



KEEN ON LEAN

In a sluggish manufacturing climate two brave Clevelanders are poised for success

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A Gutsy Beginning for a New Cleveland Manufacturer

In industry-rich Northeast Ohio, local news broadcasts a bleak picture. Daily headlines announce massive cutbacks. Manufacturing jobs are being lost. Established industrial giants that once formed the fabric of Cleveland are moving, closing and selling out. Against this grim backdrop two homegrown entrepreneurs, Larry Tyler and John Neumann, have launched a unique Cleveland-based business in-step with today's manufacturing challenges.

Background

Founded in February 2002, Kinetic Technologies, aka K-Tec, has filled a void in the design and development of innovative material handling solutions for manufacturers who are pursuing lean production. Lean production philosophy is over 30 years old, having been introduced by Toyota as the TPS (Toyota Production System). But it has not been until the last few years that North American producers, pushed by global competition and falling profit margins, have decided to accelerate their own programs. Lean, synchronous flow and forklift free are terms to describe production environments that focus on the elimination of resource waste of any kind. The benefits derived from lean operation are shorter time from order entry to delivery, improved factory responsiveness, reduced inventories, improved quality and reduced costs. One of the challenges to successful implementation of lean principles is the delivery of materials into and out of an operator's work zone exactly when needed and in the proper position for ergonomic unloading. K-Tec estimates that over the next 8 to 10 years, producers will spend over \$2 billion implementing lean programs throughout North America.

K-Tec has designed material transport vehicles and line-side accessories specifically tailored to meet these challenges. Standard products include the non-powered (ProFlowTM) and DC motor-powered (PowerFlowTM) lines of transport vehicles that move and position loads up to 6000 lb. Common base frames and interchangeable upper frames provide users with the flexibility to select the type of functionality that matches their needs. New additions such as the 2500 lb. capacity Mini-MightTM scissor lift use a low table height and small base footprint (4½" x 23" x 35") to easily fit into lift pockets on the underside of vehicles that are pushed over them. This lets the operator raise the entire vehicle and its load for safe, ergonomic unloading. The two founders estimate that about 70% - 80% of most customer needs can be met using standard lines with minor changes to accommodate integration issues.

Positive Response to K-Tec Products

An unusual show of support came recently in the form of a key UAW union official who presented the K-Tec solution as the one they preferred to endorse at a gathering of top GM Powertrain and UAW executives. The K-Tec ProFlowTM, KT2 2000 lb. capacity universal dunnage dolly and the Mini-MightTM 2500 lb. capacity low profile lift had given the new GM Powertrain engine plant, in Tonawanda, NY, something it really needed; a simple solution that could manage all primary handling requirements. The new plant, slated to open in mid-summer 2004, will produce inline 4 and 5 cylinder engines using a lean program that includes a forklift free plan to efficiently replenish the assembly lines. Specifically, they will be towing various dunnage sizes/materials/weights throughout the plant in trains of 1 to 2 dollies, manually rolling materials

on and off transfer conveyors at a very low work height and rotating/raising loads at line-side assembly. In addition, all functions must meet GM ergonomic standards for push, pull, rotation, and reach as well as towing performance. Out of five competitors, the K-Tec products were the only ones that fit the plan requirements. K-Tec was awarded an initial order for over \$300,000 in dollies and lifts. As a fitting epilogue to the story, GM has decided to expand the use of K-Tec dollies, lifts and special conveyor transfer systems to machining areas as well.

The Honda engine plant in Anna, OH is no stranger to lean production methods. As the largest Honda engine plant in the world, they are constantly looking to improve operations and reduce waste. K-Tec was called in to address their need to have one person easily move 3500 lbs. of crankshafts to the assembly line and still be able to tow them from dock to line-side and back, within Honda ergonomic and safety guidelines. By openly sharing application issues, past experience and design concepts with Honda teams, K-tec was able to design a new type of flexible vehicle that met their needs using DC powered drives for manual line-side staging and an auto-disconnect drive system for easy in-plant towing. A low profile frame design allowed ergonomic unload heights to be achieved with full containers. Long charge life, on-board recharging and easy maintenance access for batteries and drive components were key Honda requirements to optimize uptime. Plans are for Honda to use the units in their Ohio facility on existing lines and for a new engine line slated for late spring 2004 start up. In addition, Honda's Alabama engine plant has expressed interest for their crank installation process.

Industrial interest in K-Tec products has not been limited to automotive and tier one suppliers. Talks are underway with companies moving to forklift free plant floors in plastics, furniture, aerospace and heavy equipment market segments as well.

The Team

K-Tec principals are well suited to the capital equipment and lean manufacturing arena, having a combined 50+ years of management, sales, marketing and engineering experience with major U.S. equipment manufacturers. Larry Tyler, president, believes "as a young company, our biggest hurdle is managing cash for growing sales/marketing and working capital demands. There is no shortage of customer interest or need from the market." John Neumann, vice president operations, further points out "we don't have to convince our customers to move to lean operations, they are doing it themselves. Someone will get their conversion business and it will likely be K-Tec as we continue to give them better solutions than anyone else in the industry today."

Mr. Tyler brings 28 years of operational, sales and marketing experience in the industrial capital equipment and consumables markets from The Lincoln Electric Company and its largest subsidiary, Lincoln Canada. Mr. Neumann has 30 years of industrial management experience at General Motors, Budd Co, Premix Inc., Essef Corp., and a consulting services business.