

**SHEL LAB**®

# SG03 GRAVITY CONVECTION OVEN



SHEL LAB is a Sheldon Manufacturing Brand. P/N 0740581. Rev. 2024.

## Ideal for Industrial, Analytical, and General Laboratory Applications



SGO3

**SHEL LAB Gravity Convention Laboratory Ovens are recommended for critical scientific and analytical use in laboratory and pilot plant product research. Typical applications include aging, curing, drying, baking, pre-heating, conditioning and life cycle testing. Choose from three cabinet sizes, each with gravity convection and reserve heating power for quick recovery after door openings.**



- 1 Advanced PID temperature control system for sensitive response.
- 2 Built-in digital timer for automatic operation following manual start.
- 3 Independent overtemperature set-point and operational control override for additional safety.
- 4 Stainless steel interior construction for long life operation, easy cleaning.
- 5 Gravity Convection to provide gentle airflow and not disrupt delicate samples
- 6 Triple-wall construction to minimize external surface temperature.
- 7 Stainless steel shelves are adjustable on 0.5" (12.7 mm) centers to provide flexible inventory options.
- 8 Rear access port, 1.75" diameter (44mm) for independent cables, instrumentation.
- 9 Exhaust port, 3" diameter (44mm), adjustable, with external connection to customer-supplied vent for effluent exhaust if required.

### SGO Series Features and Benefits

**SGO units are engineered for safe, accurate, and uniform performance in demanding laboratory environments.**





## Applications:

- Baking and Curing
- Burn-in
- Aging Tests
- Moisture and Stability Testing
- ASTM, UL, and Life Testing
- Asphalt Testing
- Drying

SGO Series ovens are available in 110-120v, 220-240V, 50/60Hz configurations and achieve temperatures up to 306°C with fast ramp-up and recovery times.

**Heat-Up** Rapid heat-up times to 306°C depend on voltage selected. Published heat-up performance is based on a standard cabinet under controlled testing at a 20°C ambient temperature, line voltage  $\pm 10\%$  of specified voltage.

**Recovery** Upper vents are closed when recovery times following door openings are tested. Published recovery performance is based on a standard cabinet under controlled testing at a  $(22 \pm 3)^\circ\text{C}$  ambient temperature, line voltage  $\pm 10\%$  of specified voltage.



**Extended  
Warranties!**

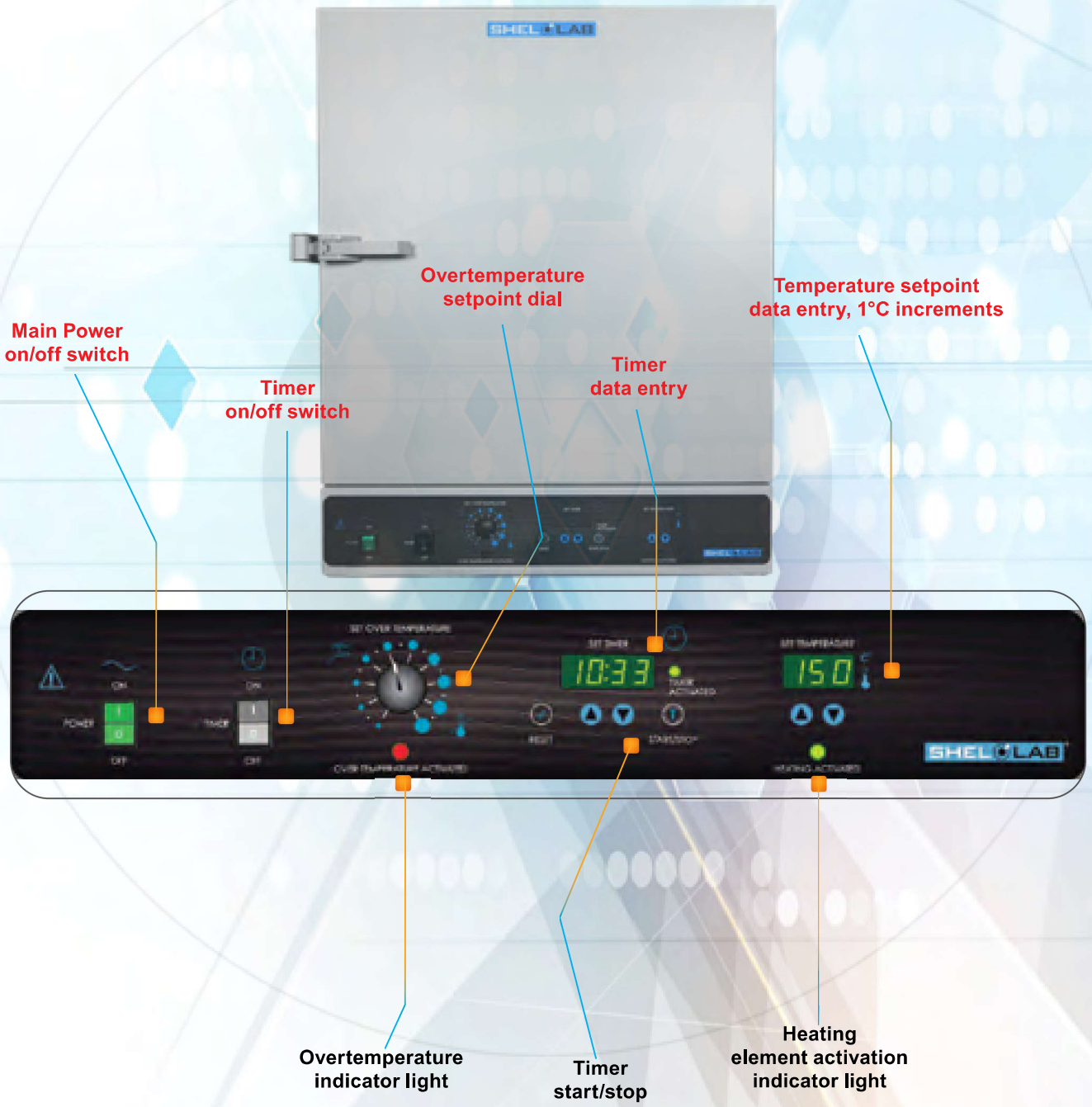
US Domestic Only

## Control, Timer Program, and Monitoring

The advanced loop PID (proportional, integral, derivative) controller commands proportional power to the heating element to provide the most accurate and responsive control. Each controller is matched to the oven size to assure faster response to setpoint without overshoot, and quicker recovery following door openings. The on-board timer permits programmed dwell cycles with automatic shut-off for custom applications. Indicator lights are included for visual status feedback on critical functions.

### Integrated Control Panel

All controls are centrally located on the main panel including manual power and timer on/off switches, independent overtemperature control, digital temperature and timer setpoint adjustments, and indicator lights for all functions.







| Model Part ID*   | SLG322  | SLG322-EA |
|--|---|-----------|
| <b>Electrical, 50/60Hz, AC, 1Ø</b>                       |   |           |
| Voltage  | 110V-120V   | 220V-240V |
| Full Load Amps   | 14  | 10        |
| Nominal Power (watts @150°C)                             | 1008  | 1440      |
| NEMA Plug Supplied                                       | 5-15P   | 6-15P     |
| <b>Temperature Range 20°C above ambient to 306°C</b>     |   |           |
| Heat-Up to Ambient — Minutes to 80°C                     | 7   | 7         |
| Heat-Up to Ambient — Minutes to 150°C                    | 23  | 23        |
| Heat-Up to Ambient — Minutes to 306°C                    | 95  | 95        |
| Recovery after Door Opening (30 sec.) — Minutes to 80°C  | 3   | 3         |
| Recovery after Door Opening (30 sec.) — Minutes to 150°C | 4   | 4         |
| Recovery after Door Opening (30 sec.) — Minutes to 306°C | 24  | 23        |
| Recovery after Door Opening (60 sec.) — Minutes to 80°C  | 5   | 5         |
| Recovery after Door Opening (60 sec.) — Minutes to 150°C | 5.5   | 5.5       |
| Recovery after Door Opening (60 sec.) — Minutes to 306°C | 37  | 37        |
| <b>Temperature Uniformity</b>                            |   |           |
| At 80°C  | 2.5   | 2.5       |
| At 150°C   | 3.5   | 3.5       |
| At 306°C   | 4.0   | 4.0       |
| <b>Unit Specification</b>                                |   |           |
| Interior Volume, Nominal                                 | 3.0 cu.ft. (85 L)                                 |           |
| Interior Dimensions W x D x H                            | 16.5" x 19.5" x 16.2"<br>419 mm x 495 mm x 412 mm |           |
| Exterior Dimensions W x D x H                            | 26.9" x 28.6" x 34"<br>684 mm x 727 mm x 840 mm   |           |
| Interior Construction                                    | 430 series stainless steel                        |           |
| Exterior Construction                                    | 20 gauge steel, powder coated                     |           |
| Shelves (See Accessories)*                               | 3 (max of 7)                                      |           |
| Maximum Weight Per Shelf*                                | 50 lb (22.6 kg)                                   |           |
| Permitted Total Load                                     | 200 lb (91 kg)                                    |           |
| <b>Site Preparation and Installation Guides</b>          |   |           |
| Door Swing Clearance (Nominal)                           | 27" (686 mm)                                      |           |
| Wall Clearance, Sides                                    | 6" (152 mm)                                       |           |
| Wall Clearance, Rear                                     | 12" (305 mm)                                      |           |
| Exhaust Duct (Outer Diameter)                            | 1.75" (44 mm)                                     |           |
| Unit Weight Empty  | 170.5 lb (77.3 kg)                                |           |
| Shipping Weight  | 203 lb (92 kg)                                    |           |
| <b>SGO3 Oven Options and Accessories</b>                 |   |           |
| Reverse Door   | <a href="#">Contact Sales for More Details</a>    |           |
| 3" Access Port   | <a href="#">Contact Sales for More Details</a>    |           |
| Caster Platform  | 90000597  |           |
| Extra Wire Rack, 50 lbs (22kg); Includes Brackets        | 9751317   |           |

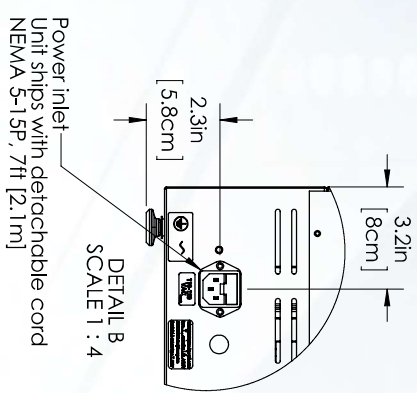
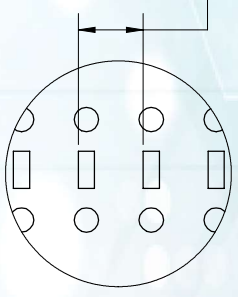
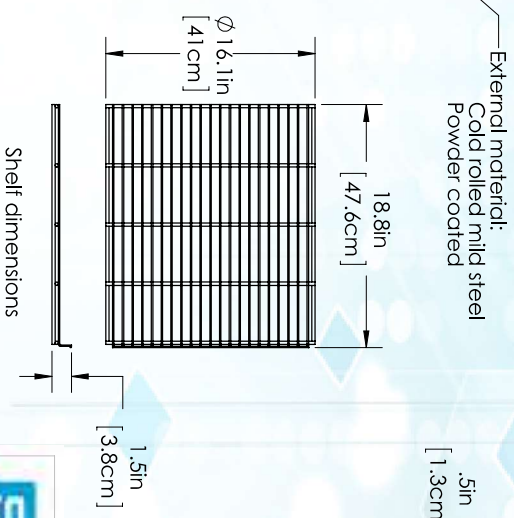
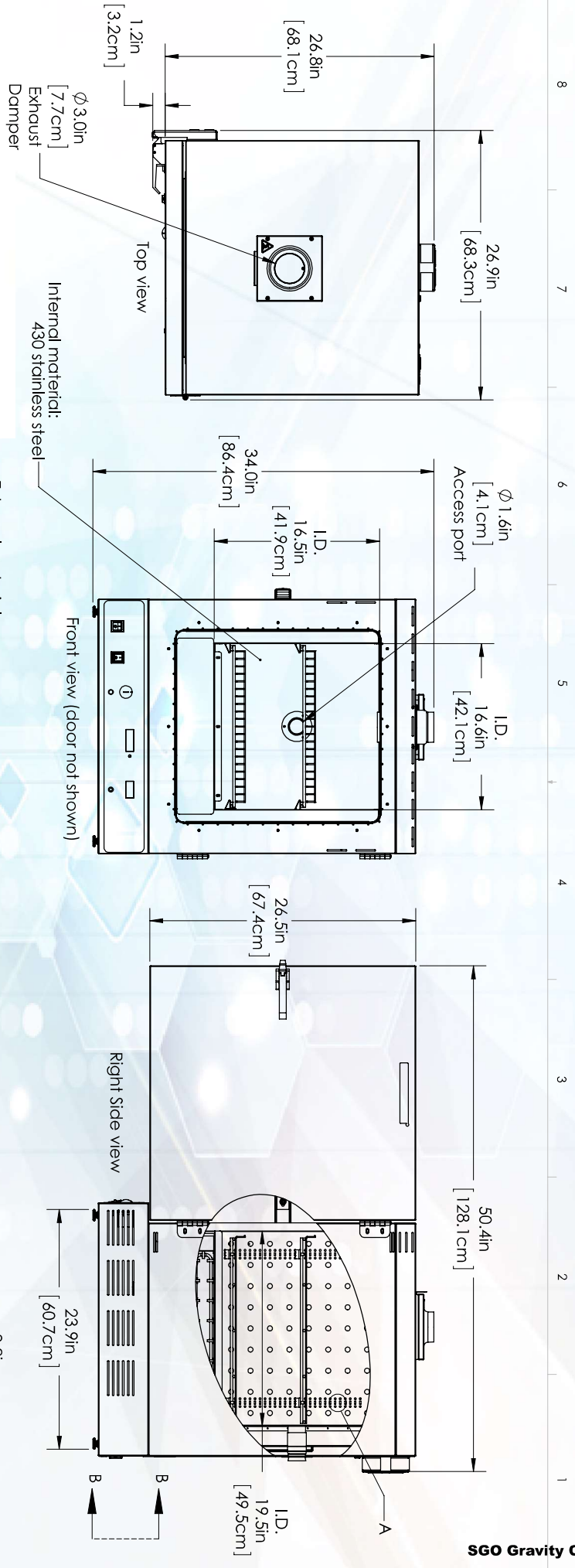
Options must be specified when ordering. Contact Sheldon Manufacturing for additional information.

\*Extra standard and reinforced shelves available. See Accessories.



Many of our customers have found that pairing our Gravity Convection Ovens SGO3 with the purchase of our Anaerobic Chambers is an ideal solution for their laboratory needs. The SGO3 ovens are perfectly suited for baking and sterilizing O<sub>2</sub> Scrubber Cartridges, ensuring optimal performance and extending the lifespan of your anaerobic chamber systems. This combination not only enhances efficiency but also supports the meticulous standards required for maintaining an anaerobic environment. If you're looking to streamline your operations, this pairing offers a reliable and effective solution.

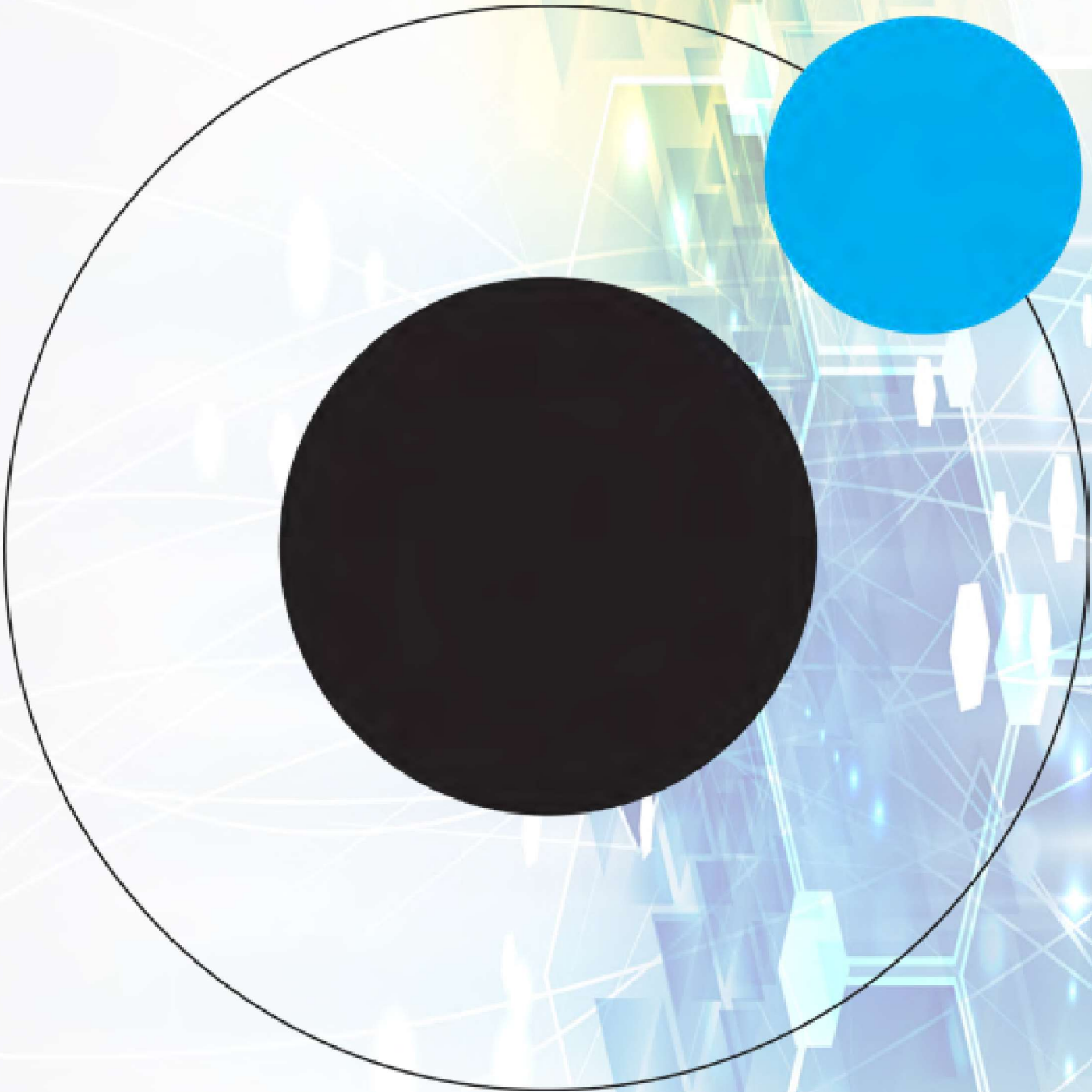




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|   |          |              |                |
|---|----------|--------------|----------------|
| PROPRIETARY AND CONFIDENTIAL  | NAME     | DATE         | MODEL:         |
| THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SHELDON MFG. ANY REPRODUCTION IN ANY FORM WITHOUT THE WRITTEN PERMISSION OF SHELDON MFG. IS PROHIBITED. | TCR      | 12/29/2015   | SGO3, 110-120V |
| SIZE  | DWG. NO. | REV          |                |
| B   | 9071451  |              |                |
| SCALE: 1:10   | WEIGHT:  | SHEET 1 OF 1 |                |

**SHEL LAB**®



**SHELDON**  
MANUFACTURING, INC

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