

Quality Vanguard

by Tanya Shih, Fastener World Inc. photo courtesy of cooperative companies

Success is never a coincidence. Since 2011 Taiwan has been exporting over USD 3.5 billion worth of fasteners annually for 3 consecutive years. It still secures its position as one of the top 3 fastener exporting nations. You may wonder why fasteners can lead to such a strong surplus for Taiwanese fastener industry. This has a lot to do with the equipment of Taiwanese makers.

In this issue, we invite several Taiwanese and overseas fastener machinery makers to introduce their main products and service, from wire drawing to surface treatment, fastener forming, inspection, and packaging. This special coverage also includes Biing Feng and Wen Yang specialized in forming machines, as well as Vizion, the rising star of inspection. Let's get a first-hand look at the quality "guardians" of Taiwanese fastener machinery.

Wen Yang Multi-Blow **Bolt Parts Formers**

Gain Reputation from Overseas Markets

ith the joy over the completion of the new 27,000 square feet automated factory based in Taoyuan Hwa Ya Technology Park in 2011 that was successfully used to satisfy the fast-growing customers' demand for the machines of Wen Yang, 90% of the bolt parts formers of Wen Yang have been shipped to over 30 countries including USA, Japan, Russia, India, Pakistan, Brazil, Kenya, Cyprus, South Korea, Southeast Asia, and Latin America.



Continuous Innovative R&D Brings Forth Improved Performance of Leading Bolt Parts Formers

Wen Yang Machinery specializes in various specifications of bolt parts formers including 1-die 2-blow headers, 2-die 4-blow bolt parts formers, 3-die 6-blow bolt parts formers, open die headers, automatic thread rolling machines, and other new types of extra-long screw & washer assembling machines, which, with a comprehensive range of performance and good quality, have been certified by CE and widely recognized by the industry.

With over 20 years of machine manufacturing experience, precision hi-tech processing facilities installed in the new factory, smooth manufacturing lines, and employment of well-trained engineering staff, the products of Wen Yang have become more diversified than ever based on the corpoate principles of "Quality First and Continuous R&D". As a result, the company can continue to reinforce the QC and manufacturing technology and the sales have been increasing since its inception.

The Attraction in Global Exhibitions with Multiple Inquiries from Buyers

The premium machines of Wen Yang have been the strong backup for customers to create their competitive edge, making it gain the long term support of global customers. Its accumulating reputation always makes Wen Yang the focus for buyers in exhibitions. In addition to USA and Japan, major markets of Wen Yang in 2014 on one hand will focus on China where the urbanization helps to increase the domestic fastener demand, and will on the other hand aim at Southeast Asia where it shows potential business opportunities in the supply chain due to the entry of many global car manufacturers. It is thus reasonable to think that these two markets are worth the strengthened investment in marketing.





Biing Feng Nut/ Part Cold Formers

ince 1976, President Shao Yin Wei of Biing Feng Enterprise has devoted himself to the R&D, manufacturing, and sales of cold forged nut/part formers for nearly 40 years and has never diverted to other facilities like screw formers, thread rolling or tapping machines. President Wei gives all his heart to the design, improvement, and innovation of cold forged nut/part formers, as he believes that whichever machine is going to be produced, the producer should always follow the principle of "making the best out of the best". Every time when he bumped into a bottleneck in developing new functions for a machine, he and his team would always work overtime and even sleep in the factory before they had the problem solved. Their standing in customers' shoes at all times earns a widespread reputation and feedback from the world, resulting in successive orders and positive interaction between the company and customers as well as achieving reciprocal growth and bilateral success.

The company offers a complete range of forming machines from Model 11B for M6 to Model 50B for M36, so customers can purchase all they need in one stop. The critical factors that drive Biing Feng to reach sales goal every year are:

- The trust of global customers in the capability and personal charisma of President Wei for cold forged part formers.
- 2. The easy operation and stability of Biing Feng's machines
- 3. The specialized and quick service of the team.
- 4. The most competitive prices of Biing Feng's machines (with high quality at low costs)

Vice General Manager Tony Hong said, "The A-Lien, Kaohsiung-based 43,200 square feet facility is not large enough



to satisfy all the upcoming orders, so in order to make the item check and handover simple to global customers as well as to win their trust, the 6th 43,200 square feet new facility is under construction and may soon be put to use for more capacity before the yearend of 2014 or no later than the beginning of 2015."

The "BF" branded nut and part formers are commonly seen in the factories of famous Taiwanese fastener suppliers of automotive nuts or set screws.

In emerging markets, Vice GM Hong thinks that, their products are subjected to high tariffs in Latin America due to protectionism. Although Biing Feng's products share a certain part of the market, it is after all not the company's target market. Currently, Biing Feng is active in looking for overseas agents with long-term, stable, reliable, and selling capability to help it broaden its market awareness.

What is worth mentioning is Biing Feng's quality policy.

"Never Compromise on Quality" has always been the policy President Wei sticks to. The forming machines he is going to offer customers should not be "just a machine" but one that is intelligent, human-based, and easy for life. Due to the trust and heavy reliance of all customers on the machines, the slogan of Biing Feng is thus perceived as:

BIING FENG = BF = BEST FORMER = BEST FRIEND.

In other words, when one first notices "BF", they'll soon come up with "BEST FORMER" in his mind; and in the end, they'll become Biing Feng's "BEST FRIENDS".

Fascinated by Visual Inspection

Vizion Precision Machinery Co., Ltd.



hen I stepped into the territory of visual inspection, I was captivated by this artistic technology that substitutes for human eyes and the use of software to interpret images from a camera. At times I wonder if someday this technology will completely replace the human eyes. I believe the answer will be affirmative." General Manager Steven Chiu told us about his profession with passion.



To make his dream come true, Steven left the former company and established Vizion Precision Machinery in Rende, Tainan. The company develops visual inspection machines for screws, bolts, and other fasteners. Currently it has successfully developed the Pin inspection platform, online lipstick filling inspection system, magnetite inspection platform, etc. It has acquired domestic and overseas patents for its related equipment. Within 4 years it sold at least 50 sets to China, Northeast/Southeast Asia, India, Turkey, and so on.

Visual inspection can be used in a wide spectrum of industries, from fasteners to electronics, food, medical industry, etc. For example, smart phone cases made of aluminum-magnesium alloy and smart phone monitors are both bonded and positioned via visual inspection. This technology can offer better precision, improve availability, and reduce labor cost. Vizion's products are produced to foster industrial automation.

Sorting for Overseas OEM

In recent years more and more companies sort fasteners for clients on subcontracts, and their business scale is enlarging as well. It is obvious that full inspection of products is an inevitable trend. Vizion started to offer sorting service in 2013 mainly for clients in Tainan. The machines are developed by Vizion itself, so the cost can be effectively reduced. In addition, the checklist for inspection is adjustable based on clients' specific requests. For example, clients can request for 360 degrees of thread damage inspection and Pin inspection, to name a few. Certainly, quality of products does not directly result from the sorting machine. Because defective products, when detected, become the excessive cost for a company, the better procedure will be to produce qualified products in the beginning and then send them to the sorting machine to ensure the defective rate of 0ppm.

Vizion's professional R&D team comprises of auto-control, software, and mechanical engineers. The company offers a streamlined production, from mechanical design, power distribution, software programming, to whole-machine sales, thus assuring equipment quality and after-market service. Vizion is proactively contacting overseas distributors to expand its sales channels. It has only operated for 4 straight years, but it continues to collect energy and it won't be too long before it grows and shines.

Feature: Machinery

Taiwan

Wire Drawing

Sheng Chyean Enterprise Co., Ltd.



Sheng Chyean has been providing maintenance service to local wire drawing mills for 20 years. Responding to our customers' requests, Sheng Chyean has begun to modify and upgrade customers' existing machines. We have extended our service by building new combined drawing machines, which are more suitable to fulfill the requirements of our customers' mills. With 20 years of experience in maintaining and designing bar drawing machines, Sheng Chyean has expanded its market from Taiwan to include Germany, USA, Japan, China, Korea, and most of Southeast Asian countries.

Sheng Chyean's machines are chosen by many clients worldwide because of their value, ease of use, easy maintenance, and very fast delivery. The key to achieving this organization is the young and energetic engineering team in Sheng Chyean. The team adopts the latest technology to increase the performance, reliability, cost and control of the machinery. Our engineers welcome the customer's input and requirements during the design and planning stage, thus creating the most suitable equipment for their individual needs. Sheng Chyean's production and products are ISO 9001 and CE certified.

Web: www.tw-sc.com.tw E-mail: tw.sc@msa.hinet.net

Cheng I Wire Machinery Co., Ltd.



We are a professional manufacturer and trading company of wire drawing machines, auto spot welding machines, automatic pickling lines, wire straightening & cutting machines, and wire welding machines.

From wire drawing machines, auto spot welding machines, automatic pickling lines, wire straightening & cutting machines, to wire welding machines, even turn-key plants and technology transfer to local and overseas wire processing companies, Schemata insists on strict quality control in each stage of the production process, from design and manufacture to finishing a machine, accomplished under one roof. We base on the spirit of service, outstanding techniques, high efficiency, strong R&D team and multiple operations to provide the best customers services that they can always rely on.

Main Products:

Automatic Pickling Lines, Drawing Machines, High/ Low Carbon Steel Wire Galvanizing, Various Designs of Wire Production Machines, High/Low Carbon Steel Wire Drawing Machines, Straight Line Continuous Drawing Machines, Wire Straightening & Cutting Machines, Electric Annealing Furnaces, Nail Making Machines In Whole Plant, Mechanical Wire Descaling Machines, Stainless Steel Wire Processing Equipment, Dipping Type Wire Drawing Machines (Fine Wires), Wire Straightening & Cutting Machines, Wire Welding

Web: www.cheng-i.com E-mail: sales@cheng-i.com

Gwo Lian Machinery Industry Co., Ltd.



Established in 1968, Gwo Lian Machinery is specialized in manufacturing drawing machines. Gwo Lian has been in the market for more than 40 years. R&D and quality are our core values. So far, the sales volume around the world exceeds 4,000 sets . Our drawing machines can process most kinds of wire materials, such as high, mid and low carbon steel, stainless steel, copper, brass, alloy steel and so on. Machine lines include Pay-off, Descaler, Drawing Machines, Spooler, Take-up and other Drawing accessories.

The core technology of Gwo Lian is the drawing line with the roller cassette. We are the very only manufacturer in Asia that can advance the technology from die to roller cassette (no powder and desulfuration needed.) and have been receiving good feedback from customers. We can also design carbon steel and stainless steel turnkey plants. All-in-one service and comprehensive training and customer service are available at all times.

Web: www.gwolian.com E-mail: sales.eu@gwolian.com

Surface Treatment

San Yung Electric Heat Machine Co., Ltd.



San-Yung was established in 1970. It has technical cooperation with Japanese and American consultants to further integrate the technical features from eastern & western world. Today San-Yung has been the biggest professional heat-treatment furnace manufacturer in Taiwan, and one of the biggest professional manufacturers for mesh belt type continuous carburizing (hardening) quenching furnaces in the world.

San-Yung furnaces are used for fasteners, hand tools, bicycle parts, chains, forging parts, automobile parts, motorcycle parts, etc. San-Yung mesh belt type continuous quenching furnace occupies over 90% of Taiwanese market and many famous companies in the world choose San-Yung furnaces.

So far, San Yung's brand is recommended by all of our customers, and currently our sales network has reached all over the world, including U.K., Germany, Romania, Norway, U.S.A., Poland, Italy, Brazil, Argentina, Russia, Belorussia, Ukraine, Kazakhstan, Turkey, Korea, Japan, India, Thailand, Indonesia, Malaysia, Singapore, Vietnam, Dubai, Bangladesh, Egypt, Pakistan, Iran, Mainland China, etc. Excellent sales performance is the best guarantee for San-Yung quality. We still progressively develop our technology for No.1 quality product, and we wish to march into a prosperous future together with all of our clients.

Web: www.sanyung.com E-mail: tsy@sanyung.com

Tainan Chin Chang Electrical Co.. Ltd.



The company has operated for more than 40 years. It upholds stability and a steady management style to face the challenges of the 21st century. Under the rapidly changing business environment, the company is also committed to technology research to bear the advent of high-tech industries and challenges.

Now the company, in the furnace sector, has established itself in the leading position in Taiwanese market, after long intensive research and development, etc. Now it serves clients from China, Japan, Thailand, Vietnam, Indonesia, Malaysia and other Southeast Asian countries as well as moves towards the future development of new technologies, new products and provides better service and quality to customers with the goal.

Main products:

- · Annealing furnaces (Bellshaped type, BP type, Pit type)
- · Continuous roller or batch annealing furnaces
- Stainless wire linear type solution annealing furnaces
- · Aluminum alloy heat treatment furnaces (T4,T6)
- Copper alloy vacuum annealing furnaces
- · Continuous type high temperature sintering furnaces and brazing furnaces
- Pit type heat treatment furnaces
- AX,DX,NX,RX atmosphere gas generating furnaces

Web: www.chin-chang.com.tw E-mail: d5782@ms63.hinet.ne

Forming

Gem International Co., Ltd.



Gem International Co., Ltd., founded in 1996, is a supplier/exporter of screw/bolt, nut, rivet, nail making machines, screw/bolt, nut, rivet optical sorting machines, conveyors, centrifugal oil cleaners and fastener tooling. The company was certified by ISO 9001 in November 2003. Gem International has established its good reputation for being able to supply customers with good quality products of machines, conveyors, tooling, centrifugal oil cleaners, and so on, while staying competitive in quality, stability, pricing and delivery. Moreover, the company has successfully developed its global markets by trading with companies in many countries and regions throughout the world, including Germany, Spain, Italy, Switzerland, Sweden, Eastern Europe, Central and South America, the Middle East, India, Southeast Asia, etc. We are sure that we will be your best business partner at the rea when the precise machine industries are growing continuously.

Web: www.gemmachinery.com E-mail: gemintl@ms25.hinet.net

Jern Yao Enterprises Co., Ltd.



Jern Yao Enterprises was founded in 1993. Our products include bolt formers, nut formers and parts formers. Jern Yao is one of the largest forming machine builders in the world, building over 180 machines a year. Jern Yao has an outstanding reputation in their field for providing high level technology, quality, service and value. Our orders come from the US, Canada, Brazil, Argentina, Germany, U.K., France, Spain, Sweden, Czech, Slovakia, Italy, South Africa, Vietnam, Turkey, Israel, Korea, Hong Kong, China, Japan, India, Indonesia, Malaysia, Singapore, Philippines, and Thailand. Some of the buyers belong to developed countries, and some are from developing countries. This implies that Jern Yao's machines have been accepted by global industrialists.

Web: www.jernyao.com E-mail: sales@jernyao.com

Stampo Enterprises Co., Ltd.



Stampo is a leading ISO 9001-2000 certified manufacturer in Taiwan and China. We specialize in custom-made bolt formers, nut parts formers. bolt parts formers, nut tapping machines and many related accessories and equipment. Our typical product lines include:

- 3 Die & 4 Die Bolt Former
- Long Stroke & Extra-Long Stroke 3 Die 3 Blow Former
- Long Stroke & Extra-Long Stroke 4 Die 4 Blow Former
- 5 & 6 & 7 Station Nut Parts Former
- 5 & 6 & 7 Station Bolt Parts Former
- Automatic 5 & 6 Station Nut Former
- Parts Tapping Machine
- Flange Nut Tapping Machine
- Pitch-head Type Vertical Two Spindle Tapping Machine
- Nut Tapping Machine

With our outstanding R&D department, we're proud to be able to offer products with the highest quality. In addition, we're also committed to providing the best customer service and technical support. So far, we have customers from the following countries and regions: (in alphabetical order) Brazil, China, Egypt, East Europe, France, Germany, India, Israel, Italy, Korea, Taiwan, Thailand, and Turkey, etc.

Web: www.stampo.com.tw E-mail: info@stampo.com.tw

Jian Hwa Enterprise Co., Ltd.



Jian Hwa is an international manufacturer specialized in producing tapping machines, which can be used to tap a wide range of nuts in various sizes.

HRT, 2 Spindles Reversible Tapping Machine, is our latest and most advanced machine. It is not only used for through and blind-hole nuts, but is also available for special shaped nuts. Moreover, it keeps nuts and the tapping spindle absolutely aimed at the center during machine tapping. Even running in the highest tapping speed condition, it still keeps the accurate tapping depth and won't damage the blind nuts or taps. Our products have been sold well, and are also exported to many countries, such as USA, China, Russia, Japan, India, Italy, Turkey, etc., and are favored by customers.

Web: www.jianhwa.com E-mail: sales@jianhwa.com

Lantech Industrial Co., Ltd.



Lantech. established in 1986, specializes in manufacturing induction heating equipment and flex arm tapping machines. In 1995, we started

to adapt transistor type induction heating to replace the traditional vacuum tube induction heating, amazingly increasing the heating efficiency by 30-40%, prolonging the machine life by 200%, and reducing the weight and volume by 100%. This success will always be our pride.

Our latest transistor type induction heating machines can heat every kind of material without contacting it. It can heat iron, steel, alloy steel, stainless steel, titanium, aluminum, copper, bronze, brass, graphite and many other materials, and it has been wildly used in hardening, annealing, tempering, forging, brazing, soldering, melting, shrink fitting, tube welding, inserts of PVC, ABS, and many other applications.

We manufacture pneumatic, electrical and hydraulic tapping machines. Pneumatic machines have the benefits of light weight. Electrical tapping machines have the benefits of safe operation, less power consumption, stable rotation speed and depth control. Hydraulic tapping machines have the benefits of biggest torque, lowered oil temperature, a wide range of speed, torque choice, and depth control.

All our tapping machines have arms made from high strength alloy aluminum for longer operating life and smooth

Web: www.lans.com.tw E-mail: lansheateng@gmail.com

Chun Zu Machinery Ind. Co., Ltd.



Chun Zu is always dedicated to developing new technology to meet various market demands. Our new machine model of 4 die 4 blow forming machine, CBF164UL, with the wire dia. of 18mm and the cutting length of 500mm, can manufacture extra long shafts for different applications.

Web: www.chunzu.com.tw E-mail: chunzu@ms9.hinet.net

Sun Fame Manufacturing Co. Ltd.



Sun Fame Manufacturing Co. Ltd. has been established for over thirty-five years. We are the earliest and the most professional designer and manufacturer of screw point cutting machines in Taiwan. We strive to design and manufacture high quality screw point cutting machines for the fastener industry and continue to innovate our design. We have many patents for screw point cutting machines in Taiwan and overseas. Besides the best materials and world-class components for our machines, we also have the best user-friendly design and sound workmanship.

We have number one market share in screw point cutting machines. If you see screws with Type 17, Type 23, Type 25, double cutting, Type 1 or Type X (oblique cutting), 90% of them are manufactured by our machines especially for wood screws, self-tapping screws, chipboard screws and deck screws with Screw Point Type 17 or double cutting (Length over 400mm is up to 95%). Our machines are very efficient since our machines are so easy to operate and adjustable for different sizes of screws. The great advantages of using Sun Fame's Screw Point Cutting Machines are high speed, durability and precision. These advantages create our customers' amazing profit in the production. Let's use our machines to create profit for your companies.

Web: www.screw-point-cutting-machine.com E-mail: sunfame1985@gmail.com

Chao Jing Precise Machines **Enterprise Ltd.**



Chao Jing Precise Machines Enterprise Co., Ltd. seeks innovative technology and excellent quality of core competencies, as well as provides customers around the world with the most sophisticated fasteners and the most reasonable prices of products. The policy "customer and quality first" has been implemented in Chao Jing's operation; with several years of experience and continuous R&D in the industry, it will move toward developing higher-value and hi-tech products. Chao Jing's principle of profit sharing with our customers is to meet customers' demands.

Web: www.chaojing.com.tw E-mail: jw.zw@msa.hinet.net

Chien Tsai Machinery Enterprise Co., Ltd.



Chien Tsai Machinery Enterprise Co., Ltd. was set up in Taipei in 1973. Mr. Chien-Tsai Chen, chairman of Chien Tsai Machinery, leads the outstanding work group to concentrate on producing and designing screw thread rolling machines. Our business grows well and prospers under hard working. Chien Tsai has accumulated 30-year experience in manufacturing. fabrication, technology for the operation, and design. Sales volume sets an extraordinary record for the industry. Our products are sold to Taiwan, Japan, America, Europe, and all over the world and is readily receiving recognition from the market. Our company has already obtained CE certification. The factory in Shanghai has already passed ISO9000 certification, and in the future, we plan to pass ISO 14001.

Product Range:

Auto thread rolling machines and slotting machines for screws. The external diameter is from 1mm to 38mm, and the length can reach 600mm.

Web: www.jiancai.com.tw E-mail: jiancai@jiancai.com.tw

Inspection

Vizion Precision Machinery Co., Ltd.



Vizion Precision Machinery Co., Ltd., specializes in vision inspection solutions for fasteners.

forging parts, and machining parts. The benefits of fully-automatic sorting machines greatly enhance efficiency and reduce the labor cost for manual sorting. Consistency and repeatability are the most critical features for all quality assurance teams.

Vizion is determined to provide you with the most powerful and costeffective optical sorting solutions. We have completed installation in Korea, India, Indonesia, Malaysia, and China

Web: www.viziontw.com

E-mail: sales@vizioninspection.com

San Shing Fastech Corp.



San Shing Fastech Corp. is a renowned and professional manufacturer of steel nuts and bolts, washers, screws, and machines.

Continuous endeavors on innovation bring its own first article inspection system in place. San Shing SBM-35L is specially designed for fast inspection of bolts during the manufacturing process, so that quality control can be systematically implemented into each process. This inspection system not only replaces traditional measurement devices and quality control methods. saving time and resources, but also integrates database, which fully utilizes the measurement results, to complete the process capability analysis and track equipment failure.

SBM-35L is used to eliminate erroneous measurement by operators, and new features are included to this trustworthy system to enhance the capability of the machine. With geometric measurement being one of the main concerns of fastener manufacturers, SBM-35L is of great assistance to fastener manufacturers. It is able to inspect roundness. straightness, perpendicularity, eccentricity, concentricity, and parallelism for the repeatability being+/- 0.01 millimeters.

San Shing incorporates front light illumination to SBM-35L. With the fine-tuned accuracy of +/- 0.01 millimeters, this alternative lighting produces a silhouette to measure various diameters, radius, and angles, which cannot be profiled from the backlight illumination.

Web: www.sanshing.com.tw E-mail: sanshing@mail.sanshing.com.tw

Ching Chan Optical Technology Co., Ltd.



Ching Chan is the biggest professional sorting machine manufacturer in Taiwan, serving the world with branches in major cities of China and Taiwan and global agents to offer in-time local service. Ching Chan continues on

innovative breakthroughs, providing not only the most efficient solutions for your quality control but also quality assurance for your customers. Ching Chan is certified with many patented products, e.g., the wheel crack inspection system solves the problem of open cracks; the 360-degree rotation system detects thread damages. Customization is available based on your requirement. Contact us now for more information. Come and join us. Regional agents wanted!

Web: www.ccm3s.com E-mail: sales@ccm3s.com

Packing

Uta Auto Industrial Co., Ltd.



Cost-saving with less labor and space. UTA brings forth the beneficial solutions from the assembly to packaging. With

the "in-line" visual sorting (CCD camera), quantity counting and boxing unit. The advanced thought let you carry out fasteners from the assembly to packaging in one station, and make production quicker and more accurate. During Apr. 4-11, we're at stand no. 15B24-01, Messe Düsseldorf. You're welcome to tell us your concerns in fastener assembly.

Web: www.uta.com.tw E-mail: washer@uta.com.tw

Jenn Tai Machinery Enterprise Co., Ltd.



Chen Tai (Jenn Tai) Machinery is a Taiwan-based factory and has specialized in Vibratory Bowl Feeder for 29 years. With the best quality and R&D team, our brand "CHEN TAI" is known as an expert in fasteners around the world. In addition to "CHEN TAI" vibratory bowl feeders, the company also sells threading machines, precise optical inspection machines,

assembly machines, screw forming machines, screw point cutting machines, etc. in Taiwan. Our bowl feeders can automatically orientate screws, washers, studs, bolts, nuts, washers, special parts, etc. on the same direction for feeding out one by one. We not only produce vibratory bowl feeders, but also produce lots of related machines for the fastener Industry.

Web: www.jenntai.com.tw E-mail: chentai@jenntai.com.tw

Overseas

National Machinery Exchange, Inc.

NATIONAL MACHINERY EXCHANGE, INC.

158 PARIS STREET, NEWARK, NEW JERSEY 07105-3829 TEL: 1-973-344-6100 * FAX: 1-973-589-0944 EMAIL: SALES@NATIONALMACHY.COM WEB: WWW.NATIONALMACHY.COM

National Machinery Exchange has been a family owned business since 1934. We are one of the largest and most influential machinery dealerships in the world. We buy individual equipment or entire facilities. We also utilize our extensive network of worldwide contacts and comprehensive understanding of the used metalworking machinery marketplace to find any used metalworking machinery for our customers.

National Machinery Exchange specializes in machinery for ferrous and non-ferrous. No Dealership in the worldwide has purchased more machinery or worked on complete plant liquidations/auctions than National Machinery Exchange. We have purchased and sold over 100,000 machines worldwide.

At NME, we pride ourselves on our technical knowledge of the equipment and understand the technological advances in each sector's manufacturing processes. One of the most important ingredients to NME's success is that we provide the services that clear the roadblocks and expedites transactions of international business. In addition, National Machinery Exchange has fulltime logistics coordinators on staff to help with all rigging needs, inland freight, and overseas shipping quotations.

National Machinery Exchange, Inc. If It's Machinery, We Have It!

Web: www.nationalmachy.com E-mail: bryan@nationalmachy.com

SLISARUK, PE



Slisaruk, PE is a supplier of fastener making, wire processing machines, and tooling from Taiwanese leading manufacturers:

- Equipment for production of bolts, nuts, screws, rivets, nails and other fasteners:
- · Steel wire drawing machines:
- · Metal mesh making and barbed wire making machines;
- Heading, forming, thread rolling and tapping tooling for production of fasteners.

The range of our products includes:

1-Die 2-Blow Heading Machines for Screws and Rivets; Multi-Station Bolt Formers: Multi-Station Nut Formers: Thread Rolling Machines; Nut Tapping Machines; Nail Making Machines; Nail Rolling Machines: Coil Nail Machines: Plastic Strip and Paper Strip Nail Machines; Spring Making Machines; Assembling Machines for Blind Rivets, Nail Screws, Roofing Screws, etc.; Heat Treatment Lines for Fasteners and Other Hardware; Plating and Coating Equipment for Fasteners and Other Hardware; Inspection and Sorting Machines; Wire Drawing Machines; Mechanical Descaling Machines: Wire Mesh Welding Making Machines, Chain Link Fence Machines, Hexagonal Wire Netting Machines, Gabion Mesh Weaving Machines; Barbed Wire Machines; Heading, Forming, Thread Rolling and Nut Tapping Tooling.

Web: www.slisaruk.com E-mail: asia@optima.com.ua

Radyne Corporation



Radyne Corporation is a multinational leader in the manufacturing and servicing of induction heating equipment for heat treatment, hardening, tempering, annealing, fasteners and cartridge shells, wire and cable heating, brazing, soldering and bonding, shrink fitting, specialty heating, and military applications. Standard power sources include solid state inverters with outputs from 3 kW through 5000 kW in many output frequencies ranging from 500Hz to 450kHz.

Radyne manufactures an automated induction case hardening and quenching system for bolt threads accommodating M4, M6, M8, M10 & M12 headed 4037 steel bolts. Quick changeover tooling plates and inductors allow for maximum uptime and flexibility. The system features servo controlled inductor and power supply height adjustment accommodating bolts ranging in part length from 12mm (.05") to 101.6mm (4.0"). Parts can be processed from 200 parts per minute to 400 parts per minute depending on the length of the bolts. An inline vibratory feed system interfaces with the rotary heat treat fixture to reliably orientate and deliver the bolts to the table tooling at the required rate. A touch screen HMI interface and temperature monitoring system offer superior control capabilities assuring the highest quality and repeatability of any induction system. This new high speed fastener heat treating system represents a leap forward in rugged design, performance and ease of use for our customer.

Web: www.radyne.com E-mail: sales@radyne.com

WAFIOS Umformtechnik **GmbH**



WAFIOS Umformtechnik GmbH is among the leading manufacturers of innovative machine technology and tools for cold, warm and hot forming. The focal point of our product portfolio are cold formers for the production of high quality fasteners made of steel wire, stainless steel, high alloy, and exotic materials. Furthermore, our integrated solutions are completed with secondary operation machines, long life quality tools and our comprehensive service.

We offer the optimal solutions for your systems. Our product range from singlestroke, doublestroke and multi station headers to thread rolling machines, pointing and nut tapping machines. Tools designed by WAFIOS Umformtechnik are optimized for your products and production process with high performance, precision and economic efficiency. Our tooling especially our thread rolling dies for the production of fasteners have unique characteristics and are used worldwide. They are a benchmark in the tooling business.

WAFIOS Umformtechnik has developed its formers for titanium forming (hot forming) with integrated induction heating units to gain a forming temperature of more than 1,000°C. KIESERLING and HILGELAND formers which are equipped with optional induction heating system are used for the production of fasteners made from high alloys for applications in the aerospace industry. Warm forming of low-alloy stainless steel with forming temperatures up to approximately 300°C can also be installed in these formers in order to achieve long tool life.

Web: www.wafios-umformtechnik.de E-mail: blosczyk@wafios-umformtechnik.de