

### XST - 1200°C Split Tube Furnaces 1-Zone & 3-Zone

The XST split tube furnaces have a hinged body which is split along its length. This design allows for easy process tube changes and simple installation of process tubes with end seals attached.



XST-3-0-12-1V2-F01

These furnaces use Fibercraft™ vacuum formed ceramic fiber heating elements with free radiating wire embedded into the body of the heater. The tube adapters are removable and interchangeable so that multiple process tube sizes can be used with one furnace.

Single zone models have excellent temperature uniformity and the three zone models can extend the uniform flat zone by independently controlling the end zones.

## Standard Features

- 1200°C maximum operating temperature
- Vacuum formed ceramic fiber heating elements ensure rapid heat up, excellent temperature uniformity and quick cool down
- Thermcraft SmartControl touch screen PID control system (see control system descriptions)
- Long life Inconel sheathed Type K thermocouple
- Accepts process tube outer diameters up to 6" (152mm)
- Heated lengths up to 36" (914mm)
- Includes 1 set of tube adapters sized to desired internal diameter
- 10' (3m) interconnecting and power cables
- Three zone models can be controlled individually or in master/slave configuration
- Furnace and controller ship fully assembled and ready for connection to incoming power supply
- Can be used in horizontal or vertical orientation (vertical mounting brackets included)



XST-3-0-36-1V2-F01

## Options and Upgrades

- The SmartControl can be upgraded to include profile programming, data acquisition and communications. These options can be purchased individually or separately and can also be purchased as an upgrade after the unit has been shipped and installed
- Independent over temperature control
- Additional sets of tube adapters
- Process tubes in various sizes and materials
- Process tube end seals for gas and vacuum
- Eurotherm 2404 series controls and communications upgrades
- Available without control system
- Custom options and upgrades available upon request, such as output control of external devices, actuators, flow controllers, etc. (extends delivery time)



SmartControl Touch Screen with Icon Navigation

**XST - 1200°C Split Tube Furnaces**  
**1-Zone & 3-Zone**

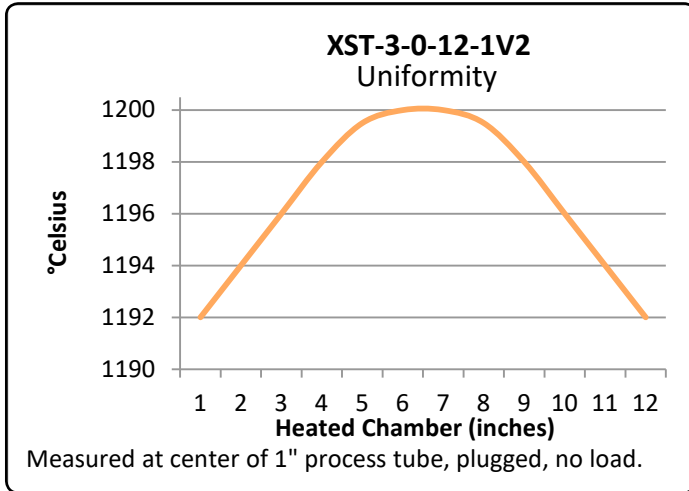
## Specifications

Model	Max Temp (°C)	Heat Zones	Heat Up Time (mins)	Max OD Process Tube in. (mm)	Heated Length in. (mm)	Furnace External Dimensions HxWxD in. (mm)	Control External Dimensions HxWxD in. (mm)	Max Power (Watts)	Volts	Amps	Thermo couple Type	Weight lbs (kg)
XST-3-0-12-1V2	1200	1	30	3 (76)	12 (304)	18x21x20 (457x533x508)	9x14x14 (229x356x356)	1700	230	8	K	80 (36)
XST-3-0-18-1V2	1200	1	32	3 (76)	18 (457)	18x27x20 (457x685x508)	9x14x14 (229x356x356)	2550	230	12	K	110 (50)
XST-3-0-24-1V2	1200	1	35	3 (76)	24 (609)	18x33x20 (457x838x508)	9x14x14 (229x356x356)	3400	230	15	K	141 (64)
XST-3-0-36-1V2	1200	1	40	3 (76)	36 (914)	18x45x20 (457x1143x508)	9x14x14 (229x356x356)	5100	230	23	K	203 (92)
XST-3-0-18-3V2	1200	3	32	3 (76)	18 (457)	18x27x20 (457x685x508)	11x20x17 (279x508x432)	2550	230	12	K	128 (58)
XST-3-0-24-3V2	1200	3	35	3 (76)	24 (609)	18x33x20 (457x838x508)	11x20x17 (279x508x432)	3400	230	15	K	159 (72)
XST-3-0-36-3V2	1200	3	40	3 (76)	36 (914)	18x45x20 (457x1143x508)	11x20x17 (279x508x432)	5100	230	23	K	221 (100)
XST-4-0-12-1V2	1200	1	35	4 (101)	12 (304)	18x21x20 (457x533x508)	9x14x14 (229x356x356)	2350	230	11	K	86 (39)
XST-4-0-18-1V2	1200	1	37	4 (101)	18 (457)	18x27x20 (457x685x508)	9x14x14 (229x356x356)	3550	230	16	K	119 (54)
XST-4-0-24-1V2	1200	1	39	4 (101)	24 (609)	18x33x20 (457x838x508)	9x14x14 (229x356x356)	4700	230	21	K	136 (62)
XST-4-0-36-1V2	1200	1	43	4 (101)	36 (914)	18x45x20 (457x1143x508)	9x14x14 (229x356x356)	7050	230	31	K	205 (93)
XST-4-0-18-3V2	1200	3	37	4 (101)	18 (457)	18x27x20 (457x685x508)	11x20x17 (279x508x432)	3550	230	16	K	137 (62)
XST-4-0-24-3V2	1200	3	39	4 (101)	24 (609)	18x33x20 (457x838x508)	11x20x17 (279x508x432)	4700	230	21	K	154 (70)
XST-4-0-36-3V2	1200	3	43	4 (101)	36 (914)	18x45x20 (457x1143x508)	11x20x17 (279x508x432)	7050	230	31	K	223 (101)
XST-6-0-24-1V2	1200	1	40	6 (152)	24 (609)	20x33x23 (508x838x584)	9x14x14 (229x356x356)	6800	230	30	K	160 (73)
XST-6-0-36-1V2	1200	1	45	6 (152)	36 (914)	20x45x23 (508x1143x584)	9x14x14 (229x356x356)	10200	230	45	K	243 (110)
XST-6-0-24-3V2	1200	3	40	6 (152)	24 (609)	20x33x23 (508x838x584)	11x20x17 (279x508x432)	6800	230	30	K	178 (81)
XST-6-0-36-3V2	1200	3	45	6 (152)	36 (914)	20x45x23 (508x1143x584)	11x20x17 (279x508x432)	10200	230	45	K	261 (119)

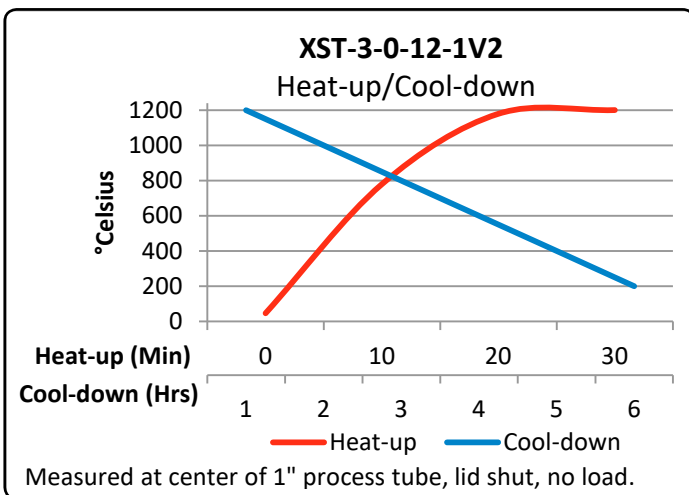
\*\*\*Notes\*\*\*

-Continuous operating temperature is 100°C below maximum temperature  
 -Heat up times are measured under no load

## Temperature Profiles



- Uniformity profile taken at a set-point of 1200°C
- $\pm 5^\circ\text{C}$  over 8" (203mm),  $\pm 1^\circ\text{C}$  over 3" (76mm)
- Uniform length increases respectively in furnace models with longer heated lengths
- $\pm 5^\circ\text{C}$  can be achieved over 90% of the entire length of 3-zone models



- Heat-up time measured from ambient to 1200°C at 100% power output
- Cool-down rate measured with top closed and power shut off
- Faster cool-down rates can be achieved with forced cooling and top open (reduces heater life)