

# WFTI Technical Achievement Awards Class of 2008

Wire Forming Technology International proudly presents the third-annual  
**WFTI Technical Achievement Award**, to **Thomas Butler**  
of **T. Butler Engineering Ltd. (TBE)**

## Thomas Butler



Nominated for his technological innovations in wire forming equipment, **Thomas Butler**, who was born in 1962 in Kilmacow, County Kilkenny, Republic of Ireland, developed his first wire forming machine in 1988 in a garage owned by his mother and father. This machine was used for the building wire industry (wall ties), and the first customer for this machine was Ireland-based **Vartry Engineering**.

Prior to his first machine invention, Thomas began his career in the wire forming industry when he worked for a German wire forming machinery manufacturing company doing business in Waterford, Ireland from 1984 to 1985. When that plant closed down in 1986, Thomas and his wife **Joan Butler** moved to the UK

where they were self-employed for a company that Thomas used to visit. As Thomas began to design and build his own machines in 1988, he and Joan opened **T. Butler Engineering Ltd. (TBE)** in Fiddown, Piltown, County Kilkenny, Republic of Ireland. Over the next several years, TBE machines were built and supplied to automotive suppliers in England for the production of components such as lock rods and torque rods. Use of hydraulics to power the form tooling in these machines eliminated the need for cams and provided improved tolerance capability for TBE machine users.

Rapidly gaining recognition for its effective use of hydraulics for wire forming, in 1993 TBE developed software using a standard PLC for open-loop proportional control of servo hydraulic valves. The TBE Multiform machine's ability to achieve improved process capability quickly opened doors throughout Europe and then North America.

Along the way, Thomas and his company also perfected simple, fast and accurate transfer systems allowing total automation of the forming of complicated parts such as double-body brake springs, rake tines, seating wire or 3-D wire forms. Parts normally requiring three or more secondary operations could be completed in a single operation on TBE Multiform machines. Secondary operations such as trimming, looping, coining, threading, upsetting, chamfering and welding are commonplace on TBE Multiform machines. High-speed feed rates, accurate transfer systems and most importantly the vision required to



Thomas and Joan Butler, founders of  
T. Butler Engineering Ltd. (TBE).



Left to right: Jonathan Butler, Leo Butler, Joan Butler,  
Thomas Butler, John Burke, and Joanne Butler.

integrate the process has enabled TBE to consistently satisfy its customers.

Additionally, research and development is continuous at TBE. Since the introduction of touchscreen programming in 1998, the company has developed its machines with 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 multi-part capability. These machines are now used worldwide to produce complicated wire forms, springs and assemblies for the companies in the automotive, appliance, agricultural, construction and medical industries.

These days, as Managing Director of T. Butler Engineering Ltd., Thomas Butler designs, engineers and writes his own wire forming software as well as manages the shop floor at the company. TBE currently has some 125 machines out in the marketplace, with its latest innovation being the Multibend line of machines. The TBE Multibend wire machine was launched at the recent *wire 2008* trade show in Düsseldorf, Germany. This machine line simplifies complex forming, and it features twin head design, a dual feed feature, up to 14 axes, a touchscreen interface, quick changeover and setup, transfers for secondary operations, high speed and minimum tooling requirements.

A special-purpose range of wire forming machines is also available from the company. All of the machine ranges manufactured by TBE provide the capability of manufacturing components in wire sizes ranging from 1.5 to 10 mm.

Thomas Butler's dedication to performance and quality has brought the company a long way since its inception. And although TBE has grown, Thomas Butler and his wife Joan have ensured that this same dedication has been maintained among all members of the TBE organization. [www.tbe.ie](http://www.tbe.ie)

**WFTI**



The new TBE Multibend wire forming machine recently introduced in the TBE booth at *wire 2008* in Düsseldorf, Germany.



Personnel of UK company, Wild Springs, and Thomas and Joan Butler signed an order for a new TBE Multibend machine at *wire 2008*.



TBE is represented in North America by Forming Systems Inc., [www.formingsystemsinc.com](http://www.formingsystemsinc.com). Tim Weber (l) and Dan Bagwell (r).

**WFTI Technical Achievement Awards** are given out annually to individuals in the spring making and wire forming industry who have been responsible for major technical developments related to equipment, materials or accessories for making springs, wire formed parts, wire mesh or rebar products. The awards honor individuals responsible for major practical innovations that have improved the way

springs, wire formed parts, wire mesh or rebar products are made or how they perform.

Award recipients have been selected from nominations made to this magazine.

*Class of 2009* nominations should be submitted to *Wire Forming Technology International* by October 15, 2009.