

Society of Tribologists and Lubrication Engineers



Hudson-Mohawk Section
Presents

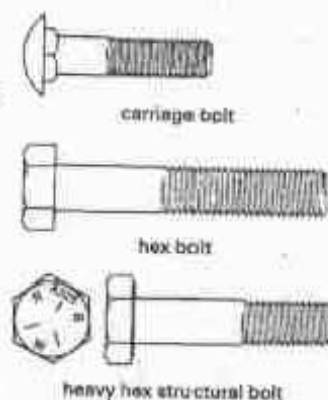
Tribology-Related Fastener Failures - a PDH

By

Neville Sachs, President

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We use them by the millions to hold our mechanical world together and they all function by **friction**. And fasteners are complicated: there are now FOUR standards for identification of steel US thread nuts and the marking systems for both US and metric stainless fasteners have changed substantially. SSA has been doing a lot of experimenting and the results really challenge what we see in fastener handbooks and texts. For example, they took a series of bolts, lubricated them once, then tightened them several times with little change in the torque vs clamping force, concluding that lubricant additives may have had a significant effect. He will also describe some interesting failures, including four 3.5" diameter, 193" long bolts, where retightening stopped the fatigue crack growth.



Neville has been a long-distance member of our Section for several years. He is a graduate of Stevens Tech, majoring in mechanical and chemical engineering and has been engaged in plant reliability and failure analysis for over 35 years. He is also ASNT qualified for a variety of nondestructive testing techniques. He is not only an STLE Certified Lubrication Specialist but has also been active on the CLS committee for several years. He's a licensed Professional Engineer with many technical papers and textbook chapters to his credit and has published "Practical Plant Failure Analysis". His company provides technical support services devoted to improved plant and equipment reliability. Their capabilities include vibration monitoring, mechanical failure analysis, corrosion and materials engineering, design reliability analysis, and a wide variety of nondestructive examinations methods. This program qualifies as a **Professional Development Hour** but will also be interesting (failures always are!). Come out and hear one of our favorite speakers!

This meeting, with a hot buffet dinner (\$10 per person, \$5 for *spouses* and students) afterwards, will be at:
Niskayuna Fire District #2 Firehouse Classroom, 2772 Troy-Schenectady Rd. - See Map
6:00 p.m., Thursday, October 22, 2009

For reservations call John or Marilyn Lange (518-882-6373), or email johnalangejr@aol.com by Tuesday Noon, October 20 at the very latest. Please take care of this right away. Thanks.

November 19 - Another Special Event!
Bill Delozier will take us into the world of the Teeny-Weenies:
Miniature ball bearings in small fans.