# SPIROL®

**COILED SPRING PINS FOR COSMETIC CASE HINGES** 

# **SPIROL®** Series 550 **©** Cosmetic Coiled Pins

The unique flexibility of the Series 550 Cosmetic Coiled Pin makes it the ideal hinge pin for compact cases.



The Series 550 Cosmetic Coiled Pin's seam is prepared with a beveled edge to ensure that there are no high spots at the seam.

The use of a Cosmetic Coiled Pin will simplify your design and manufacturing process. Assembly is easier and less expensive, and the hinge performance will exceed swing torque requirements.

Uniform radial spring force results in controlled hinge movement and a hinge quality that remains consistent over time.

Controlled hinge movement is achieved with wider tolerances and lower molding costs than with a solid pin or cut wire.

Low insertion force and compression of the pin during installation minimize hinge stress and scrap.



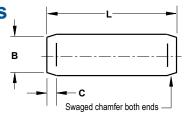
Constant radial force

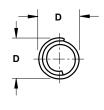
Contact **SPIROL** for design assistance: ca.SPIROL.com/Cosmetic-Design



## **SERIES 550 COSMETIC** COILED PINS

# **Specifications**





Nominal Diameter	Dim. "D" Pin Diameter		Dim. "B" Chamfer Diameter	Dim. "C" Chamfer Length	Recomi Hole Di		Dim. "L" Standard Lengths (Tolerance = ± 0.25)					
	Min.	Max.	Max.	(Ref.)	Min.	Max.	6	8	10	12	14	16
1.2	1.27	1.35	1.15	0.40	1.19	1.22						
1.5	1.60	1.68	1.40	0.50	1.49	1.53						

Standard Material Nickel Stainless Steel SAE 302/304, 1.4310 (18-8)

Standard Finish Plain - Oil Free

### **Design Guidelines**

The use of a Series 550 Cosmetic Coiled Pin will simplify design as misalignment of the inner and outer holes to provide friction is no longer necessary. Intentional misalignment is difficult to control in production and induces stress in the hinge area causing cracking and pin fallout.

- Misalignment should not exceed 0.05mm.
- 60% or more pin length retained by the inner hole.
- Minimum bearing surface in either hole should exceed three times the diameter of the pin.
- The inner hole depth should be at least 0.35mm deeper than the retained pin length to prevent breaks at assembly.
- The holes in the cover and the base should be precision matched to achieve maximum friction swing torque.

# **Pin Installation Technology**

The Model HC, Horizontal, Dual Pin Inserter was developed specifically for installing Series 550 Cosmetic Coiled Pins into plastic hinges.

This machine dramatically increases production efficiency with minimal operator training and effort.



SPIROL offers complimentary Application Engineering support! We will assist on new designs as well as help resolve issues, and recommend cost savings on existing designs. Let us help by visiting Application Engineering Services on SPIROL.ca.

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