

WHY ARE MY BOLTS RUSTING FASTER THAN BEFORE?

This isn't simple or easy but you buy or use bolts and nuts or you wouldn't have read this far. The basic finish on 90% of commercial fasteners is Zinc Plating, and the basic spec is ASTM B633. The default coating thickness is .0002" or "two tenths". On top of that coating goes a chromate dip to "seal" or "finish" the parts. For many years the standard chromate was hexavalent in either clear (keeping the parts silver) or yellow dichromate (making the parts yellow tinged) which provides a superior salt spray resistance.

SO TO RECAP ...

.0002 zinc and clear chromate (12-24 hour salt spray). .0002 zinc and yellow dichromate (96 hour salt spray).

Pretty basic stuff and hadn't changed for 40 years until... Erin Brokavich!!

To our shock and dismay the hexavalent chromate (CR6) we were coating the bolts with is and was poisoning the air and water and ground. So...led by those thoughtful people in the European Union we are migrating from Hexavalent Chrome to Trivalent Chrome. Less harmful and less dangerous but also sadly, less corrosion resistance. Your 3/8-16 x 1 Grade 5's out there on the swing set that used to hold up for 7 years are now showing rust in 3 or 4. The up-side is that we collectively are not poisoning the ground water for our children and grandchildren but the down-side is that trivalent isn't as good as hexavalent at preventing corrosion.

WELL WHAT AM I GOING TO DO ??

Plan A...a 96 hour topcoat over the trivalent zinc. Plan B...a long-life spin dip coating. Plan C...Zinc Nickel plating

OT... ASK YOUR FRIENDLY DUNCAN BOLT SALES PERSON FOR HELP!



<u>1-800-798-1939</u> <u>www.duncanbolt.com</u> <u>sales@duncanbolt.com</u>

The information presented is believed to be accurate at the time of publication, however is subject to change without notice. It's use is voluntary and the sole responsibility of the user.