



With our patented helical disk spring, Roehrs can offer our customers a proven and tested machine component, which in many cases replaces the common multi-layer disc spring assembly. The helical disk spring consists of two identical flat wire compression springs, screwed into one another to achieve a cross-section similar to that of disc springs. The uninterrupted grain structure of the raw material leads to an increased durability and reduces the risk of breakage of the coiled spring. In principle, the characteristics of any inversely layered disc spring assembly can be realized with a helical disk spring design. The load increase is proportional to the deflection since there appears only bending stress in the strip spring steel. It is also possible to apply a pitch during the coiling process of the helical disk spring, allowing it to initially display the characteristic of a compression spring and to work with the high loads of a disc spring assembly at the first contact of its coils.

The essential advantages at a glance:

- Single component design, no breakup into individual discs
- Simple and cost-saving assembly and maintenance
- Extremely high spring load at a minimum outer diameter and a low hysteresis
- No erroneous diagram results caused by incorrect layering or grease influence
- High durability due to the use of strip steel with uninterrupted grain structure
- High operational safety due to stable spring loads even in case of breakage (no loss of deflection)
- Spring characteristics are designed according to customers requirements
- No friction at mandrel or sleeve due to the fact that the stiffness of the spring allows to dispense with any guidance
- High resistance to negative environmental conditions and extreme temperature variations
- Economical productivity for all applications, also in small quantities

TAC Rockford Product Line

Machine Tool Gauges, Tool Changer Alignment, Runout Test Arbors, Workholding Systems, Tool Holders, Adapters and Extensions, Tool Holder Blanks, Machine Tool Accessories, Coolant Tubes and Gauges, Heat Shrink Systems, Rapid Prototyping

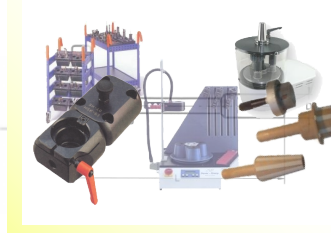
Tool Holders



Gauges



Accessories



Rapid Prototyping

