Multi-wire springs are made of wire strands with various strand structures and are put to use as compression, torsion, tension and form springs.

From a technical point of view, Roehrs multi-wire springs are highly sophisticated products and are used in case single-wire springs made of round, flat or square wire could fail due to highly dynamic frequencies and high-impulse stresses or could not guarantee the operational safety. Due to the strand structure, multi-wire springs display increased spring loads and reduced torsion stresses at high deflections compared to single-wire springs.

The tensile stresses in the cross-section of the wire significantly counteract the torsion stresses which would normally destroy the spring and lead to an increased damping effect.

The essential advantages at a glance:

· Absorption of high impact velocities and peak loads
· Absorption of high dynamic frequencies
· Excellent damping features
· Optimization of damping and gliding features as well as durability by means of thermoplastic coating
· Optimum utilization of material in the cross section of the wire strand by converting torsion into tensile stresses
· High operational safety, as the spring force is virtually unaffected by breakages within the strand
· High deflections possible, even given small outer diameters
· Flat spring characteristic, increasing progressively when close to solid length

Tel 815 962-5600 | Fax 815 962-4600
www.tac.us | info@tac.us
304 North Main Street | Suite 104 | Rockford, IL 61101 USA