

# ElectroForce® 3500 Series



## Site Preparation Guide

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Circulator



Power



Cooling



Gas



LN<sub>2</sub>



Fluid



Light



Hardware



Software



Temp



Lab



Customer

# Ideal Setup



## IDEAL PLACEMENT AND BENCH MEASUREMENTS

Select a location with adequate floor and ceiling space and a rigid laboratory bench that is level and is in a vibration-free environment.



Table depth: 1.2 m (4 ft)

Table width: 1.5 m (5 ft)

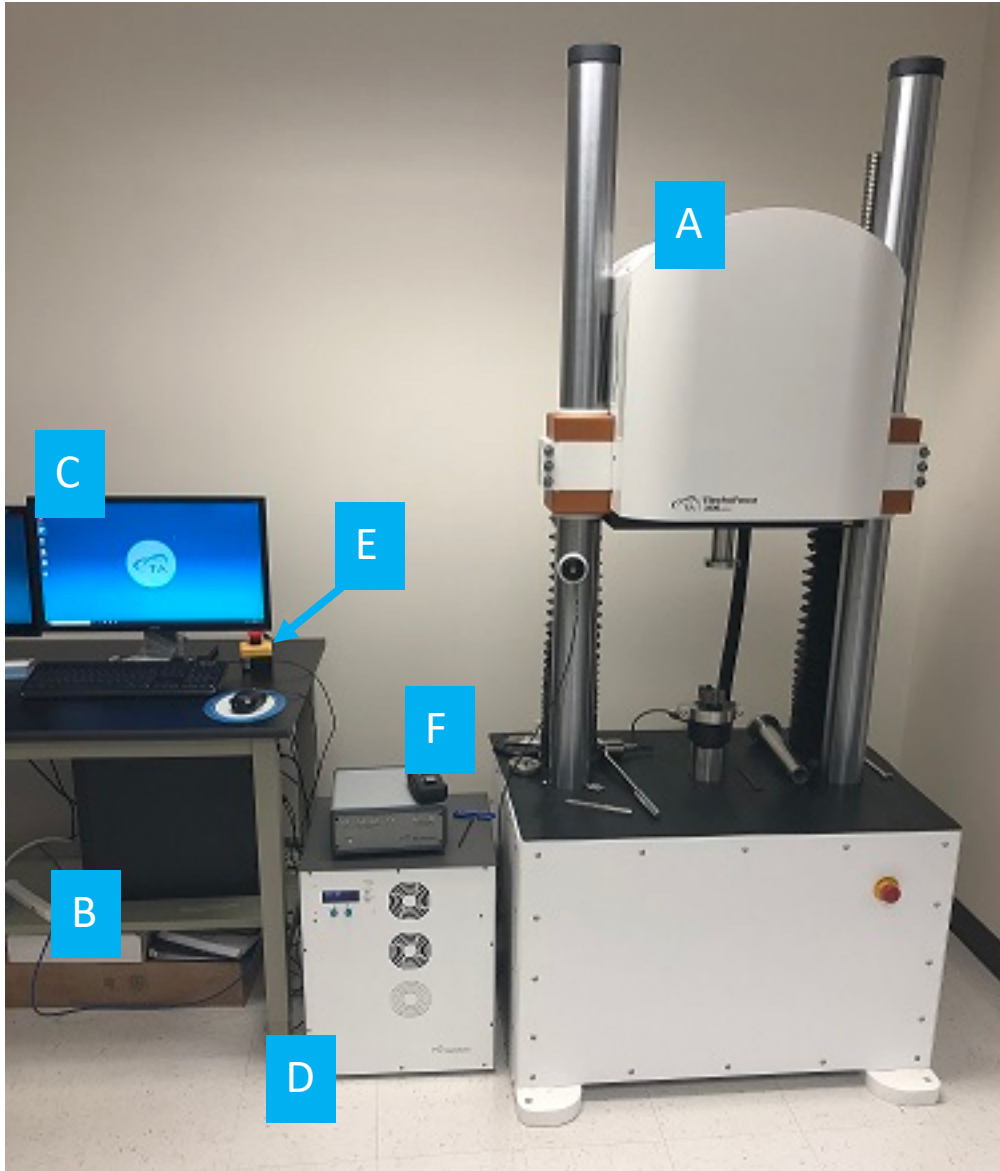
Floor space: 91.44 cm x  
91.44 cm (3 ft x 3 ft)

Distance from the wall:  
0.15 m (0.5 ft) min.

# System Components



## MAIN SYSTEM COMPONENTS



- |                     |                         |
|---------------------|-------------------------|
| A. Test Instrument  | D. Power Supply (Axial) |
| B. Computer Tower   | E. Emergency Stop       |
| C. Computer Monitor | F. PCI Electronics Box  |

# Instrument Measurements



## 3510 TEST INSTRUMENT



Height: 2700 mm (106 in)

Width: 990 mm (39 in)

Depth: 815 mm (32 in)

Weight: 1050 kg (2300 lbs)



## 3520 TEST INSTRUMENT

Height: 2495 mm (98 in)

Width: 861 mm (34 in)

Depth: 756 mm (30 in)

Weight: 644 kg (1420 lbs)



# Instrument Measurements



## 3550 TEST INSTRUMENT

Height: 2495 cm (98 in)

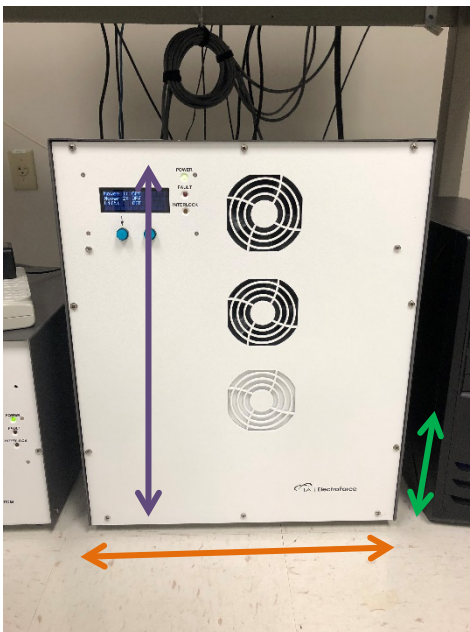
Width: 861 cm (34 in)

Depth: 756 cm (30 in)

Weight: 816 kg (1800 lbs)



## POWER SUPPLY



Height: 74.4 cm (29.3 in)

Width: 43.2 cm (17 in)

Depth: 48.3 cm (19 in)

Weight: 36 kg (80 lbs)

# Lifting the Instrument



## LIFTING THE INSTRUMENT



To avoid system damage, only specified lift points should be used.



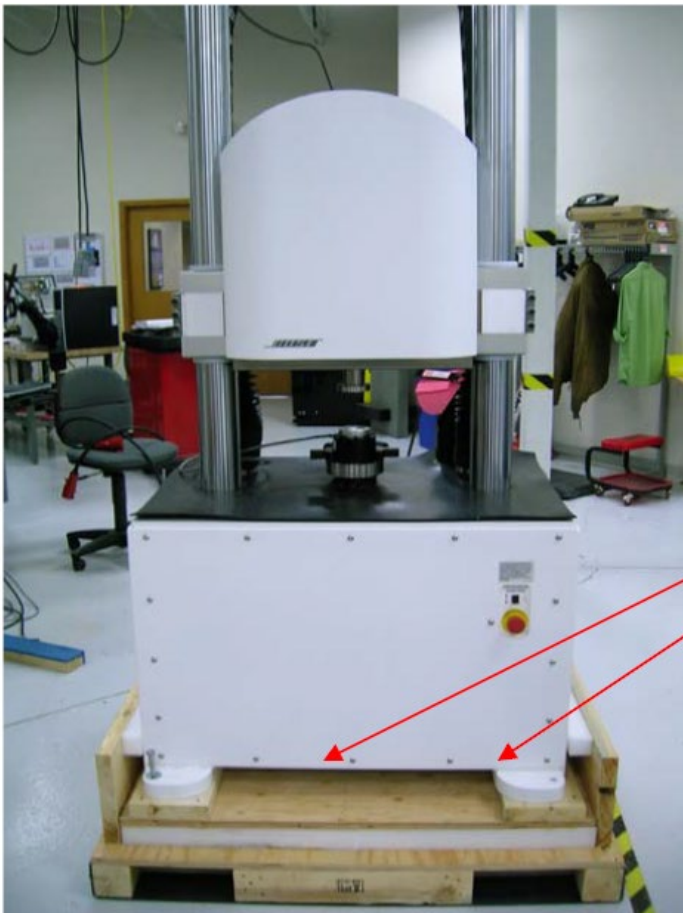
Proper technique should be used for lifting any system component.



A powered lift (fork-lift) should be used when moving the load frame.



Avoid pinch points when moving the load frame or other components. Pinch points can exist between the load frame and mounting surface or walls during movement of frame.





Lift Points – Front  
and Back of Base

# Utility Requirements



## POWER

Item	Requirement
Instrument Power	<ul style="list-style-type: none"> <li>• 208–230V, 50/60 Hz, 32A</li> <li>• 400V, 50/60 Hz, 20A</li> <li>• Neutral to Ground (NG) voltage max 0.5 volt</li> <li>• Safety ground per local regulation</li> </ul>
PCI Box Power	<ul style="list-style-type: none"> <li>• 104–120V, 50/60 Hz Hz, 1.25 A</li> <li>• 207–230V, 50/60 Hz Hz, 0.8 A</li> </ul>
UPS (Optional)	<ul style="list-style-type: none"> <li>• 104–120V, 50/60 Hz, 1A</li> <li>• 207–230V, 50/60 Hz, 0.5A</li> </ul>
Hot/Cold Chamber	<ul style="list-style-type: none"> <li>• 230V, 50–60 Hz Hz, 9.6A/2200W, 1 ph</li> </ul>
Power cords provided	<ul style="list-style-type: none"> <li>• 3510, 3520, 3550: L 15-30 plug for 208–230V instruments</li> <li>• 3520, 3550: IEC 60309 plug for 400V instruments</li> <li>• International: Line power cord provided is based on country</li> </ul> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>L 15-30</p> </div> <div style="text-align: center;">  <p>IEC 60309</p> </div> </div>



**Use power cords with plugs appropriate for your circuit.**



Supply voltages lower than indicated may result in a degradation of performance.



Ensure that the mains assigned do not also supply power to noise generating equipment nearby, such as motors, welders, transformers, etc.



An independent heavy GROUND wire must be provided through the power hookup. Improper grounding may cause severe damage for which the supplier will not accept responsibility. All power strips must be fully grounded and carry the ground through to the sockets into which the computer is plugged.



# Utility Requirements



## HOT/COLD CHAMBER

Item	Requirement
Gas	Liquid nitrogen
Pressure	152–345 kPa (22–50 psig)
Connections	½ -inch SAE, 45-degree flare fitting



## MISCELLANEOUS

Item	Requirement
Operating temperature	18°C (64°F) to 30°C (86°F)
Relative humidity	40–65% (non-condensing)



# TA Instruments Offices

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