

Press Release

June 9, 2015

From: Holly Hanson, Director, Cumberland Business Incubator

SUBJECT: Cumberland Business Incubator tenant adds Nano Fluid Technology to their Product Line

Coolants and Cleaners, a Cumberland Business Incubator tenant business, has added Tool X Metal Working Fluids to their product line. Tool X is a nano fluid that allows solid nano particles to be put in a stable colloidal suspension in a cutting fluid coolant.

The nano fluid improves tool life, increases speeds and feeds, improves Ra/surface finish and lowers the heat of the cutting fluid. Over 50 companies with CNC machines, saws, thread rollers, cold header and other machines are utilizing the fluids in their applications including milling, boring, grinding, broaching, gun drilling, sawing, cold heading, forging and stamping.

Tool X is a company of experienced engineers in metal working, coatings and metallurgy with over 50 years combined experience in nanotechnology. Jim English of Tool X developed the first Nano Fluid on the market. Tool X utilizes nano carbon technology with three unique qualities: graphene shell, nano onions, and Sp³ carbon. The nanoparticles act as a slurry reducing abrasive wear, preventing metal to metal adhesion between tool and material. Nanoparticles flatten asperities on the tool tip, while hardening the metal surface and filling micro-cracks, preventing pitting.

Tool life increases of >400% were achieved in reaming applications in cylinder heads with Tool X, gun drilling tool life was increased from 200" per tool to over 500" with Tool X, saws used in steel mold making went from 1000 cuts per blade to over 1900 cuts with Tool X. Double tool life in milling and broaching applications are being achieved in automotive OEM applications. Davenport and Swiss Screw machines have achieved reduction in cycle times from 36 seconds to 28 seconds. Doubled die life in titanium and stainless steel thread rolling applications have been achieved in an aerospace fastener company in Chicago.

Coolants and Cleaners is located within the Cumberland Business Incubator on the Roane State Community College campus, 2569 Cook Road, Crossville TN 38558. They supply metalworking fluids and absorbents to manufacturing businesses in Alabama, Mississippi and Tennessee, including providing Qualichem products to the Tennessee College of Applied Technology locations throughout Tennessee.

Coolants and Cleaners has a generous sample program so that companies can evaluate the advantages of products in their specific applications. For more information about Tool X and other products contact Steve Randall at steve@coolantsandcleaners.com 931-210-4466 or 1-800-775-3584, website www.coolantsandcleaners.com.

For more information about the Cumberland Business Incubator and Maker Space, visit www.cumberlandincubator.com or call (931) 456-4910.