

# Coiled Spring Pins (Spirol Pins)

Offering strength and flexibility, our coiled pins are one of the most versatile pins available

## **Spring Tension Coiled Pins**

Coiled spring pins consist of 2-1/4 coils of spring steel or stainless steel and have swaged chamfers at each end. They are designed for plain drilled holes, but countersinking makes insertion easier.

Coiled pins are available in either standard duty (ISO 8750) or heavy duty (ISO 8748) to provide options for strengths, flexibility and diameter.

Heavy Duty: ISO 8748 / BS 7057 / DIN 7344, typically used in high shear strength applications and hardened host materials.

Standard Duty: ISO 8750 / BS 7058 / DIN 7343, offer the best balance between flexibility and strength and are recommended for most applications.

### Advantages of Coiled Pins

- The coiled design improves shock absorption as the load is spread over more than one coil.
- Assembly is easier as the insertion force needed is lower.
- The pins cannot interlock when in bulk, which is a benefit when they are to be barrel plated or installed using bowl-fed equipment.

### **Standards**

### **Materials**

- ISO 8748—Heavy Duty
- BS 7057—Heavy Duty
- DIN 7344—Heavy Duty
- ISO 8750—Standard Duty
- BS 7058—Standard Duty

- Spring Steel
- Austenitic Stainless Steel

#### **Finishes**

Coiled pins are normally supplied with a plain oiled finish. Steel pins may be given a protective finish such as zinc, phosphate, etc but for electrolytically applied finishes it is essential to de-embrittle the pins immediately after plating.

Since the de-embrittlement process is not completely reliable, non-electrolytic finishes or stainless should be used for safety-critical applications.

Where pins are to be used in plastic assemblies, it is recommended that they be de-oiled before use to avoid embrittlement of the plastic.



Nominal Diameter, mm	0.8	1	1.2	1.5	2	2.5	3	3.5	4	5	6	8	10	12	14	16
Expanded Diameter																
ISO 8750 min	0.85	1.05	1.25	1.62	2.13	2.65	3.15	3.67	4.20	5.25	6.25	8.30	10.35	12.40	14.45	16.45
max	0.91	1.15	1.35	1.73	2.25	2.78	3.30	3.84	4.40	5.50	6.50	8.63	10.80	12.85	14.95	17.00
ISO 8748 min				1.61	2.11	2.62	3.12	3.64	4.15	5.15	6.18	8.25				
max				1.71	2.21	2.73	3.25	3.79	4.30	5.35	6.40	8.55				
Recommended Hole Size min	0.80	1.00	1.20	1.50	1.99	2.49	2.99	3.48	3.98	4.95	5.95	7.93	9.93	11.90	13.85	15.85
max	0.84	1.04	1.24	1.60	2.10	2.60	3.10	3.62	4.12	5.12	6.13	8.17	10.20	12.22	14.25	16.25
Minimum Double Shear Strengths – Tested to ISO 8749, kN																
Spring Steel (ISO 8750)				1.45	2.5	3.9	5.5	7.5	9.6	15	22	39	62	89	120	160
Spring Steel (ISO 8748)				1.9	3.5	5.5	7.6	10	13.5	20	30	53				
Stainless Steel (8750)				1.05	1.9	2.9	4.2		7.6	11.5	16.8	30				