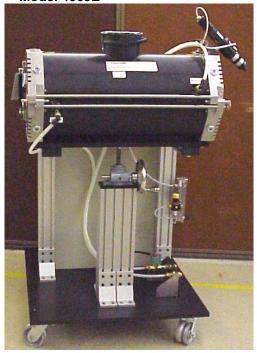


Pre/Post Extrusion Infrared Heating System

Model 4069E



# **Infrared Heating Solutions**

The Model 4069E *ExtrudelR*<sup>TM</sup> Infrared Heating System provides instantaneous infrared energy directly to extruded rubber or plastic products. The system generates shortwave infrared energy that readily penetrates into the extruded material, resulting in uniform heating and curing at a rate up to 10 times faster than other conventional heating sources.

The *ExtrudelR*<sup>TM</sup> system uses multiple high intensity, quartz halogen infrared lamps, backed by highly polished aluminum reflectors, to generate infrared heat energy and focus it toward the target material. This type of system offers the benefits of rapid heat generation, precise control, and instant on/off capability. These systems have been used in numerous pre- and post-extrusion applications including preheating, drying, curing and annealing of extruded materials.

#### **Pre/Post Extrusion**

Ideal for applications before and after the extrusion process including; preheating, drying, curing and annealing of extruded materials.

### **Precise Heating Control**

The SCR-based power control system provides precise control of the quartz halogen lamps within the heating chamber resulting in uniform heating of the target specimen. The source of the master signal is selectable from the control panel for either local- (10-turn potentiometer with a 0-999 counter) or remote-control (via a temperature controller with pyrometer input).

#### Cart

Adjustable height cart, mounted on "v" groove wheels with a 42-inch (±5-inch), pass line adjustment.

### **Extrusion Size**

System available in two different sizes to accommodate extrusions up to 2 inches in diameter and extrusions up to 4 inches in diameter.

### **Optional Pyrometer**

Reads product temperatures from 0 to 500°F and displays on a digital meter.

Fast. Focused. Controlled.



Research Inc. 4069-Extrude-D-01-A

# **Description**

The Model 4069E *ExtrudelR*<sup>TM</sup> parabolic clamshell heating system is designed to heat extruded products that have an outer diameter from 0.25 inch to 4 inches. The system's heating chamber is comprised of either 12 or 18 individual quartz halogen lamp/aluminum reflector assemblies (12 lamps for extrusion diameters up to 2 inches and 18 lamps for diameters up to 4 inches) for total heater power of ~30kW. The *ExtrudelR*<sup>TM</sup> pre/post extrusion Infrared heating system includes the following components:

#### **Model 4069 ChambIR Heaters**

For extrusion diameters up to 2 inches:

- 25 inches of heated length
- 12 2500 watt lamps (30.0 kW)
- Refer to Model 4069-12R-25L-30KW-480V, in the Model 4069 product data sheet for, detailed heater information.

For extrusion diameters up to 4 inches:

- 16 inches of heated length
- 18 1600 watt lamps (28.8 kW)
- Refer to Model 4069-18R-16L-28KW-480V, in the Model 4069 product data sheet for, detailed heater information.

#### **Model 935 Power Control Cabinet**

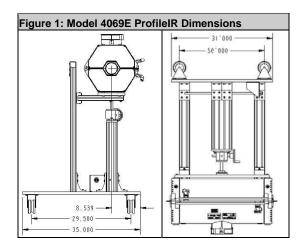
- NEMA 12-style enclosure
- Master potentiometer (local mode)
- Operator panel with local/remote control switch
- Optional pyrometer temperature indicator
- Electrical: 480-Volt (three phase), 50- or 80 Amps

#### Cart

- "V" groove 4" diameter wheels (revolving)
- 42" pass-line height with ± 5" adjustment
- Water interface panel with customer water connection point (2.6 gal/min required)
- Water solenoid to prevent condensation
- Cart supports heater, control cabinet, and protected interface wiring and cooling lines

### **Remote Operator Panel (Optional)**

Standard Model 935 control layout conveniently relocated to operator side of heater



#### Safety/Maintenance

- Water flow switch, thermostat and contact switch with interlock circuits.
- Finger guard and gas spring assists operator in opening cover
- System Cooling On/Off control switch with lamp indicator on control panel
- Lamp-out Detection circuit with lamp-out indicator on control panel

## **Pyrometer System (Optional)**

- Thermalert TX manufactured by Raytek
- Thermal camera (pyrometer) with power supply, air purge with filter included
- ½-inch spot size at 12-inches from camera
- Adjustable mounting bracket
- Digital Temperature Indicator, 0-500°F

# **Ordering Information**

Table 1: Model 4069E Ordering Information	
Model	Product Description
4069E	Extrusion Infrared Heating System
Code	Extrusion Diameter
2	<2 inches
4	<4 inches
Code	Additional Options
TCP	Pyrometer with digital readout
OP	Remote Operating Panel
(Chinning weight approximately E00 pounds)	

(Shipping weight approximately 500 pounds)

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