Extruder Maintenance (Dr. Kirk Cantor) **May 20, 2016**

About the Seminar

This one-day program focuses on proper maintenance of polymer extruders, both single screw and twin screw. Upon completion of this seminar, attendees will be able to:

- describe how to safely maintain and operate an extruder
- identify the primary extruder components requiring maintenance and explain how best to maintain them
- discuss how screw and barrel construction influences wear rate and extruder performance
- describe troubleshooting methods for extruder mechanical problems

What the attendees will learn:

- safety considerations when operating and maintaining extrusion systems
- components comprising the extruder drive system and how to maintain them
- screw and barrel characteristics, including materials of construction, clearance issues, alignment, and maintenance
- extruder instrumentation calibration, installation, and diagnostics
- proper extruder operating procedures
- common methods and materials for purging
- troubleshooting extruder mechanical problems

Who should attend:

- Operators
- Set-up technicians
- Process engineers
- Maintenance mechanics
- Floor supervisors
- Plant managers

LOCATION OF SEMINAR:
D. R. Joseph, Inc.
921 W. Harris Rd.
Arlington, Texas, 76001
+1-817-987-2030

RECOMMENDED HOTEL:
Courtyard Marriot
711 Highlander Boulevard
Arlington, Texas 76015
+1-817-465-5599

Course Description

1. Introduction to Extruders
    - o Single Screw Extruders
    - o Twin Screw Extruders
2. Safety
    - o Moving Parts & Nip Points
    - o Electricity/Grounding
    - o High Temperatures
    - o High Pressures
3. Drive System
    - o Motor
    - o Gearbox
    - o Thrust Bearing
4. Screw and Barrel
    - o Materials of Construction
        - Standard Materials
        - Corrosive Resistance
        - Wear Resistance
        - Specialty Materials
        - Screw/Barrel Material Compatibility
    - o Flight Treatment
    - o Screw/Barrel Clearances
        - Heated Barrel
        - Cooled Feed Throat
    - o Screw/Barrel Wear
        - Mechanisms
        - Indicators
    - o Barrel Alignment
        - Consequences of Misalignment
        - Alignment Techniques
    - o Feed Housing
        - Temperature Control
        - Cooling Channel Blockage
    - o Screw/Barrel Cleaning
        - Pulling Screw
        - Cleaning Screw/Barrel
        - Measurements
        - Breaker Plate/Screen Pack Installation
        - Replacing Screw

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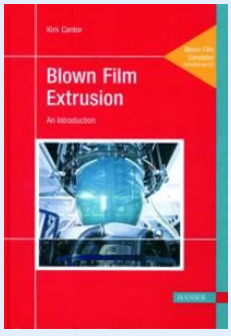
5. Instrumentation
    - o Sensor Calibration
    - o Heater Installation and Diagnostics
    - o Thermocouple Installation and Diagnostics
    - o Pressure Transducers
6. Proper Operation Methods
    - o Start-up
    - o Normal Operation
    - o Shutdown
7. Purging
    - o Material Types
    - o Purging Methods
8. Troubleshooting Mechanical Problems
    - o Vibrations/Unusual Sounds
    - o High/Low Temperature
    - o Low/No Output
    - o Output Instabilities
    - o Excessive Pressure
    - o Vent Flow
    - o Plastic Leakage

Books authored by Kirk Cantor:

- Blown Film Extrusion, includes “Blown Film Extrusion Simulator”



The course fees are:	Through April 22, 16	After April 22, 16
Blown Film Extrusion:	$850.00	$950.00
Extruder Maintenance:	$450.00	$550.00
If taking 2 courses:	-$50.00	-$50.00
3rd attendee discount (5%):		
Total:		

A 5% discount will be given for the 3rd and up attendees from the same company. The course fees include lunch for each day and the handout material.

Cancellations: A refund, less $150.00 cancellation fee, will be made if the registration is cancelled in writing by or on April 22, 2016 REE Inc. reserves the right to cancel one or more seminars or substitute instructors. Should this occur the attendees will be notified. We do not take any responsibility for penalty fees or any other cost that may be incurred due to cancellation. We recommend that you book travel with refundable fares. Registrants who fail to attend are liable for the fees of the course registered for.

Fax registration to: 530-269-1084 or register on-line at www.rauwendaal.com

Name on Card:			
Name Attendee:			
Title:			
Company:			
Billing Address:			
City:		State:	
Country:		Zip:	
Phone:			
Fax:			
E-Mail:			
Additional attendee name:			
Additional attendee name:			
Credit Card	If you use this form you can use the “custom payment box” on the front of our website to use a credit card. Be sure to check “not a PayPal member” put in your total and write me a note that you faxed your registration form. If you have problems call the number on the back of your credit card!		

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