

# TFO Series Forced Air Ovens

**CASCADE™**

**TEK**



**TFO-10 • TFO-28**

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

Cascade TEK forced air ovens are recommended for critical scientific research, analytical, and laboratory use. These ovens are also suitable for use on the production floor and beyond. Typical applications include aging, curing, drying, baking, pre-heating, conditioning, and life cycle testing. Choose from two cabinet sizes, each with forced-air circulation and reserve heating power for quick recovery after door openings.

### TFO Ovens Features and Benefits

TFO ovens are engineered for safe, accurate, and uniform performance in demanding laboratory environments.



- +** Fast ramp-up to 306°C for faster cycle times.
- +** Temperature range approximately 15°C above ambient to 306°C for multiple applications.
- 1** Watlow PM9 Plus Controller programmable control with ramp and soak capabilities.
- 2** Integrated Over Temperature Limit with digital set-point (OTL) to provide additional temp limit control.
- 3** Stainless steel interior construction for long life operation, easy cleaning.

- 4** Forced-air circulation to assure maximum temperature uniformity.
- 5** Triple-wall construction to minimize external surface temperature.
- 6** Stainless steel shelves are adjustable on 0.5" (12.7 mm) centers to provide flexible inventory options.
- 7** Rear access port, 3.0" diameter (76 mm) for independent cables, instrumentation.
- 8** Intake and exhaust ports, 3.0" diameter (76 mm), adjustable, with external connections to customer-supplied vent for effluent exhaust if required.

- +** Internationally certified CAN/CSA, UL, EN, IEC 61010, and compliant with CE.

**MADE IN  
USA**



# Applications:

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

## High Temperature Performance

Cascade TEK forced air ovens are available in 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 get your product to temperature faster than ever.

**Recovery** After a standard door opening the TFO family has rapid recovery times to setpoint. Optimized air flow and heating elements allow your product to return to temperature setpoint in the shortest time yet.



TFO-28

Intake Damper

Exhaust Damper



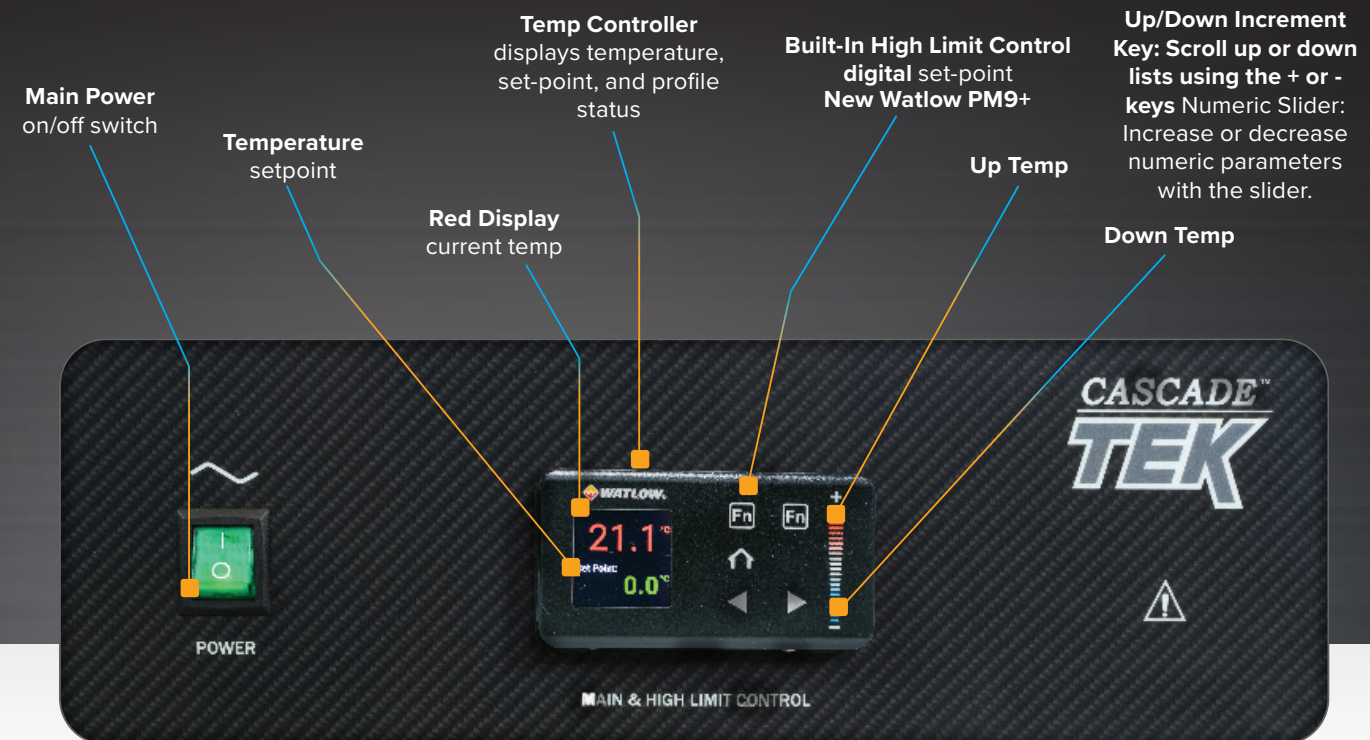
TFO-10

## Control, Timer Program, and Monitoring

The Watlow PM9 Plus PID (proportional, integral, derivative) controller commands proportional power to the heating elements to provide the most accurate and responsive control. The control parameters are matched to the oven size to assure faster response to setpoint without overshoot, and quicker recovery following door openings. The Watlow EZ-Zone supports custom recipe creation. Each recipe can enable full ramp and soak control for custom applications. A total of 4 recipes with up to 40 steps can be used to configure the oven to your process.

## Integrated Watlow Control Panel

All controls are centrally located on the main panel including manual power, Watlow PM9 Plus controller with integrated over-temperature limit and recipe control.



## TFO Oven Specification Chart

|                               | TFO-10  | TFO-28  |
|-------------------------------|---|---|
| Part ID                       | CTF1022-H                                     | CTF2822-H                                     |
| Interior Volume, Nominal      | 10 cu.ft. (283 liters)                        | 28 cu.ft. (792 liters)                        |
| Interior Dimensions W x D x H | 29.8" x 20.6" x 30.0"<br>757 x 524 x 762 mm   | 31.7" x 26.0" x 60.9"<br>805 x 660 x 1546 mm  |
| Exterior Dimensions W x D x H | 44.1" x 29.9" x 56.8"<br>1121 x 760 x 1442 mm | 42.5" x 34.1" x 85.9"<br>1080 x 866 x 2182 mm |

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



### TFO Forced Air Oven Options

|   | TFO-10    | TFO-28    |
|---|-----------|-----------|
| Calibration of Single Component (NIST Traceable)            | 9990840   | 9990840   |
| Chart Recorder (Single Pen)                                 | 6900535   | 6900535   |
| 485-USB Converter Communication Cable                       | 9900764   | 9900764   |
| Chart Recorder (Honeywell 3 Channel Paperless)              | 6900531   | 6900531   |
| Power Exhaust, installed                                    | 9990741   | 9990741   |
| Additional 2.75" Access Port, Sliding Damper (location TBD) | 9990024   | 9990024   |
| Base Cabinet Stand with doors (Factory Installed)           | 9751264   | -         |
| Casters, Two Swivel Wheels, With Two Fixed Installed        | -         | 9990872   |
| Stainless Steel Shelf with Clips                            | 995-00007 | 999-00005 |

Options must be specified when ordering. Contact Cascade TEK for additional information.

Cascade TEK TFO ovens are tested for use within an ambient air pressure range of 22.14 – 31.3 inHg (75 – 106 kPa), with no flammable, volatile or combustible materials being heated. Specifications subject to change without notice. Cascade TEK Made in USA. 8/21 PN: 0740604



## Customization Options

Cascade TEK offers a variety of customization options for any application. With our impressive team of experts, Cascade TEK builds solutions to any problem.

Forced air ovens provide the ultimate drying experience. Cascade TEK's forced air ovens are made in the USA.

- Electronically data-log your drying process
- Programmable temperature control & digital overtemp protection
- Additional access ports for feed through and power connections



**CASCADE**™

**TEK**



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