

Extrusion

Startup

- 1-1. Run water bath drain hose to drain located under pultruder.
- 1-2. Attach air hose to fitting at end of water bath and turn air pressure on at supply.
- 1-3. Run water supply hose from source behind pultruder heater unit to water bath.
- 1-4. Turn water supply on (check for leaks at hose connection). Water will begin filling water bath.
- 1-5. Turn extruder main power on (located on extruder screw side of control unit).
- 1-6. Turn extruder computer on.
- 1-7. Plug pelletizer electrical cord into outlet labeled 480 volts, 3 phase, 20 amps behind extruder.
- 1-8. Place container under pelletizer chute to catch extruded material.

Extruding Material

- 2-1. Pour material into extruder hopper.
- 2-2. Select "Win Ext" program on the extruder computer desktop.
- 2-3. Choose "File/New" (open a new test file).
- 2-4. Select hand icon (on far right of computer screen) "Test Start/Stop."
- 2-5. Switch to machine control, then set speed (30 rpm is good starting speed).
- 2-6. Set extruder temperature values (for polypropylene, set all regions to approx. 205 deg C).
- 2-7. Review path extruded material needs to follow through water bath:
 - Under first roller.
 - Under second roller.
 - Up through dryer.
 - Into chopper.
- 2-8. Once water level is at top of water bath and all set temperatures have been reached on extruder, provide air to dryer by turning green handle at end of water bath.
- 2-9. Push pelletizer "start" switch. Use dial to adjust speed.
- 2-10. Once extruded material exits die and enters water bath, guide it under first and second rollers and up through air dryer into chopper.
- 2-11. As extruded material begins to run smoothly, screw speed and pelletizer speed can be adjusted as needed.

Shutdown

- 3-1. Stop the extruder by selecting "stop" on the keypad.
- 3-2. Shut off water supply.
- 3-3. Exit the "Win Ext" program.
- 3-4. Shut off extruder main power.
- 3-5. Shutdown extruder computer.
- 3-6. Push pelletizer "stop" switch.
- 3-7. Unplug pelletizer electrical cord.
- 3-8. Turn valve under water bath until parallel with hose to allow water to drain from water bath.
- 3-9. Turn off air pressure at supply and disconnect air hose from fitting at end of water bath.
- 3-10. Return all hoses to their storage locations.