Wireless Monitoring of winding Roll Pressures
Tim Walker, TJ Walker & Associates, Inc. / Tekscan

Winding is a dynamic process. The final roll is the product of all that happens from roll start to final cutoff. Nearly all roll measurement methods try to characterize a roll's structure after winding is completed. This is like understanding why a plane crashes from diagnosis of the debris. What winding needs is the equivalent of a 'black box.' Something that can help us understand what is happening during the winding process. This presentation will present data on a method to measure how stresses build up within a winding roll by monitoring internal roll pressure using thin resistance-based pressure sensors and wireless data collection.