

10-11 JULY 2017, BANGKOK, THAILAND

PIDT-17-165

Extruder Performance Evaluation, Maintenance and Troubleshooting

This two-day program covers a range of topics related to the performance, operation and maintenance of a polymer extruder, both single and twin screw. Topics to be covered include introduction to extruders, measuring extruder performance, preventative maintenance procedures, hardware measurements, polymers, processing principles, and start-up/ shutdown procedures. The emphasis of the program is on operating and maintaining an extruder for long life and high performance. This program is intended for anyone who works directly with extruders. This includes operators, set-up technicians, process engineers, maintenance mechanics, floor supervisors, and plant managers of plastics extrusion processes.

Program Content

- Introduction to Extruders:** Single Screw Extruders, Twin Screw Extruders, Triple Screw Extruders
- Safety :** Moving Parts & Nip Points, Electricity/ Grounding, High Temperatures, High Pressures
- Proper Operation Methods :** Start-up, Normal Operation, Shutdown
- Extruder Performance Measurements :** Throughput, Specific Throughput, Pressure Consumption and Variation, Energy Consumption and Variation, Specific Energy Consumption
- Maintenance Strategies**
- Drive System :** Motor, Gearbox, Thrust Bearing
- Screw and Barrel :** Materials of Construction, Flight Treatment, Screw/ Barrel Clearances, Screw/ Barrel Wear, Barrel Alignment, Feed Housing, Screw/ Barrel Cleaning
- Instrumentation:** Sensor Calibration, Heater Installation and Diagnostics, Thermocouple Installation and Diagnostics, Pressure Transducers
- Polymers:** Classifications, Structure, Types/ Properties
- Processing Principles:** Solids Conveying, Melting, Melt Pumping, Mixing, Degassing, Die Forming
- Purging:** Material Types, Purging Methods
- Troubleshooting Mechanical Problems:** Vibrations/ Unusual Sounds, High/ Low Temperature, Low/ No Output, Output Instabilities, Excessive Pressure, Vent Flow, Plastic Leakage

New Extrusion Technologies

12 JULY 2017, BANGKOK, THAILAND

PIDT-17-166

This one-day program introduces recent innovations for a wide range of extrusion technologies. A variety of extrusion types are presented, including compounding, blown film, flat film and sheet, wire and cable, pipe and tubing, and screws and dies. The purpose of the program is to gain up-to-date knowledge on extrusion technologies. This program is intended for anyone who works with the extrusion process. This includes operators, set-up technicians, process engineers, screw and die designers, floor supervisors, and plant managers of plastics extrusion processes.

Program Content

- | | | |
|-----------------------------|------------------------------|--|
| 1. Extrusion Compounding | 4. Pipe and Tubing Extrusion | 7. Screw and Die Design |
| 2. Blown Film Extrusion | 5. Wire and Cable Extrusion | 8. Auxiliary Equipment for Extrusion Processes |
| 3. Film and Sheet Extrusion | 6. Profile Extrusion | 9. Other Processes |

Program Instructor: Prof. Kirk Cantor

Kirk Cantor is Professor of Plastics and Polymer Engineering Technology at the Pennsylvania College of Technology where he has been since 1990. Prior to joining the faculty at Penn College, he was an aerospace engineer at NASA where he worked with polyethylene film for high altitude scientific balloons. Kirk received his Bachelor of Science in Aerospace Engineering from the University of Maryland and his Master of Science and PhD in Polymer Science from The Pennsylvania State University. He is the author of "Blown Film Extrusion" from Hanser Publications and of numerous articles on polymer extrusion.

Registration Fee

Course Name	Code	Thailand Delegates		Overseas Delegates	
		Baht		US\$	
		REGISTER BEFORE 30 MARCH '17	REGISTER AFTER 30 MARCH '17	REGISTER BEFORE 30 MARCH '17	REGISTER AFTER 30 MARCH '17
Extruder Performance Evaluation, Maintenance and Troubleshooting	PIDT-17-165	20,000	25,000	750	850
New Extrusion Technologies	PIDT-17-166	12,000	15,000	450	550

Remarks: Registration Fee includes documents, lunch and refreshments. Registered participants are required to arrange their travel and accommodation arrangements. Payment is required with registration. *Group Registration: 5% discount on total registration for the group of three delegates from the same company.*



To register, please contact

Plastics Industry Department @ TechnoBiz

TechnoBiz Communications Co., Ltd.

2521/27, Lardprao Road, Khlongchaokhunsingha Wangthonglang, Bangkok 10310 Thailand
Tel: +66-2-933 0077 Cell: +66-84-658 1444 Fax: +66-2-955 9971 Email: training@technobiz-asia.com
Web: www.plastics-industry.org Contact Person: Ms. Sirinthip Boonlom