

Kemtech International Pvt. Ltd. Full Range Machinery Supplier for Wire & Cable Industry

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Established in 1986, Kemtech provides products, services and customized solutions with the aim to achieve customer satisfaction in the Indian industry. It has expanded its reach today to various industries such as wire, cable, tube, rubber, plastic, hydrocarbon, power, ferrous & non-ferrous, and general engineering. During its short span of existence, it has received recognition in consistently providing its customers with high quality products and raw materials, sourced from selected international manufacturers/inventors. The company offers products to the various industries in the Indian sub-continent, sourced mainly from the continents of North America, Europe and additionally from South Africa.

WCI recently had an interview with **Mr. Anuraag Mahajan, Managing Director, Kemtech International Pvt. Ltd.** Excerpts:

Wire & Cable India: Kemtech says it helps the wire and cable industry with best products, services and customized solutions. How?

Anuraag Mahajan: Kemtech is recognized for its ability to offer only unique class leading technologies, which are second to none globally in terms of reliability, durability, consistency, built quality, and unmatched productivity. Our products offer quality which produce consistency adhering to very tight tolerances since such type of technologies are offered by our partners or companies who were inventors of these products and special purpose machines in their respective fields. They have hence developed solutions to address the specific

problems or concerns being faced in general for such applications. For many applications, we also offer lower capital cost entry points with modular solutions, which can be scaled up to achieve higher productivity as the need arises for customer who focus on reinvesting back into the business. Our product offerings come with a promise of unmatched after-sales services, which is of top most priority for us as a solution provider since 'customer's satisfaction' is our ultimate goal. Our uniqueness lies in focusing on selling business solutions and not products, which are aligned with the basic philosophy and goals of our customer.

I would like to emphasize that Kemtech maintains high standard of brilliance in all aspects of its operations through constant monitoring and periodic evaluation of our processes. Beside that I would like to mention that our endeavor is to source and supply the products of highest quality at competitive prices satisfying the expectation of our customers with continuous improvement in our activities as structured framework.

WCI: Give us a brief summary of all the solutions and technologies by Kemtech meant for the wire and cable industry.

AM: With respect to the wire industry, Kemtech provides various products, mainly for specialized wire drawing, wire forming, wire rope testing, wire braiding and wire resistance welding like applications. These applications are for the cold rolled as well as hot rolled steel bars/rods and both for ferrous and non-ferrous materials processed by high productivity special purpose machines, which ultimately results in various end products requiring very high accuracy.

For the cable industry, various applications for non-ferrous materials from wire drawing dies, specialty shaped wire drawing, wire braiding for specialty cables, laser handling machine for surgical needles, air wipers, cold pressure welders, butt welders up to automated cable packing solutions for highest possible productivity needs delivered through special purpose machines.

WCI: What are the challenges in the process which you may have observed and which motivates you to come up with a solution?

AM: In my opinion, the biggest challenge of our market in general is to overcome typical customer obsession of lowest

possible investment that too for one time purchase of capital equipments. By doing so, customers typically risk having higher cost of productivity, unreliability, inconsistent quality of their produce, higher scrap rates, higher maintenance costs and higher machine downtime or in other words inefficient operations. One has to understand that the biggest recurring expenditure for any production company is 'machine downtime', which can be minimized by investing in long-term goals like top quality equipments and technologies that can provide the much required time to focus one's resources on one's core business. Furthermore, if the maintenance is not enough, draining of valuable resources as well as opportunities can be the possible result. Only top quality equipments and state-of-the-art technologies can ensure best possible economies of scale and complete peace of mind.

WCI: Kemtech over the years 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 drawing, wire shaving/peeling, PC strand wire to wire forming products like nails, twisted square bars, laser handling machine for surgical needles etc.

WCI: 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 requirements of good processes, productivity 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 acquirement 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 pricier 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 or repair cost and least 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: 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 afforded to the country by entering foreign markets aggressively, the opportunities for employment and education grows within the country.

The wire and cable industry has started to embrace the advantages of the higher costs of good technology and are slowly moving away from cheap bargain equipment, which is not efficient or reliable and

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, represents the pinnacle of the machine makers within their categories. We represent them simply because they understand the importance of continued improvement in their machines 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 aluminum, 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

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Viraj is one of the largest manufacturers and exporters of Stainless Steel long products in the world. With turnover of USD 1.5 Billion, the company is exporting its stainless steel products (Wire Rods, Wires, Welding Wires, Flanges, Fasteners, Bright Bars and Profiles) to more than 1300 customers based across 90 countries spread over 6 continents. With melting capacity of 528,000 tons per annum, the company produces more than 50,000 SKUs in various grades like Austenitic, Ferritic, Martenistic, Duplex and Electrode in various shapes and sizes. Viraj's stainless steel products see application in automobile industries, food processing industries, boilers, pressure vessels, shipbuilding, oil pipelines, petrochemical facilities, construction projects and surgical instruments – among many other means of utilisation.

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and upgrades. Equipped with an entirely new glue system, upgrades to nearly every major component, unique programming improvements and the option to configure for glued EcoCore tube usage, the D-2050 represents the latest in REELEX packaging machinery. Taking the 'tried and true' D-2000 and evolving the machine for reliability, servicing, usability, through put, and reduced operating cost results in a machine that is familiar, yet ready for the next generation of data cables and industrial advancements.

HUESTIS Industrial introduced its 2 inch 'down drafter' air wiper in May 2017. The down drafter is an innovative new design that incorporates air jets at both ends of the wiper and a center bottom drain that is threaded to allow the user to hook up a vacuum unit, piping, or a tube to return the liquid back to the process system. This design allows for multiple ganging of units within a system without excessive 'blow

back' onto the following air wipers, thus increasing drying efficiency. This unit also has enhanced performance over our standard air miser as a standalone or a single unit on a process line. Customers find that its unique properties make it ideal for many process applications at high speeds where improved drying prior to printing applications, spark testing, or spooling is critical. Offered in the most popular sizes, it comes with a metering valve to control the air flow of the rear jets. This new product is the AMDD2000 and it has larger wire and cables with superior performance.

WARDWELL & SPIRIKA a pioneer in field of braiding and winding saw new trends becoming mainstream. The use of flat ribbon wire to shield cables was considered a specialty application in the late 90s and early 2000s. Today, it is a standard process for select cable categories. Wardwell offers a single-position winder (model W8-901) with

integrated, driven payoff to provide wound packages for maximum braiding performance in combination with Spirka's DF braiding machines. The flat ribbon wire differs from round wire in that it is always used in single end combinations but it poses numerous challenges to attain properly wound packages and a smooth braiding construction.

The use of super fine wire grows in wire and cable and medical applications. The manufacturers of cable and medical devices are increasingly designing smaller and smaller cables to fit into ever shrinking electronic devices. Braiding machines and other processing equipment must evolve to handle wire in the 40-48 average range. Wardwell's RS 16 was designed with these applications in mind and gives customers the ability to bring new ideas to the drawing table.

SPIRIKA saw more and more of automatic system for winding. For this our principal

developed automatic two and four spindle winding machines and so called splitting lines, which can be supplied with suitable payoff systems depending from customers technology.

JOUHSEN-BÜNDGENS has new Special solutions for efficient, high-precision wire processing. Whether straightening and cutting, electro fission, end machining, cold forming or point grinding, Jouhsen-Bündgens machines process wires with the smallest tolerances at high speeds worldwide. The demand for Jouhsen-bündgens technology has also increased with the continued drive for component miniaturization. The equipment produces parts for the electronics or the automotive industry, drive and cam chains, bearings or pins. For medical applications lancets, cannulas and surgical needles are often cut, grinded and loaded into magazines at high speeds of hundreds per minute. ■

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 tumbling.

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 putting 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 28 up to as much as 130 mm (1.1" to 5 1/8") and wire diameters from \varnothing 1.8 to \varnothing 4.2 mm (.071" to .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.

The *ENKOnail models*, intended for small and midsize capacity needs, produce up to 1,000 nails per minute at \varnothing 2.0-4.2mm (.079" to .165") and nail lengths 38-103 mm (1 1/2" 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 *ENKOrroll thread rolling machine* has been specially designed for making screw shank or annular nail profiles. Apart from the high production capacity, the ENKOrroll 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 standalone 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 *ENKOLLator paper stick* collator has been designed for making collated sticks of nails with two head types: D-head, and offset head. The collator 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 *ENKOLLator 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* collator 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.