## D.R. Joseph Blown Film Lab and Seminar Center

The DRJ Blown Film Lab is a versatile R&D environment which houses a 3 layer blown film line, accompanied by a variety of state of the art quality assurance equipment. DRJ offers the lab space and equipment for rent to customers interested in R&D development on a economical scale, avoiding the costs related to full size production testing. All equipment is separately metered, and conveniently maintained on an isolated, secure server. The DRJ Blown Film Lab is an ideal setting for:

- Technical seminars
- Product development / testing
- Operator or technician training Short prototype runs

## Our 3 layer line features:

- 0.787" (20mm), 30:1 Barrier Screws with temperature controlled water cooled feed throat
- 1.97" (50mm) 3 Layer Die with 0.039, 0.059, 0.079"die gaps (1, 1.5 and 2mm)
- Regulated chilled cooling air
- Inverter Controlled Dual Lip Air Ring with low and standard BUR lip sets
- Soft Roller Bubble Cage
- Oscillating Haul-Off
- Automatic Width Control with auto calibration for fast startups
- Edge Guide
- Surface Winder Torque Tension Control
- Max Production Rate: 20 lbs./Hour
- Max Layflat: 7.5 inches
- Max Line Speed: 100 feet/minute
- Roll Configuration: Tubing on 2" or 3" cores
- Formulation Change-Over Time: ~5 minutes

## The QC equipment includes:

- Offline thickness measurement ISO Cert.
- Tensile and peel strength ASTM D882, D3354
- Elmendorf tear ASTM D1424, D1922, D689, TAPPI T414 ISO 6383-1, 6383-2, 1974
- Dart impact testing ASTM D1709
- Haze/gloss light transmission ASTM D1003, D1044
- Coefficient of friction ASTM D1894
- Color spectrography ASTM D2244, E308, E1164, ISO 7724 5036, 6174 Gloss: ASTM D2457, D523 7668 DIN 67530, JIS 8741 DIN 5033 ISO 2313
- Burst tester (2 types) ASTM D1922, D1424, D689, TAPPI T414, ISO 6383-1, ISO 6383-2 ISO 1974
- FLIR infrared camera
- Fiber optic inspection camera
- Oven for heating samples

The 3 layer blown film line has a max production rate of 20 pounds per hour. The maximum web width that can be produced on the line is 225mm layflat. The die gap is 2mm, and can be changed to 1.5mm or 1mm on request. A guided winder for tubing only is integrated with the line.





