
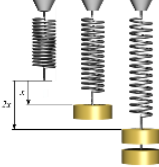

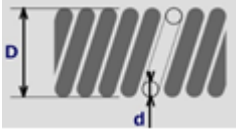
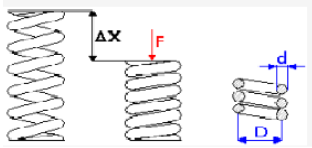


<b>Spring Basic Concepts</b>	
	<p>Springs are mechanical parts included in many everyday objects</p>
	<p>Spring Constant is the ratio between the force actuating in a spring and the caused displacement</p>
	<p>Spring stiffness is the value of the spring constant</p>
	<p>The Spring constant depends on the material, the number of turns per unit length (n), the turns' diameter (D), the wire diameter (d)</p>
 <p style="text-align: center;"><math>F = k\Delta x</math></p> <hr style="width: 20%; margin: auto;"/> $k = \frac{G d^4}{8 n D^3}$	<p>Spring constant, K  Actuating force, F  Caused displacement, <math>\Delta x</math>  Transverse elastic modulus, G  Number of turns per unit length, n  Turn diameter, D  Wire diameter, d</p>

Note: Pictures from internet resources