

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

## MONO LAYER

The DRJ Blown Film Lab is a versatile R&D environment, which houses a mono-layer blown film line (with 80, 50 or 33mm die), 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
- Operator or technician training
- Product development / testing
- Short prototype runs

### Line features & spec's:

- 1.77" (45mm), 30:1, Feed screw with ambient water cooled feed throat
- Die Dia/Die Gaps: (3.14"/ .047 - .090"), (1.96"/ .047"), (1.30"/ 0.047")
- Inverter Controlled Dual lip Air Ring with Low Melt Strength Lip Set for Biomaterials and TPU
- Regulated chilled cooling air
- Auto Width Control & Auto Calibration for fast startups
- Soft Roller Bubble Cage
- Adjustable tower height: 78-92" (air ring to nip)
- Gusseting boards
- Edge slitter
- Surface Winder – Torque or Dancer Tension Control
- Max production: 140 lbs./hour
- Max layflat: 29.5" (750mm)
- Max Line Speed: 270 feet/minute
- Roll Configuration: Tubing, C-Fold, Gusseted, on 3" core
- Formulation Change-Over Time: ~10 minutes

The blown film line has a max production rate of 140 pounds per hour (63.5kg/hr). The maximum web width that can be produced on the line is 750mm (29.5") layflat. The die gaps are: (80mm die: 0.047 - 0.09"), (50mm die: 0.047"), (33mm die: 0.047"). A guided winder for tubing and c-fold is integrated to the line. Lab production can yeild the following roll spec's: Tubing, C-Fold, Gusseted, on a 3" core.

For rental inquiries, contact us at [drjlab@drjosephinc.com](mailto:drjlab@drjosephinc.com)



### 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



**AT-4725 Haze-Gard Plus**

**CC-6834 Spectrophotometer**

**LSSD-01 Leak and Seal Strength**

**FX-7100-VS Coefficient Of Friction**

**DX-8285-AB Drop Dart Impact**

**KUNDIG Filmtest**

**SIV-S1 Elmendorf Tearing Strength**

**Precision Universal Tester MT-1528**