

THERMAL VACUUM TESTING SYSTEMS



FRONTIER TVAC and Bake-Out Systems put you in control with affordable and easy-to-configure systems that replicate the extreme temperature and vacuum environments for your specific application.

FRONTIER BY LACO TECHNOLOGIES



FRONTIER TVAC SYSTEMS

FRONTIER BAKE-OUT SYSTEMS

FST CUBE & CYLINDRICAL TVAC SYSTEMS

STANDARD

FSB CUBE & CYLINDRICAL BAKE-OUT SYSTEMS



STANDARD CONFIGURATION OPTIONS

FST & FSB Models

Standard chamber sizes include:

Cube:

20 in (50.8 cm), 24 in (61 cm)
30 in (76.2 cm), 36 in (91.4 cm)

Cylindrical (Dia x L):

18 x 24 in (45.7 x 61 cm)
24 x 30 in (61 x 76.2 cm)
30 x 36 in (76.2 x 91.4 cm)
36 x 40 in (91.4 x 101.6 cm)

Standard features include:

- Turbo pump with gate valve
- Dry roughing pump
- Viewport with LED Lighting
- ISO-17025 Calibrated Vacuum Gauges
- Spare ports
- Configured to your requirements
- Meets NASA launch standards
- Vacuum: ATM to 10^{-7} Torr
- High vacuum bake-out
- Fully integrated & tested
- Electrical & T/C feedthroughs
- Proprietary platen & shroud technology
- Thermal cycling options:
 - LN2 & electrical heat: -150°C to 200°C
 - Recirculation chiller: -70°C to 150°C



FCT TVAC SYSTEMS

CUSTOM

FCB BAKE-OUT SYSTEMS



CUSTOM CONFIGURATION OPTIONS

FCT Models

FCB Models

Cube chamber sizes of 20 - 60 in (51 - 152 cm)

Cylindrical chamber sizes of 18 - 96 in (46 - 244 cm) diameter, any length

- Pullout platens
- Custom shrouds
- Double door
- Custom feedthroughs
- Optional cryo-pumps
- Optional controls
- Internal shelf heating
- External Wall Heating
- Cooling circuits for fast cool down
- High vacuum performance down to 10^{-6} torr
- Optional RGA heads



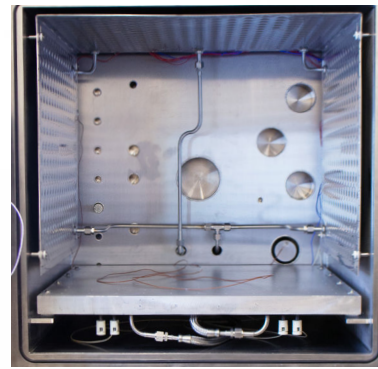
FST & FSB CUBE SYSTEM DIMENSIONS

	FST/FSB - 2020	FST/FSB - 2424	FST/FSB - 3030	FST/FSB - 3636
CHAMBER DIMS (INSIDE - L x W x H)	20 x 20 x 20 in 50.8 x 50.8 x 50.8 cm	24 x 24 x 24 in 61 x 61 x 61 cm	30 x 30 x 30 in 76.2 x 76.2 x 76.2 cm	36 x 36 x 36 in 91.4 x 91.4 x 94.1 cm
PLATEN SIZE (L x W)	19 x 19 in 48.3 x 48.3 cm	23 x 23 in 58.4 x 58.4 cm	29 x 29 in 73.7 x 73.7 cm	35 x 35 in 88.9 x 88.9 cm
DEVICE UNDER TEST (DUT) VOLUME (L x W x H)	19 x 19 x 16 in 48.3 x 48.3 x 40.6 cm	23 x 23 x 20 in 58.4 x 58.4 x 50.8 cm	29 x 29 x 26 in 73.7 x 73.7 x 66 cm	35 x 35 x 32 in 88.9 x 88.9 x 81.3 cm

FST & FSB CYLINDRICAL SYSTEM DIMENSIONS

	FST/FSB - 1824	FST/FSB - 2430	FST/FSB - 3036	FST/FSB - 3640
CHAMBER DIMS (INSIDE - DIA x L)	17.5 x 24 in 44.5 x 61 cm	23.4 x 30 in 59.4 x 76.2 cm	29.5 x 36 in 75 x 91.5 cm	35.5 x 40 in 90.2 x 101.6 cm
PLATEN SIZE (L x W)	22 x 14 in 55.9 x 35.6 cm	28 x 20 in 71.1 x 50.8 cm	35 x 24 in 89 x 61 cm	40 x 24 in 101.6 x 61 cm
DEVICE UNDER TEST (DUT) VOLUME (L x W x H)	22 x 14 x 19 in 55.9 x 35.6 x 48.3 cm	28 x 20 x 11 in 71.1 x 50.8 x 28 cm	35 x 24 x 14 in 89 x 61 x 35.6 cm	40 x 24 x 22 in 101.6 x 61 x 55.9 cm

PORTS, FEEDTHROUGHS, PLATENS, AND SHROUDS



TVAC & BAKE-OUT ACCESSORIES



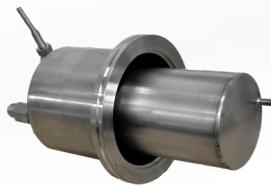
REFRIGERANT COLD FINGER



CELLULAR REMOTE SUPPORT

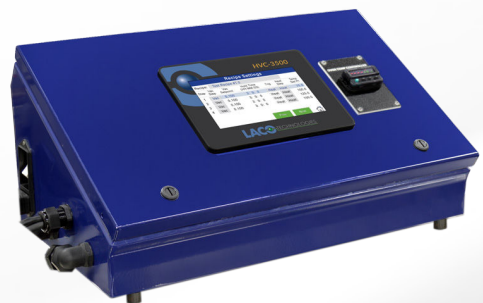


SPARE PORTS & FEEDTHROUGHS



LN2 COLD FINGER

HVC-3500 CONTROLLER



- Included with all standard Frontier systems
- 20 customizable recipes
- Full system integration
- Automated vacuum & temperature control
- Data logging
- Remote access