Session 8 – Product Approvals Internationally vs. North America

Product Approval

- Acceptable To The Authority Having Jurisdiction
  - Canada - Certified to a CSA Standard (also IECEx standards are acceptable)
  - Europe - Approved By Accredited Testing Agency To CENELEC Standards

    - Now Includes ATEX Directives With $C\epsilon$ Marking

    - Marked "Ex"

  - IEC - Approved By Accredited Testing Agency To IECEx Standards

Product Approval - International

- Approval To IEC Standards
  - IEC Does Not Have Testing (At This Time…) with exception of IECEx and new introduction of IECEE
  - Many Countries "Adopt" IEC Standards
    - May Include "National Deviations"
    - Tested To An Adopted Standard & Marked With "Ex"
  - Manufacturers May Declare as "Complying With IEC Standards"
    - This Is not an Approval
    - Some Products Don't Require Approval
    - May find type-testing or other testing for certain IEC products such as Motor Controls & Switchgear

How Do Product Approvals Compare?

Product Approval Requirements			
CEC	NEC	CENELEC	IEC
Must Be Tested & Approved To CSA Standard By Accredited Testing Agency UL, CSA and others	Zone Products Must Be "Listed" to ANSI Std. Division Products Acceptable In Zones UL, ETL, FM, CSA	Must Be Tested To EN Std. By Accredited Testing Agency ATEX 7/1/2003	Through Country ACB Little or no country deviation

- Criteria for Evaluating or Testing Products By an Accredited Certification Organization
  - USA
    - ANSI Are The National Standards
    - UL, FM, ISA, MSHA, Coast Guard… write Standards
      - May Not Be ANSI Standards
  - Canada
    - Canadian Standards Association - CSA
      - Fire Alarms by Underwriters Laboratories Canada Ltd.
  - Internationally
    - CEN, CENELEC, IEC and various country specific standards including DIN, BSI, NORSOK, etc.