ISD Spring Technical Event
May 10-11, 2013

Session	Presenter	Length
Fugitive emissions [Key Note] • Fugitive emission • Legislation • Certified valve packing technology • Valve sealing performance standards (comparison) • Teadit 2236 • New products development	Teadit – Ron Walters	1 hour
Fluoropolymer Basics and Applications This talk will cover the fundamentals of fluoropolymer materials and applications where they are utilized. Topics covered: -Tools for solving problems that cannot be resolved with traditional elastomers -Examine considerations when choosing a fluoropolymer in reference to design, application, and cost -Instruction on the process for choosing the correct fluoropolymer for specific applications -Provide instruction on formulating and processing fluoropolymers Specific materials to be reviewed: -Fluoroelastomers (FKM) -Perfluoroelastomers (FFKM / PFE) -Fluoroplastics (PTFE, FEP, THV, PVDF, etc.) Those attending should have a basic understanding of elastomers and their end-use applications. The class will provide instruction on how to make decisions of choosing the correct fluoropolymer for the right application. Primary focus will be on elastomers with some additional information on plastics.	**Ed Cole** - Sr Chemist 3M Advanced Materials Division	2 hours
Principles of the Bolted Joint Assembly Best practices in assembling a bolted joint will be taught, utilizing a JJenco FADU (Flanged Assembly Demonstration Unit). Concepts shared include use of proper tools, bolt interaction, gasket technology, load deflection curves, etc. This is a most powerful and visual representation of the impact that choices regarding products and methods make in sealing ability of a flanged assembly.	Teadit – Joel Baulch	2 hours 10-15 students
Rubber Manufacturing Processes: How Rubber Polymers are Constructed This is a general technical presentation on what kinds of ingredients are used to make the various varieties of rubber sheet used in the gasket and sealing business. Background on these materials will explain why neoprenes, EPDMs and SBRs are considered appropriate alternative compounds for sealing widely divergent applications. Extenders, ozone resistances, oils and fillers are lesser ingredients that enhance a compounds resistance to sealing uses.	American Biltrite - Paul Smith	2 hours

Emphasis will be given to learning what compounds can be chosen for oil resistance, oil proof-ness, weather resistance, wear resistance, tear resistance and other demands of the environment. Like baking a cake, choices of ingredients can alter the end result of what's made. There will be a of couple case studies highlighting misuse vs desirability.		
Mechanical Seal Evolution & Theory The primary objectives of the session will focus on the function of the various components of a mechanical seal and the fundamental concept of how they work. The PowerPoint presentation will also include a brief examination of the three factors that influence sustainable reliability and methods of controlling them.	Sepco – Tommy Seales	2 hours
How to make rubber seals: Discussion and Shop Tour. Tour through productions areas including Rubber Lab Mold Shop Rubber Prep Molding Deflashing Inspection Packaging A more in depth discussion of the above topics than the Shop Tour noted below, this session will cover Injection, Transfer & Compression Molding Operations. Attendees will observe specific operations in order to get a better feel for methods used and difficulties encountered during production.	Precision Associates	2 hours
Shop tour: Tour through productions areas including Rubber Lab Mold Shop Rubber Prep Molding Deflashing Inspection Packaging Clean Room Tour will give a quick overview of these operations used by Precision Associates.	Precision Associates	1 hour
Rubber Testing & ASTM D2000 Attendees will see a presentation that covers the ASTM specification D2000, and visit a rubber lab. Attendees will observe the specific tests required for this specification as well as other laboratory operations. ASTM D2000 Physical Properties Testing includes: • Tensometer (Tensile, Modulus, Elongation, Tear Resistance, Bond Strength) • Compression Set • Heat Ageing • Fluid Ageing (Room Temp & Elevated Temp) • Brittle Point Testing Additional Testing subjects:	Precision Associates	2 hours

• Temperature Retraction (TR-10, etc.) • Compressive Stress Relaxation (CSR) • Hardness Testing (Durometer, IRHD) • Specific Gravity • Rapid Gas Decompression (RGD) • Steam Resistance • FTIR • Rheology • Extrusion Resistance		
Medical Product Considerations for Sealing Class includes a discussion of considerations seal distributors should be familiar with when selling to the medical industry, including terms used by the rubber industry as it relates to the medical industry, specification definitions, etc. Includes in depth tour of clean room operations.	Precision Associates	2 hours
Tutorial on Ducting, & elastomeric expansion joints – Part A & Part B This technical training session will provide an intermediate level of exposure for high temperature fabric expansion joints. We will discuss: • Intended purpose of expansion joints, • Where they are used in typical power and process plants, • Selection of materials, • Applications for expansion joints, • Importance of why certain types of joints work better in specific applications, • How to locate and analyze the condition of in-service expansion joints, and • How to offer solutions to existing problems for plant staff. Attendees should have a very basic understanding of expansion joints. The class will teach the foundational knowledge needed to ask the right questions to get the information needed for the proper design and quotation of expansion joints, and will build on the Sealing Your Success e-Seminar planned for January 18. Leading the session is an industry expert with 27 years of expansion joint design and field experience, so please bring your questions and don't miss this training session."	Holz Rubber	4 hours; 2 hours each Part
How to pack a pump We will review packing selection and installation in a power point overview that lasts 30 to 45 minutes and then we'll move to an actual pump and un-pack and re-pack it (and valve as well) with hands on participation. Limit 10 students per class.	American Braiding	2 hours