EXTRUSION GROUP
Local Service Global Reach

WEBINAR PROGRAM 2022

A warm welcome to join our webinars in this year 2022. Feel free to contact us with any further questions you might have. We are here to support.

February 2	**Process Variables and Interactions** This informative webinar demonstrates the influence of extruder process parameters (screw speed, feed rate, barrel temperature) on system response parameters: torque, specific energy; melt temperature; die pressure; degree-of-fill and residence time. The relationships between these primary process parameters and the resulting extruded product is discussed.
March 2	**Melt Filtration** This webinar, presented by Dan Smith from Maag Americas, will provide an overview of available melt filtration hardware (e.g. fixed screens, continuous vs discontinuous screen changers) and the process implications associated with each type and typical applications. Considerations for specifying and maintaining such equipment will be described.
April 6	**Vacuum Systems for Extruder Applications** This webinar will be presented by Chris Halbach from WinTek Corporation, a leading supplier of process vacuum systems. The presentation will provide an overview of the basics of vacuum technology and describe the various types of vacuum systems available (e.g. water-ring versus oil seal, once-through versus full recovery), with pros and cons of each. Information on how to size vacuum pumps and troubleshooting tips will also be presented.
May 4	**Installation and Commissioning of Twin-Screw Extruders** This webinar will review best practices for efficient installation and commissioning of twin-screw extruders. Since various departments are involved with a new extruder (purchasing, operations, engineering, maintenance, etc.), this presentation will provide some guidelines for site preparation, scheduling of contractors (riggers, plumbers, electricians, etc.) and tips for project managers responsible for starting-up new extrusion lines.
June 1	**Side Feeding Technology** The basic techniques for optimizing the capacity of side feeders is presented in this webinar. While various aspects of side feeding have been described in previous webinars, all of these concepts are assembled into a single presentation for a deep dive on this topic: side feeding position (L/D), proper venting and extruder screw design. Tips for maximizing side feeding efficiency and a troubleshooting guide are also included in the webinar presentation.
July 6	**Extruder Instrumentation and Control Systems** The presentation will provide an overview of basic extruder instrumentation, alarms and interlocks and will cover control system architecture, PLC platforms (e.g. AB, Siemens), communication protocols, recipe management and data acquisition. Integration of related upstream and downstream auxiliary equipment will also be covered in this informative presentation.

August 3	**Screw and Barrel Wear Measurement** This webinar will explain the procedures for conducting wear measurements on extruder screws and barrels which should be an integral part of your preventive maintenance program. Techniques and tooling are described for obtaining an accurate picture of the condition of your machine, critical for proactive replacement of components prior to failure. A review of wear tolerances will also be presented. This is a must-see webinar for all maintenance personnel involved with extrusion.
September 7	**Understanding Extruder Barrel Metallurgy** This webinar will review the standardized test methods used for measuring abrasion and corrosion-resistance and explain how different alloy chemistries provide protection against abrasion and/or corrosion. The presentation will cover surface treatment and heat treatment options, through-hardened steels (wrought, cast and PM) and manufacturing methods for extruder barrels (solid, lined, HIP, cladding) along with the advantages and disadvantages of each. The presentation will explain the many choices available for high performance replacement barrels to reduce the cost per wear and increase component lifetime.
October 5	**Understanding Screw Element Metallurgy** This webinar will provide an overview of standardized test methods used for measuring abrasion and corrosion-resistance and explain how different alloy chemistries provide protection against abrasion and/or corrosion. The presentation will cover surface treatment options, through-hardened steels (wrought and PM) and manufacturing methods for screw elements (bimetallic, crest weldment and cladded/full encapsulated) along with the advantages and disadvantages of each. This presentation will explain the many choices available for high performance replacement parts to reduce the cost per wear and increase component lifetime.
November 2	**Extrusion Tools, Tips and Tricks** This webinar will reveal some of the “tricks of the trade” for assembling/disassembling, maintaining/servicing and operating your twin-screw extrusion equipment.
December 7	**The Compounding Extruder of the Future** Will the next-generation twin-screw extruders operate at higher screw speed (>1500 rpm) or with higher torque density (>20 Nm/cm^3) than the machines available today? Will the evolution of ‘self-driving’ automobiles translate to autonomous manufacturing machinery? Tune-in to this webinar to see what lies ahead for the future of compounding technology…