

ElectroForce® 3300 Series III



Site Preparation Guide

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Circulator



Power



Cooling



Gas



LN₂



Fluid



Light



Hardware



Software



Temp



Lab



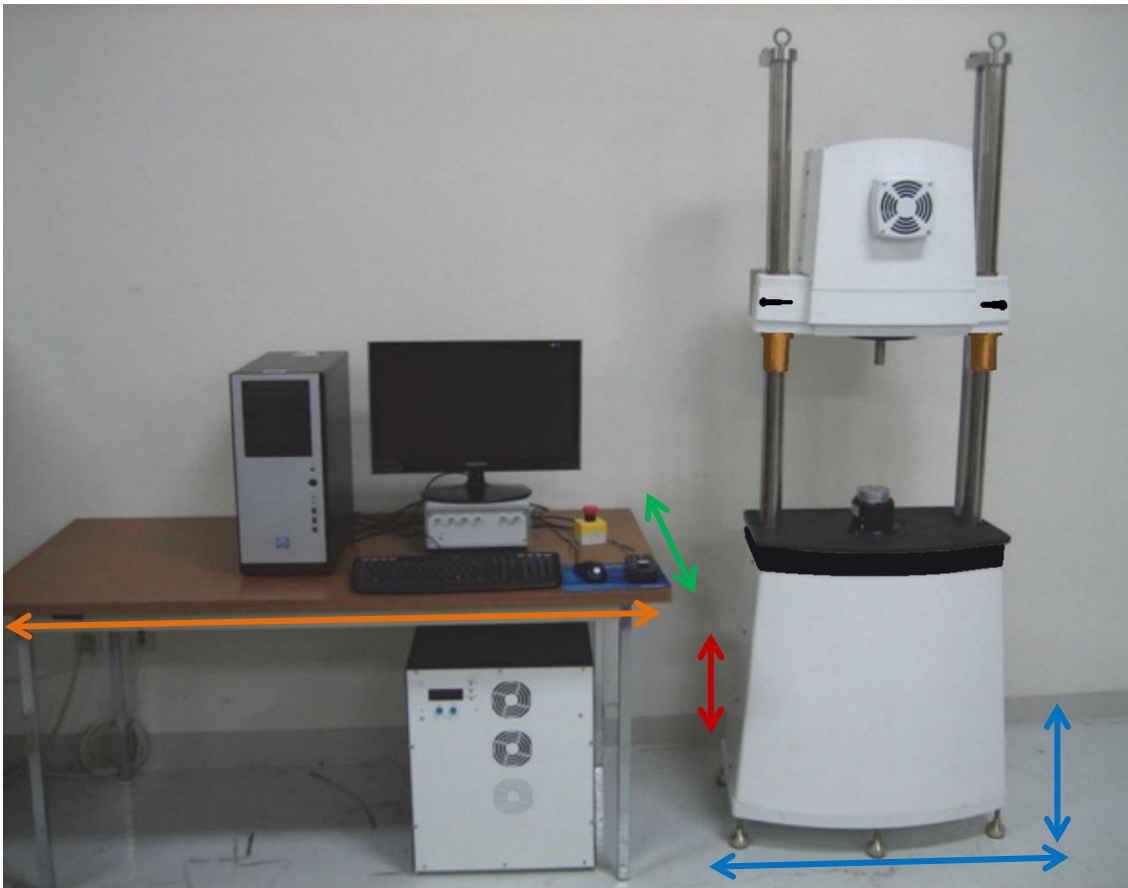
Customer

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. Bench must be rated to support several hundred pounds.



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

Table width: 1.5 m (5 ft)

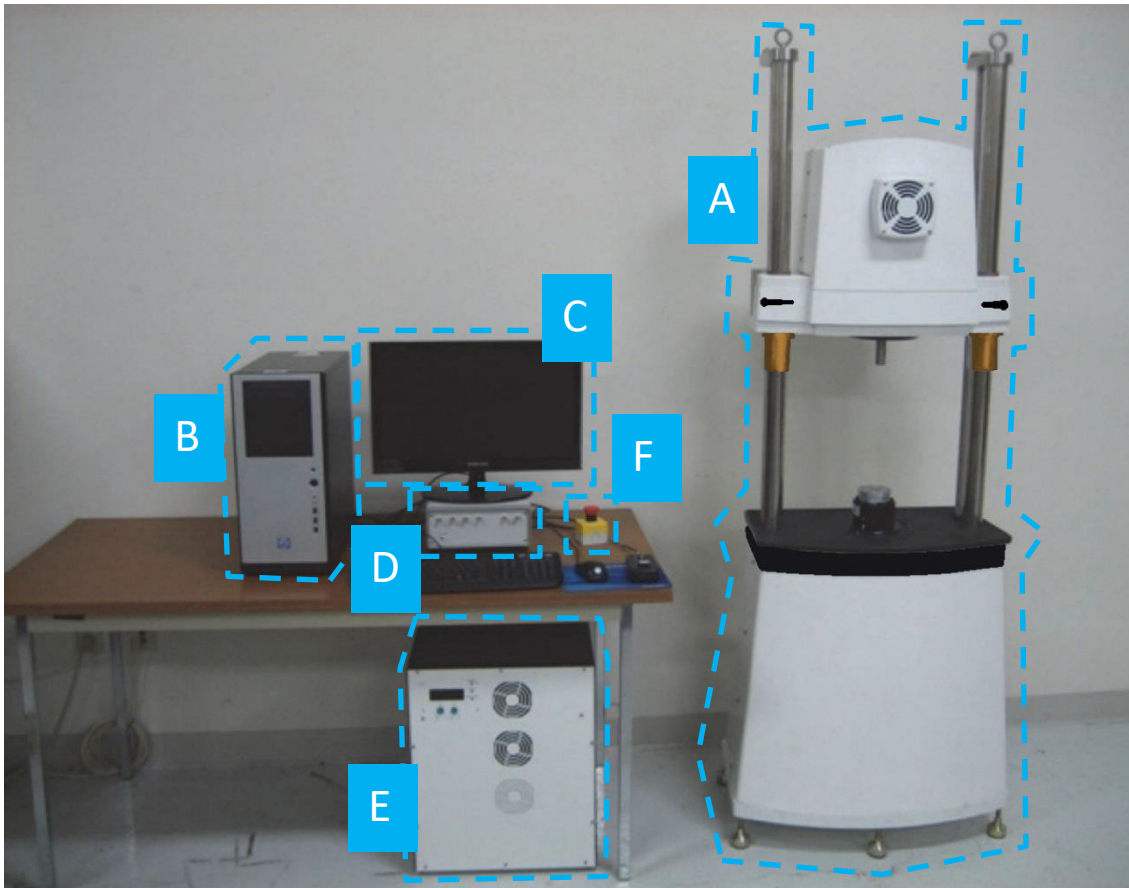
Table depth: 1.2 m (4 ft)

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

System Components



MAIN SYSTEM COMPONENTS



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

Instrument Measurements



3300 SERIES III – FLOOR STANDING FRAME



Height: 1854 mm (73 in)

Width: 579 mm (22.8 in)

Depth: 518 cm (20.4 in)

Weight: 279 kg (615 lbs)



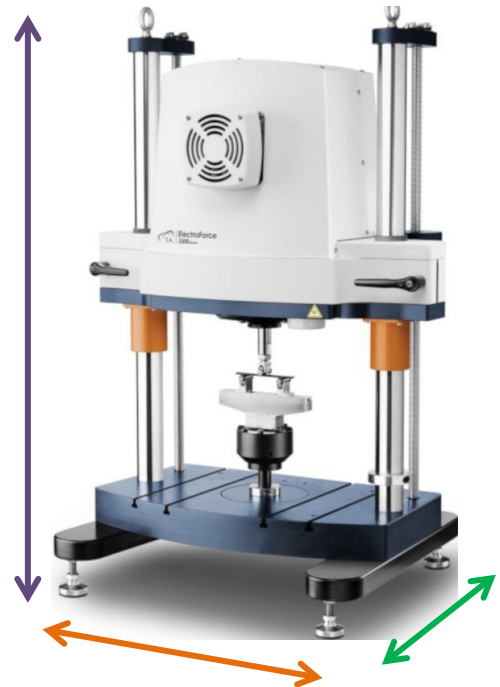
3300 SERIES III – BENCHTOP

Height: 1232 mm (48.5 in)

Width: 579 mm (22.8 in)

Depth: 518 cm (20.4 in)

Weight: 172 kg (381 lbs)



Instrument Measurements

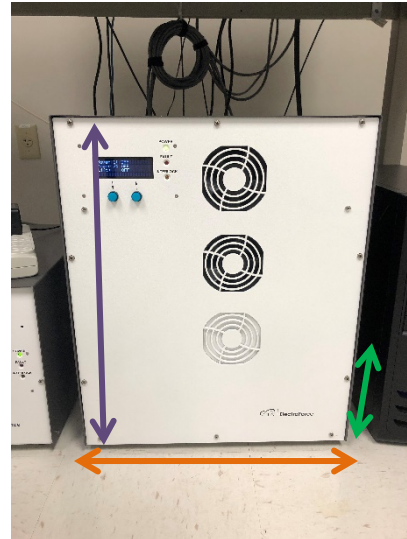


POWER SUPPLY FOR 3330

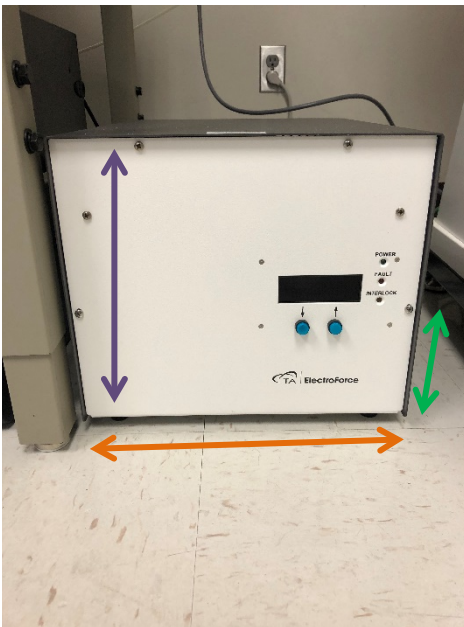
Height: 53.34 cm (21 in)

Width: 43.18 cm (17 in)

Depth: 40.64 cm (16 in)



POWER SUPPLY FOR 3310



Height: 30.48 cm (12 in)

Width: 34.29 cm (13.5 in)

Depth: 40.64 cm (16 in)

Utility Requirements



POWER

Item	Requirement
Instrument Power	<ul style="list-style-type: none"> • 200V, 50–60 Hz, 15A • 230V, 50–60 Hz, 13A • Neutral to Ground (NG) voltage max 0.5 volt • Safety ground per local regulation
PCI Box Power	<ul style="list-style-type: none"> • 104–120V, 50–60 Hz Hz, 1.2 A • 207–230V, 50–60 Hz Hz, 0.6 A
Torsion Power Supply	<ul style="list-style-type: none"> • 208–230V, 50–60 Hz Hz, 2A • If the Torsion power supply is integrated into the Axial power supply, rather than separate, the system usage rises to 12A
Hot/Cold Chamber	<ul style="list-style-type: none"> • 230V, 50–60 Hz Hz, 9.6A/2200W, 1 ph
Saline Bath	<ul style="list-style-type: none"> • 207–230V, 50–60 Hz Hz, 3A
Multiple Sample Fatigue Saline Chamber	<ul style="list-style-type: none"> • 207–230V, 50–60 Hz Hz, 2.7A
Thermoelectric Cooled Grips	<ul style="list-style-type: none"> • 100–240V, 50–60 Hz Hz, 2.85–1.19A • Chiller: 115–230V, 50–60 Hz, 4.5–2.3A
Power cords provided	<ul style="list-style-type: none"> • 6-20P plug for 230V systems • International: Line power cord provided is based on country



6-20P



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



GAS

Item	Requirement
Purge gas	Air
Pressure	413–515 kPa (60–80 psig)
Flow	8.5 L/min (0.3 CFM)
Connections	¼-inch push-to-connect or ¼-inch NPT female to filter/dryer/regulator with ¼-inch push-to-connect removed ¹
Conditions	<ul style="list-style-type: none">• 5 µm• Grade 5• Must be free from oil and dirt• Dew point ≤ 10°C

¹ Interconnection between the system and the supplied filter/regulator equipment is via ¼-inch push-to-connect fittings; use supplied tubing.



HOT/COLD CHAMBER

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

Site Preparation Checklist



ElectroForce 3300 Series III

	<p>Enough bench/floor space for instrument and computer</p> <ul style="list-style-type: none"> <input type="checkbox"/> Table width: 1.5 m (5 ft) <input type="checkbox"/> Table depth: 1.2 m (4 ft) <input type="checkbox"/> Floor space (for floor standing frame): 91.44 cm x 91.44 cm (3 ft x 3 ft)
	<p>Instrument power is</p> <ul style="list-style-type: none"> <input type="checkbox"/> 200V, 50–60 Hz, 15A <input type="checkbox"/> 230V, 50–60 Hz, 13A
	<p>Purge gas</p> <ul style="list-style-type: none"> <input type="checkbox"/> Air: 413–515 kPa (60–80 psig), 8.5 L/m (0.3 CFM) <input type="checkbox"/> 5 μm filtered <input type="checkbox"/> Dew point \leq 10°C
	<p>Hot/Cold Chamber:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Gas: Liquid nitrogen <input type="checkbox"/> Pressure: 152–345 kPa (22–50 psig)
	<ul style="list-style-type: none"> <input type="checkbox"/> The Customer assumes responsibility for any damage that occurs when the instrument is moved by someone other than a trained TA Instruments Service Representative.

I hereby acknowledge that all utility requirements have been met per the checklist above and that they will be ready at the agreed time of installation.

If all utility requirements are not met at the agreed time of installation, additional charges may be incurred for a return Service trip.

_____ / /
Customer *DD* *MM* *YYYY*

_____ _____ _____ _____
Company *City* *State* *Country*

Please send a signed copy of the completed checklist to your local Service representative.

TA Instruments Offices

For information on our latest products, contact information, and more, see our website at:
<http://www.tainstruments.com>.

To find your local TA Instruments office and contact information, visit
<http://www.tainstruments.com/contact/ta-directory/>

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