

The Smallest Wave Springs on the Market

TFC have been the leading European supplier of Smalley spring products for almost 40 years and, the unique Crest-to-Crest® multi-turn compression springs, have always been of interest to designers because of their axial & radial space saving features.

Since these products are made by edge-coiling flat wire to specified diameters, the ability to produce springs even up to 2,000mm has never been a problem but, when small diameters were needed, the limitations were more acute. However, over the past decade in particular, Smalley's production team have greatly enhanced the ability to produce smaller and smaller springs. This has culminated in the recent expansion of our popular YC & YCM series down to 0.188 inches and 5 mm in diameter with special designs being available down to 0.157 inches or 4mm in diameter.

Simon Ward, TFC's Product Manager said "One of the chief reasons for having to decline projects in the past was the limitation on coiling diameter but with these latest developments, being able to offer springs down to 4mm in diameter is a great opportunity for us to further develop our sales of these unique products. We can certainly see, for example, possibilities for designers within the medical, computer and robotics industries where these types of springs couldn't fit before."

With ISO9001: 2008 approval incorporating Design Status, our qualified engineering staff are able to offer a complete free of charge engineering service and are available to assist with part selection, custom design, application requirements, material selection and more.

Applications are discussed in depth, first-off design data and drawings are submitted for approval to ensure our customers are provided with the correct design, first time. However, should modifications prove necessary, our no-tooling process and flexible manufacturing procedures mean the production of prototypes is easily and economically achieved without onerous tooling charges and long lead times.

[View the full Crest-to-Crest® range](#)