

A Comprehensive Glossary of Spring Terminology

As one of the oldest and best-designed stock spring lines of the country, Hardware Products Company is your one-stop shop for short-run, multiple springs. We specialize in small runs in spring, ring, and wire forms and ensure remarkably rapid turn-around times. We can operate 24/7, if needed, providing you with the right springs, right now! We know the drill.



Check out the complete list of HPC's capabilities by requesting our Capabilities Statement. To request a copy email us at sales@hardwareproducts.com or check out our website: www.hardwareproducts.com.

To help you get a better understanding of the process of spring making as it relates to your spring needs, we've put together a comprehensive glossary of spring terminology, keeping you—the buyer—in mind:

Deburring – Several processes are available of which all have the end result of removing any loose or protruding bits of steel from a finished part.

Design Assistance – Implementing the Spring Manufacturers Institute software to verify customer spring designs.

Grinding – Removal of round-shaped material at the ends of the spring for the purpose of making the spring stand flat and square on a flat surface. The ends are made flat by grinding to provide a flat surface.

Lathe Coiling – Pulling wire around an arbor to produce springs, cold working process.

Painting – Color-coding to customer specifications.

Passivating – Acid treatment of stainless steel to remove contaminants and improve corrosion resistance partially lost during the manufacturing process.

Plating – Ensures corrosion resistance or used for electrical conductive purposes. For e.g. Zinc, tin, electro-less nickel, and hot tin solder.

Ring Making – Utilizing many exotic alloys and shapes to produce precision connector rings.

Secondary looping and bending – Cold work process done in the secondary department or on CNC machinery.

Setting – Cold work process done to prevent the loss of length and load at operating heights by presetting the spring to remove all of the length loss before you ever see it.

Shotpeening – Cold work process in which the material is peened to induce compressive stresses and thereby improve fatigue life.

Special Packaging – Fulfilled as per customer's requirements.

Stamping – Cold work process to produce flat springs and clips implementing specially produced dies to hydraulic presses.

Testing – Use of automatic electronic testing equipment to ensure quality standards are met.

Tooling – In-house tool and die making to provide installation assistance during production.

Wheelabrating – Shot blasting with steel grit or shot thrown from a spinning wheel patented by Wheelabrator Fyre.

Winding – High-speed process of twisting spring-tempered wire into a helix by machines specifically designed for such an operation.

Wire Forming – Use of the latest CNC equipment to ensure accuracy of wire formed parts.

If you require more technical information, we are just a phone call away to provide as much as you need.

At Hardware Products, we take great pride in our personalized customer service. From spring research and development to prototype, and then through small, medium, and high-volume production to SpringLink inventory management, our dedicated team of spring specialists is here to add value to every step of the spring manufacturing process.

Contact us now to start a conversation with one of our spring geeks.



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