

TRU  **WAVE**[®]

Wave Springs & Spiral Rings



 **ROTOR CLIP**[®]

Designed for Quality



Rotor Clip Company produces coiled flat wire spiral ring and wave spring products in addition to its full line of tapered and constant section retaining rings.

Customers can take advantage of vendor consolidation by purchasing all of these items from a manufacturer known for its quality and reliability around the world.

**Certified to:
ISO/TS 16949
ISO 9001
AS9100
ISO 14001**

**Online Specs:
www.rotorclip.com**

SPIRAL RINGS

These rings provide the following advantages:

- 360° contact with the groove.
- No stamping burrs that can damage shaft/housing.
- Capable of withstanding higher axial loads than stamped parts.



Spiral rings are available in numerous configurations to tolerate a wide range of thrust loads.



TruWave® SPIRAL RINGS

This product combines a standard spiral ring with a wave spring by having an axial wave form in a retaining ring design.

- Ideal for compensating axial play because of tolerances, thermal expansion, etc.
- Provides more points of contact compared to a bowed retaining ring.
- Eliminates shims.



The waves of the internal NKG (L) and external NCG (R) TruWave rings compensate for accumulated tolerances.

MATERIALS AVAILABLE

Carbon Steel • Stainless Steel (AISI 302 & 316, PH-17-7)
Beryllium Copper

FINISHES AVAILABLE

Oil Dip • Passivation • Zinc Phosphate



TruWave® WAVE SPRINGS (SINGLE TURN & MULTI TURN)

- Space savings in axial direction - 50% of the operation height could be reduced versus a coil spring.
- Bending load in the waves guarantees 100% axial transmission of load.
- Requires handling of only one spring compared to stacked disc springs / wave washers.
- Unlimited range of forces could be created by using the factors of wire size, wire form, number of turns, turn configuration, number of waves, and wave form.



Rotor Clip Wave Spring part numbers:

GAP SINGLE TURN/OVERLAP SINGLE TURN:
Metric (**MST**)/Standard Inch (**SST**)/Narrow Inch (**NST**)

**MULTI-TURN PLAIN ENDS/
MULTI-TURN SHIM ENDS:**
Metric: Light (**MWL**)/Medium (**MWM**)/Heavy (**MWR**)
Inch: Light (**WSL**)/Medium (**WSM**)/Heavy (**WSR**)



MATERIALS AVAILABLE

Carbon Steel • 17-7 Stainless Steel • AISI 302 Stainless • AISI 316 Stainless • A286
Inconel X-750 • Elgiloy • Hastelloy C276 • Beryllium-Copper • Phosphor-Bronze

FINISHES AVAILABLE

Oil Dip • Vapor Degreased & Ultrasonic Cleaned (Stainless) • Passivation • Black Oxide • Phosphate • Vibratory Deburr

WAVE SPRING / SPIRAL RING INTERCHANGE

WAVE SPRINGS			SPIRAL RINGS			SPIRAL RINGS		
ROTOR CLIP®	Spirolox®	Smalley®	ROTOR CLIP®	Spirolox®	Smalley®	ROTOR CLIP®	Spirolox®	Smalley®
SST	TR/TB	SSR	KL	UR	VH	MKM	ZRM	-
NST	-	SSR Size-N	CL	US	VS	MCM	ZSM	-
MST	TR/TB	SSB	KM	RR	WH	MKR	ZRT	-
WSL	CML	C/CS	CM	RS	WS	MCR	ZST	-
WSM	CMM	C/CS	KR	RRT	WHT	MKG	ZRH	-
WSR	CMH	C/CS	CR	RST	WST	MCG	ZSH	-
MWL	-	CM/CMS	KG	RRN	WHM	KLM	-	VHM
MWM	-	CM/CMS	CG	RSN	WSM	CLM	-	VSM
MWR	-	CM/CMS	DKR	-	DNH	MKA	-	EH
			DCR	-	DNS	MCA	-	ES
			DKL	-	FH	NKG	-	WHW
			DCL	-	FS	NCG	-	WSW
			KLR	-	FHE			
			CLR	-	FSE			

ALL RINGS HAVE A FUNCTION

Any Company Can Make a Retaining Ring, But Only Rotor Clip Can Make Them All

We Offer Choice: We Provide Solutions.

We don't waste your time trying to sell you a certain ring because that happens to be the only one we make.

It's about your application and what you need to make it work. Tapered Section, Spiral, Constant Section... One isn't "better" than the other. But one can save you money over the others, if you select the right one for your requirements.

Let our engineers help you find the one ring that works best for you, not the one that's best for us to sell you.

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