

Post-Conference Event

International Training Program (TechnoBiz) Extruder Maintenance

31 March 2010, Impiana KLCC Hotel, Kuala Lumpur, Malaysia

This one-day program focuses on proper maintenance of polymer extruders, both single screw and twin screw. Topics to be covered include preventative maintenance procedures, hardware measurements, start-up/shutdown procedures, and extruder performance measurements. The emphasis of the program is on maintaining an extruder for long life and high performance. This program is intended for anyone who works directly with extruder. This includes operators, set-up technicians, process engineers, maintenance mechanics, floor supervisors and plant managers of plastic extrusion process.

Program Outline

1. Introduction to Extruders
 - Single Screw Extruders
 - Twin Screw Extruders
2. Safety
 - Moving Parts & Nip Points
 - Electricity/Grounding
 - High Temperatures
 - High Pressures
3. Drive System
 - Motor
 - Gearbox
 - Thrust Bearing
4. Screw and Barrel
 - Materials of Construction
 - Standard Materials
 - Corrosive Resistance
 - Wear Resistance
 - Specialty Materials
 - Screw/Barrel Material Compatibility
 - Flight Treatment
 - Screw/Barrel Clearances
 - Heated Barrel
 - Cooled Feed Throat
 - Screw/Barrel Wear
 - Mechanisms
 - Indicators
 - Barrel Alignment
 - Consequences of Misalignment
 - Alignment Techniques
- Feed Housing
 - Temperature Control
 - Cooling Channel Blockage
- Screw/Barrel Cleaning
 - Pulling Screw
 - Cleaning Screw/Barrel
 - Measurements
 - Breaker Plate/Screen Pack Installation
 - Replacing Screw
5. Instrumentation
 - Sensor Calibration
 - Heater Installation and Diagnostics
 - Thermocouple Installation and Diagnostics
 - Pressure Transducers
6. Proper Operation Methods
 - Start-up
 - Normal Operation
 - Shutdown
7. Purging
 - Material Types
 - Purging Methods
8. Troubleshooting Mechanical Problems
 - Vibrations/Unusual Sounds
 - High/Low Temperature
 - Low/No Output
 - Output Instabilities
 - Excessive Pressure
 - Vent Flow
 - Plastic Leakage

Program Instructor – Prof. Kirk Cantor

Dr. Kirk Cantor is a Professor of Plastics and Polymer Engineering Technology at Pennsylvania College of Technology, where he has been teaching for 20 years. His primary area of teaching and consulting is polymer extrusion. Prior to teaching, Dr. Cantor was an aerospace engineer at the National Aeronautics and Space Administration (NASA) where he specialized in polymers and processing of blown film used for high altitude, scientific research balloons. He is author of well-known book "Blown Film Extrusion"

Registration Fee / Person:

- 250 US\$ /Person (before 31 January 2010)
- 350 US\$ / Person (After 31 January 2010)

Registration fee includes training documentation, refreshment and lunch

Program Agenda: 09.00 – 17.00

Language: ENGLISH

For more information, please contact TechnoBiz Communications Co., Ltd (Tel: +66-2-938 2315, Email: training@technobiz-asia.com)