

## Newsletter – March 11, 2015

### English XL VIT F2508 Certification ILS Completed

EXCEL TRIBOMETERS, LLC recently conducted an Inter-Laboratory Study (ILS) using a set of the four ASTM F2508 reference surfaces, satisfying all F2508 Validation, Calibration, and Certification criteria. Thank you again to those who participated.

January 2015 ILS Results:

Surface	Mean, Xbar	Repeatability Std Dev, Sr	Reproducibility Std Dev, SR
A	0.110	0.007	0.011
B	0.184	0.009	0.015
C	0.227	0.014	0.032
D	0.706	0.020	0.051
C1028 r1	0.190	0.012	0.015
C1028 r2	0.185	0.013	0.016

This is not the first time the English XL VIT has satisfied the ASTM Practice E691 ILS protocol. Round robins and ILS's in 1998 and 2000 proved the precision and repeatability of the instrument. The results of those efforts are published in the Red Book on page 69:

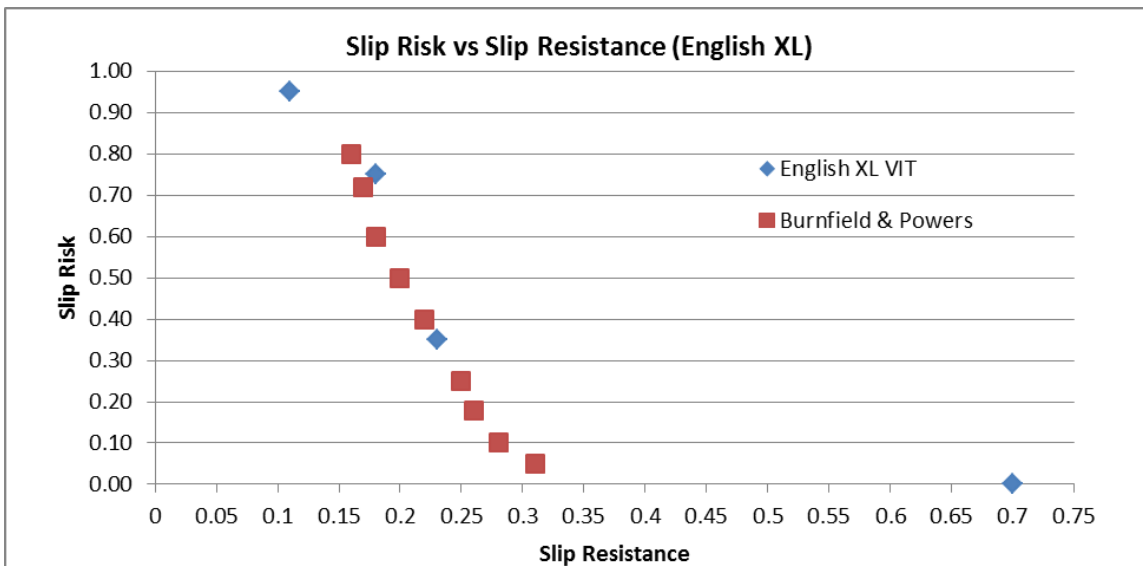
Ceramic Tile Type	Repeatability Std Dev, Sr		Reproducibility Std Dev, SR	
	1998	2000	1998	2000
Dry Smooth	0.043	0.030	0.052	0.077
Dry Quarry	0.013	0.018	0.025	0.054
Wet Smooth	0.023	0.014	0.036	0.035
Wet Quarry	0.009	0.015	0.027	0.043

**Related Articles:**

There are many peer reviewed published papers with valuable information for English XL VIT users. A “Related Articles” section in each newsletter will highlight some of these. The first to be mentioned is “Prediction of slips” by J. M. Burnfield and C. M. Powers:

“Prediction of slips: an evaluation of utilized coefficient of friction and available slip resistance,” 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. This article can be purchased and downloaded at [Taylor and Francis Online](#).

- The purpose of this study was to investigate the relationship between slip resistance, as measured using an English XL VIT, and peak utilized coefficient of friction (uCOF) determined from force plate recordings on the probability of a slip occurring during level walking.
- This study demonstrated that knowledge of a person’s uCOF and the available slip resistance, as measured by the English XL VIT, can be used to predict the probability of a slip event during level walking in young adults. As measures of available slip resistance vary across the type of tribometer used, the study stated that the relationships reported likely apply to only the English XL VIT.
- Figure 4 in the study is of special interest: “Figure 4. Scatter plot showing the relationship between the available coefficient of friction (measured with a tribometer) and the probability of a slip event occurring as calculated by logistic regression.” If the recent English XL VIT F2508 ILS data is plotted on Figure 4, the risk for slip shows a definite correlation.



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

Instrument Calibration is designed to make sure 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 for your next annual Instrument Calibration, and your tile will be recertified at no additional charge.

### **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).



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.

### **New Certified XL Tribometrists**

The CXLT Program once again received strong support and rave reviews. Our last class was held in January 2015 in New Orleans. The new and returning CXLT's are listed below and on the website (click here for the [CXLT Registry](#)). Congratulations to all!

Christopher C. Basile, P.E.	Rimkus Consulting Group	
Michael Collins	Assured Florida Investigations	
Robert M. Funcik	Applied Building Sciences, Inc.	
Randolph J. Harris	Fay Engineering	
Daniel A. Johnson	Daniel A. Johnson, Inc.	Current CXLT
Jason Johnson	EcoLab	
Sam Kodsi	Kodsi Engineering, Inc.	Current CXLT
Stephen F. Lander	Rimkus Consulting Group	Current CXLT
Cristin McCarty, M.P.H., Ph.D.	Kodsi Engineering, Inc.	
William J. Moran II	US Forensic	
Barry E. Parsons	Robson Forensic	
Lawrence H. Reynolds	Marsh Risk Consulting	
Anthony Shinsky	Robson Forensic	
Cassandra Skaarup	EcoLab	
Gary D. Sloan	G. David Sloan, Inc.	Current CXLT
Peter A. Townsend	Rimkus Consulting Group	Current CXLT
Wilbur T. Yaxley	Consulting Engineer	Current CXLT

**Next CXLT Program: May 5 - Philadelphia, PA**

The next CXLT Certification Program will be conducted by EXCEL TRIBOMETERS, LLC on Tuesday, May 5, 2015 in Philadelphia, PA. The class will be held at the Philadelphia Airport Marriott. A block of rooms has been reserved at a special rate of \$179.00 per night for the night of May 4. There is a large convention in Philadelphia during this time, so we recommend reserving your rooms as soon as possible. Contact the hotel directly for room reservations at (215)-492-9000 or reserve rooms online: [Online Reservation](#)

Philadelphia Airport Marriott  
One Arrivals Road, Terminal B  
Philadelphia, PA 19153

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 please do so. Participation helps to ensure your compliance and understanding of the science 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.

### **Standardized Test Foot Preparation – The Sander**

EXCEL TRIBOMETERS, LLC is now accepting orders for the Sander, the English XL VIT standardized test foot preparation device. Make your life easier and your results even more precise and repeatable. To order, call us or order online: <http://www.exceltribometers.com/index.php?page=parts-and-supplies>

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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