

## Newsletter – July 14, 2015

### New Map of Certified XL Tribometrists

Those searching for a Certified XL Tribometrist can now use our interactive map to help locate CXLT's in a specific location. Please note that only those CXLT's electing to share their contact information are displayed on the map.

[CXLT Registry with Map.](#)

### Related Articles:

There are many peer reviewed published papers with valuable information for English XL VIT users.

Last month we highlighted “Prediction of slips: an evaluation of utilized coefficient of friction and available slip resistance” by J. M. Burnfield and C. M. Powers. This article demonstrated that the probability of a slip event (during level walking among pre-qualified, healthy, young adults in a laboratory setting) can be predicted if the available slip resistance as measured by the English XL VIT and the individual's utilized COF are known.

The “Prediction of slips” by Burnfield and Powers, Journal of Forensic Sciences, Volume 47, Issue 6, November 2002, and Ergonomics Vol. 49, No. 10, 15 August 2006, 982–995 can be purchased and downloaded at [Taylor and Francis Online.](#)

uCOF	Min	Max	Mean	Stdev
Level walking	0.14	0.31	0.21	0.04

There are studies that show more data that should be useful to us in understanding the variations within traction demand in humans. The following study used subjects from three different age groups, classifying the traction demand for each age group, gender, and walking speed (again, during level walking among pre-qualified, healthy adults in a laboratory setting).

The “Influence of Age and Gender on Utilized Coefficient of Friction during Walking at Different Speeds,” Metrology of pedestrian locomotion and Slip Resistance, ASTM STP 1424, M.I. Marpet and M.A. Sapienza, Eds., article can be purchased and downloaded from [ASTM STP 1424](#)

Measured uCOF	Min	Max	Mean	Stdev
Slow walking	0.14	0.35	0.22	0.04
Medium walking	0.17	0.39	0.24	0.04
Fast walking	0.13	0.44	0.26	0.06
Males Slow Walking	0.14	0.33	0.20	0.04
Females Slow Walking	0.14	0.35	0.24	0.04
Males Medium Walking	0.17	0.39	0.23	0.05
Females Medium Walking	0.18	0.31	0.24	0.03
Males Fast Walking	0.17	0.44	0.28	0.07
Females Fast Walking	0.13	0.34	0.24	0.05
Middle Age Males, Fast walk	0.22	0.44	0.32	0.09

The test subjects are 6 sets of 10 people walking - 60 subjects, 10 of each gender in 3 age groups (young, middle-age, and senior) walking at three different rates (unloaded, straight-line walking).

This data shows that the mean traction demand for walking lies somewhere near 0.24. The range goes from 0.13 to 0.44 for the entire data set from a group of only 60 test subjects.

### **New Certified XL Tribometrists**

The CXLT Program once again received strong support and rave reviews. Our last class was held in May, 2015, in Philadelphia. The new and returning CXLT's are listed below and on the website. Congratulations to all!

Click here for the [CXLT Registry with Map](#).

Stephanie Whetsel Borzendowski	Applied Building Sciences, Inc.	
Walter E. Green	Fleisher Forensics	
David S. Komm	Augspurger Komm Engineering, Inc. & BTI Consultants	
Thomas M. Kosanda	Rimkus Consulting Group, Inc.	
David J. Littlewood, P.E.	Fleisher Forensics	
Andres I. Navarro	Kimley-Horn and Associates	
Darrin Richards	BIORECON Engineering	
Michael A. Sapienza	Sapienza Consulting, LLC	
Todd A. Springer, Jr.	Augspurger Komm Engineering, Inc. & BTI Consultants	
Mark E. Williams, AIA, NCARB	Robson Forensic	
James J. Bernitt	LGI Forensic Engineering, P.C.	Former
Thomas Pienciak	Robson Forensic	Former
Oswaldo Arevalo	Sdii Global Corporation	Former
Scott A. Cameron, R.A.	LGI Forensic Engineering, P.C.	Current

**Next CXLT Program: November 9 – Denver, CO**

The next CXLT Certification Program will be conducted by EXCEL TRIBOMETERS, LLC on Monday, November 9, 2015 in Denver, CO. The class will be held at the Courtyard Denver Airport. A block of rooms has been reserved at a special rate of \$139.00 per night for the night of November 8. Contact the hotel directly for room reservations at (303) 371-0300, or [reserve online](#).

Courtyard Denver Airport  
6901 Tower Road  
Denver, CO 80249-6338

The current program is constantly being improved with expanded sciences and extensive hands-on instruction with the instrument to maximize the value of your investment. First time CXLT program participants, experienced English XL users wanting a refresher, as well as CXLT's choosing to retake the course and test to maintain their current status, have all touted the program.

To read comments received, check out: [CXLT Program Testimonials](#)

**All English XL VIT Owners Should Consider the CXLT Program**

We encourage anyone who uses an English XL VIT but has never attended the CXLT Program to do so. Participation helps to ensure your competence and understanding of the sciences and principles of walkway safety and slip resistance metering. It also teaches and reinforces the proper and accurate use of the English XL VIT. Please consider the importance of your participation in this program.

Holding the CXLT certification assures your recognition and respect as an expert who is knowledgeable, competent, and proficient in walkway safety, meaningful tribometry, and in the use of the English XL VIT. Anyone needing to perform a competent risk assessment of a walkway or evaluate flooring and footwear products, needs to establish a strong foundation in the principles of safety engineering, the sciences of walkway safety, the scientific and mechanical aspects of the available slipmeters, and the effects of reasonably foreseeable variables on the performance of walkways and slipmeters. The certification also shows that the CXLT had extensive hands-on instruction in the proper use of the English XL VIT and proved his or her proficiency with the most respected slipmeter.

Please be sure to review the updated and expanded [CXLT Certification Program](#) on the EXCEL TRIBOMETERS, LLC website. On-site programs are available for organizations with a large staff interested in tribometry and walkway safety.

### **What to Send for Instrument Calibration**

Instrument Calibration ensures your English XL VIT slip resistance testing system is in optimal condition. Make sure you send all components of the system when it is time for annual Instrument Calibration: your English XL VIT, your certified test foot calibration tile, and your Sander (if you have one).

The Sander has been used for the past two years to certify all calibration tiles. If your tile was certified more than two years ago, ship it with your instrument at your next annual Instrument Calibration, and your tile will be recertified at no additional charge.

To order the Sander or a Certified Calibration Tile, call us or order online: [Sander](#) and [Tiles](#)

### **Storing, Packing and Shipping Your English XL VIT**

The English XL VIT soft carrying case is designed to fit only the instrument in the center compartment and its necessary accessories in the outer pouches. If you put other objects in the case with the meter, you risk damaging your instrument during shipment.

When shipping your English XL VIT for annual Instrument Calibration, remove everything except the meter from the carrying case. Your calibration tile and Sander should be bubble wrapped and placed in the same packing box, but not in the soft case with the meter. Put the slipmeter in the soft case with the mast set to 0.05 slip resistance on the protractor (nearly vertical).



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Fill the space in the soft case over the instrument with bubble wrap or air pillows to keep the meter seated at the bottom of the case.



Snap the case closed and put it in a box with enough packing materials such that nothing moves when shaken.

We value your input and questions and look forward to hearing from you. All of your comments and concerns are welcome and will be thoroughly addressed. Your communications are treated with respect and kept in the strictest of confidence. You may contact Peter directly at (757) 897-2853 or by email at [pwidas@exceltribometers.com](mailto:pwidas@exceltribometers.com)

Thank you for your participation in the continuing efforts for advancements in the field of walkway safety and meaningful tribometry.

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Vice President, Chief Operating Officer

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