

Tapered/Constant Section Rings **Finishes**



PHOSPHATE COATING (PA) - This standard finish is recommended over unfinished plain steel since it offers an extended shelf-life protection against rusting. **THERE IS NO ADDITIONAL CHARGE FOR THIS FINISH.**

PHOSPHATE AND OIL (PD) - This finish provides 8-hour salt spray protection.

PHOSPHATE WITH SEALER (PAL) - A coating is added to the finish to control loose phosphate crystals on the surface of the part.

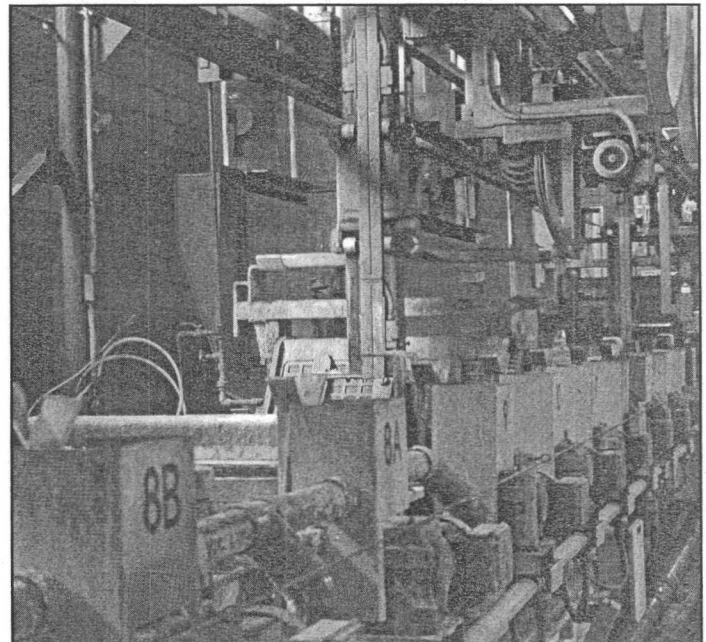
HEAVY PHOSPHATE AND OIL (HPD) - This finish provides 72 salt spray hours and can be used in place of costly stainless steel material in some applications. (Contact Rotor Clip Technical Sales for more information).

ZINC PLATING (ZD) - This coating features a yellow dichromate post plating finish. It affords the metal excellent salt spray protection (96 hours) and is particularly effective for applications exposed to seawater. Rotor Clip SAE 1060-1090 steel retaining rings are zinc plated using a mechanical plating process, which effectively eliminates hydrogen embrittlement.

ZINC BRIGHT (ZF) - Most of the dichromate is leached out of this process, leaving a "bright" silver finish on the parts. ZF offers some corrosion protection (48 hours), but is widely used when the aesthetics of the part are a factor.

ZINC DICHROMATE w/SEALER (ZDL) - This improved finish offers corrosion protection of up to 240 hours of salt spray protection. (**Heavy Zinc Dichromate with Sealer - HZDL** - offers 480 hours of salt spray protection.) It is a low cost substitution for costly non-corrosive materials such as stainless steel in some applications. Call for additional information.

TRIVALENT CHROMATE over ZINC (Z3X) - This coating meets global requirements for hexavalent-free coatings. **Z3X**, trivalent with a sealer, affords 240 salt spray hours of protection. RoHS & ELV compliant.



OIL OVER STEEL (OIL) - Used for Constant Section Rings, an oil finish is applied over carbon steel to offer an extended shelf-life protection against rusting. No salt spray protection.

Finish	Code	Description	Salt Spray Hours	Color
Phosphate	PA	Shelf-Life	-	Black
	PD	Phosphate and Oil	8 (Red Rust)	Black
	PAL	Phosphate with Sealer	-	Black
	HPD	Heavy Phosphate and Oil	72 (Red Rust)	Black
Hexavalent Chrome	ZF	Zinc Bright	48 (Red Rust)	Silver
	ZD	Zinc Dichromate	96 (Red Rust)	Yellow
	ZDL	Zinc Dichromate Sealer	240 (Red Rust)	Yellow
	HZDL	Heavy Zinc Dichromate Sealer	480 (Red Rust)	Yellow
Trivalent	Z3X	Trivalent Chromate Zinc plus Sealer	96/240*	N/A
Optional Color Coding Finishes	ZFF	Zinc Flash	None	Silver
	CF	Copper Flash	None	Copper
	OIL	Oil Over Steel - Shelf Life	-	Black

* White Corrosion/Red Corrosion

NOTE: Electroplating can not be successfully done with steel retaining rings due to the problems encountered with hydrogen embrittlement.

