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Zero To 100 In...

by:

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Line of forming machines for making complicated wire forms, springs and assemblies reaches a milestone.

One hundred machines and counting. Dedication to performance and quality has brought **T. Butler Engineering, Ltd. (TBE)** a long way since **Tom and Joan Butler** organized the company in 1988. Machine number 100 is close to completion, in preparation for delivery to a USA company already running many Multiform machines around the clock. Although TBE has grown, the same dedication is apparent today among all members of the TBE organization, located just outside Waterford in southern Ireland.

TBE Multiform machines are now used worldwide to produce complicated wire forms, springs and assemblies for industries such as automotive, appliance, agricultural, construction and medical.

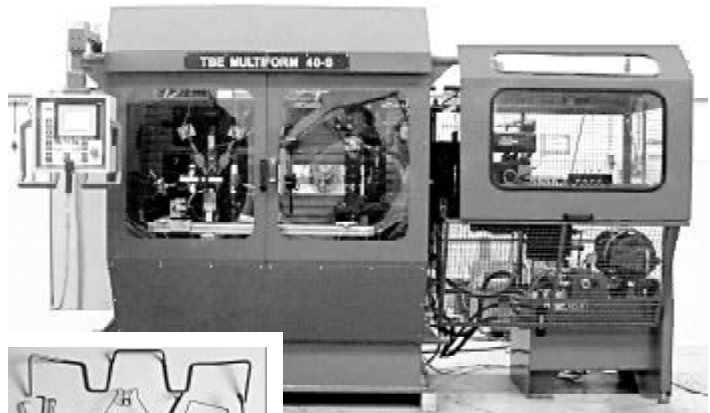
The First Machines

Starting slowly, TBE delivered its first machine to an Irish company in 1990, for production of wire forms for the construction industry. That customer continues to purchase TBE machines today. Over the next several years, machines were supplied to England automotive suppliers for production of components such as lock rods and torque rods.

Use of hydraulics to power-form tooling eliminated the need for cams and provided improved tolerance capability for TBE users. Rapidly gaining recognition for its effective use of hydraulics for wire forming, in 1993 TBE developed software utilizing a standard PLC for open-loop proportional control of servo hydraulic valves. The TBE Multiform's ability to achieve improved process capability quickly opened doors throughout Europe and then North America.

Today's Machines

Along the way, TBE also perfected simple, fast and accurate transfer systems allowing total automation of complicated parts such as double body brake springs, rake tines, seating wires or 3-D wire forms. Parts normally requiring three or more secondary operations, are now completed in one operation on TBE Multiform machines. Secondary operations such as trimming, looping, coining, threading, upsetting, chamfering and welding are now commonplace on TBE Multiform machines. High-speed feed rates, accurate transfer systems and most importantly the vision required to integrate the process, enables TBE to consistently satisfy its customers.



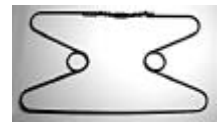
The TBE 40S Multiform machine with miscellaneous Multiform parts (inset at left).

Research and development is continuous at TBE. Since the introduction of touch screen programming in 1998, we have seen the addition of digital AC servo drives, high-speed feed systems, coiling heads and rotating wire. Today, there are six Multiform models all with CNC feeding, multiple axes, servo winding, servo forming, press attachments, rotating wire, integrated welding, a roll thread attachment, chamfer heads, dual feeds and multipart capability.

Summary

To compete in today's marketplace, cost must be removed from the product without sacrificing quality or service to the customer. In many cases, automation is the answer. For companies choosing to compete by investing in technology, TBE offers a solution with the opportunity to improve the product. For TBE, 100 machines is just the beginning.

Contact TBE in Ireland; contact the author at TBE's exclusive rep in the USA, Canada and Mexico, Forming Systems, Inc.; or **Circle 205**. **WFTI**



Multiform parts (top to bottom) rake tine, bedding, tire rack & thread upset form.