

DieMax XL® – Maximum Life Springs



Springs you can rely on

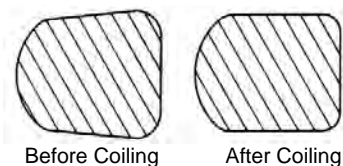
A combination of enhanced raw material, optimal spring design, innovative manufacturing processes, and broad distribution channels allow the DieMax XL® spring to yield the best, most dependable performance and availability combination, time after time.

Spring Wire

Danly springs are manufactured from premium spring quality steel. The high tensile strength and superior heat resistance wire characteristics contribute to the low-stress, long life spring design.

Enhanced Design

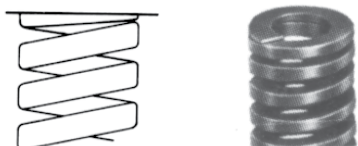
Our spring starts with a modified trapezoidal cross section and changes to a "D" cross section after coiling. This wire cross section has significantly lower stress levels during compression compared to competitor designs. The "D" cross section also allows for more coils per spring while providing a greater amount of spring travel to solid when compared to competitor springs.



Modified trapezoidal cross section of rectangular wire springs changes to a "D" cross section during coiling to achieve a low stress level that means longer spring life.

Physical Dimensions and Load Ratings

Computer controlled coiling and spring setting equipment allow tight control over the critical spring characteristics. Every manufactured lot of DieMax XL® springs is carefully inspected for hole/rod fit, free length, spring rate, solid height, squareness and physical appearance. All inspection results are recorded and analyzed to ensure compliance to quality standards. These tight tolerances and highly inspected attributes guarantee the springs will work freely over the rods or freely in the holes specified without binding. They also ensure that the free lengths, solid heights and spring loads are compatible from spring to spring and lot to lot for predictable, long-life performance.

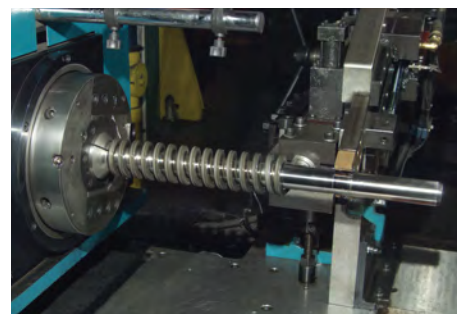


Ends of each spring are closed and ground square to assure that the spring will stand on either end and provide a maximum bearing surface.



Manufacturing Processes

In addition to the optimal, low-stress spring design, the continual investment in the most advanced coiling and spring processing equipment allows Danly to offer a premium, long-life, mechanical spring solution. From the computer controlled spring coilers with in-line SPC data collection, the springs are routed through a series of steps including shot peening to reduce working stresses, and set removal which ensures the spring length and load will not relax in the tool.



Using the latest in CNC coiling technology, springs are produced with much better predictability and consistency in performance, rates and lengths.

Operators use Statistical Process Control (SPC) software to ensure that every production process meets our high quality standards.

Spring testers track and verify consistency in spring dimensions and rates with custom spring testing software.

ISO Maximum Life Springs

Six load classifications – in standard ISO sizes for dies, jigs, fixtures, and general tool work.

Danly springs are offered in a range of lengths, diameters, and load classifications that conform to the ISO 10243 International Standard and the NAAMS (North American Automotive Metric Standard), including color coding for easy identification of load range.

ISO 9001:2015 Registered Quality

All of our Danly die springs are manufactured to ISO 9001:2015 quality standards consistent with the Danly reputation for providing the stamping industry with the most carefully engineered diemakers' supplies. Comparison testing of the operating life of Danly die springs and competitive products have shown that Danly springs offer significantly longer life.

The exceptional quality of Danly die springs has made them popular for a wide variety of applications. For example, Danly die springs are commonly used in general tool work, such as jigs and fixtures, as well as in industrial clutches and brakes and as components in farm machinery and aircraft mechanisms. Many manufacturers specify Danly die springs because the quality and service life of these springs improves the reliability and performance of their products.

Whatever your application might be, you can be sure that the springs you select from this catalog will consistently provide rugged, dependable spring performance. They will live up to the Danly reputation for quality and value.

For help with your selection, or to order die springs, contact Danly or your authorized Danly distributor.

JIS Maximum Life Springs

Metric springs conform to the Japanese Industrial Standards (JIS)

For years, we have manufactured high quality springs in all standard ISO sizes and a series of round wire springs, following ISO 9001:2015 quality standards – all in inch sizes. With the springs in this catalog, we are making available a line of true-metric springs, in all the standard JIS sizes and colors.

This extension of the spring line gives more options to customers with exacting requirements, and best of all, makes them available from the same reliable source as the inch springs. If you need help finding a specific heavy-duty compression spring, give us a call.

R-Series Springs

- Inch sizes manufactured to industry standard colors
- Yields reliable, trouble-free performance
- Manufactured in an ISO 9001:2015 certified facility
- Manufactured from premium spring quality high-tensile strength steel in accordance with ASTM A1000-99 specifications
- Optimal rectangular wire design

Also available

- Spring Cages
- Spring Retainers
- Spring Guards
- Custom Special Springs