELEX’s latest product is our D-2050. The D-2050 is an evolution of the D-2000 (as the standard packaging machine for large production runs of data cables) automated REELEX packaging machine, with myriad improvements, new features...
ENKOTEC High-Efficient Nail Manufacturing Systems

ENKOTEC is a leading global supplier of machinery for the manufacture of mass-produced nails as well as customized solutions. The company create, innovate, and produce solutions for its customers.

ENKOTEC A/S, established back in 1981 for producing and commercializing the newly developed nail manufacturing machine. The introduction of the ENKOTEC rotary nail machine was a revolution within the nail industry, as the machine was completely different from the conventional nail manufacturing machines known since the turn of the 19th century.

The nail machine quickly became a Danish export success and today ENKOTEC machines are running in nail factories located all over the world. Its headquarters is in Denmark where the company undertakes the development, production and sale of machines and tooling for the manufacture of nails. It has regional sales offices in Cleveland, Ohio, and in Buenos Aires, and cooperates with local commercial agents on selected markets, such as KEMTECH in India.

PRODUCT LINES

ENKOTEC nail machines are using a unique rotary forming principle, allowing wire feeding, wire cutting and head forming to take place in one continuous process of rotating movements. The ENKOTEC technology makes it possible to produce high-quality nails at an unprecedented speed, without compromising production stability, while requiring less space and fewer operators and offering the possibility of unmanned production. At the same time, this machine concept allows to implement an environment friendly production with a low noise level, small energy consumption and an oil-free manufacturing process, eliminating the need for subsequent nail tutbling.

Over the years, ENKOTEC has made continuous design and material improvements on the nail machine, thus meeting customer requirements for increased cost-efficiency and user-friendliness. ENKOTEC's product program includes various complementary machines supplied as stand-alone units or in-line systems. ENKOTEC's in-line nail manufacturing solutions feature a balanced combination of well-proven systems and modern technology proving our wish to constantly push our customers ahead of competition.

ENKOTEC's present high-capacity nail machines, the ENKOnail+ series, are designed according to a modular principle with a basic machine and several machine variants. The machines are producing up to 2,500 nails per minute, and it is possible to cover nail lengths from 25 up to as much as 130 mm (1.1 to 5.1/8”) and wire diameters from ø1.8 to ø4.2 mm (0.071” to 0.165”). The ENKOnail+ machines come with a PLC control system and touch screen operator interface, which is easy to navigate and allows quick setup of nail parameters.

ENKOnail models, intended for small and midsize capacity needs, produce up to 1,000 nails per minute at ø2.0-4.2 mm (.079” to .165”) and nail lengths 38-103 mm (1.5” to 4”). The ENKOnail machines feature simple adjustments, quick tooling changeovers, easy access for cleaning and service, and long tooling life among other advantages. Combined with our high-end ENKOnail+ series, the ENKOnail models allow us to offer a complete range of high-speed nail machines, where many tooling parts are common for all machine models, thus increasing their cost effectiveness.

The high-speed ENKOroll thread rolling machine has been specially designed for making screw Shank or annular nail profiles. Apart from the high production capacity, the ENKOroll machine incorporates numerous advantages such as high-quality nail profiling, high production speed, high stability, quick tooling changeovers, simple adjustments, and low noise level. The machine is capable of running in-line in a nail manufacturing line or as a stand-alone machine.

ENKOTEC’s product range also includes the ENKOpack, which is a movable stand-alone packaging machine. The system offers the possibility of in-line nail production in a complete, automated nail manufacturing process. The ENKOpack automatically feeds the nail cartons, fills them with the accurate number of nails, and transports the nail cartons via automatic drive belt conveyors. All of this can be done in-line with a standard ENKOTEC nail machine or thread rolling machine.

The unique ENKOlroller paper stick collar has been designed for making collated sticks of nails with two head types: D-head, and offset head. The collar has a very regular footprint, with all components integrated, and allows easy access to machine maintenance by removable front panels. The machine features a new type of stick cutting system with minimal wear and almost no adjustment.

Furthermore, ENKOTEC has exclusive rights to worldwide sale and service of the highly efficient collators engineered and built by the German high-standard manufacturer BAUSSMANN Collated Fasteners GmbH: The ENKOroll wire coil collator, using automatic cutter and coiling units, can produce bright and electro galvanized wire welded coil nails with smooth shank, ring shank, screw shank and spiral Shank. The ENKOLLATOR plastic stick collar has been designed for making plastic collated strip nails, using servo-drive technology in all processes. The machine can produce bright, electro, hot dipped galvanized and stainless steel nails, with smooth shank, ring shank and screw shank.

ENKOTEC is the total supplier of our in-line manufacturing solutions and therefore guarantees the performance of the complete lines. Our customers are sure to acquire a production line where the individual machines composing the line have been combined and tested thoroughly for reliable and efficient in-line function. Furthermore, by having only one supplier, our customers will benefit from ENKOTEC’s well-known service concept.