



TetraTek Products, Inc.

We Put It All Together

Request for Applications Assistance

Please provide us with the following information. This document is intended as a checklist to help you to describe your needs. Other than your "Contact Information" and a "Description of the Desired Equipment, Application or Test" no other information is "Required." Naturally, the more information you provide us the better our response can be.

Thank you for considering us for your needs.

Send to:

**TetraTek Products, Inc.
501 South Reino Road, Unit 335
Newbury Park, California 91320**

Attention: Applications Engineering

Phone: 805-376-0540

E-Mail: applications@tetrattekproducts.com

Subject: Request for Quotation from (Your Name or Company)

Begin typing at the blue "x"

Your Contact Information:

| | |
|-------------------|---|
| First Name: | x |
| Last Name: | x |
| Company: | x |
| Department: | x |
| Mail Stop: | x |
| Street Address: | x |
| Street Address: | x |
| City: | x |
| State: | x |
| Outside USA: | x |
| Zip/Postal Code: | x |
| Telephone Number: | x |
| Fax Number: | x |
| E-Mail Address: | x |
| Company Web Site: | x |

Description of the desired Equipment, Process, Application, or Test:

Examples are: Life Test, Functional Test, Parametric Test, Burn-in, Environmental Test, MIL-SPEC xxx Test, Quality Audit, Design Verification, Production Sample, Production Assembly, Process Controls, End of Line Verification Test, Test Fixture, Product Handling Fixture, Instrumentation and Sensor Integration, Data monitoring, Robotics, Laser Cutting or Trimming System, Handling Carts or Fixture, Vacuum System, Space Simulator, Thermal Shroud, or Thermal Base-plate.

Please describe the desired equipment in full.

X
X
X

Please attach applicable specifications or procedures, if available.

Description of your Product or Process:

X
X
X

Please attach information including: sketches; drawings; schematics; pin-outs of connectors; software descriptions; photographs (bmp, jpg, or tiff preferred); technical bulletins describing your product; specifications describing your product; weight (pounds or kilograms) per item; and average materials of construction or specific heat (btu/F-lb preferred).

Are product samples available?

X

Are product carrier samples available?

X

Describe the product interface points including mechanical attachments, connectors, fluid attachments, gas attachments, vacuum attachments, cables, fasteners and etc.:

X

Describe the product power requirements – please include Volts and Amperes for each product stated separately:

X

Is continuous product monitoring required or can products be scanned or monitored one at a time? Please state the maximum loop time for rescan if scanning is acceptable.

X

Is a product simulation load board or external system required? Please describe.

X

Are chemical reactions part of your process? Please describe the chemicals and the combinations expected.

X

Is direct cooling or heating of your product required during testing? If so, is an external air or cooling system needed? What are the fluids, flows, pressures, pressure drops and temperatures needed?

x

Is precision motion or handling of your product part of your process? Please describe the handling procedure.

x

Please describe the accuracies required and provide a drawing or sketch of the motions needed.

x

Please provide specifications for the maximum speed or force on your product during motion or handling if applicable.

x

If carriers, product handling equipment, or fixtures are part of your process, please provide details of these units including: sketches; drawings; schematics; pin-outs of connectors; software descriptions; photographs (bmp, jpg, or tiff preferred); technical bulletins describing the carrier, product handler, or fixture; specifications describing the carrier weight (pounds or kilograms); and average materials of construction or specific heat (btu/F-lb preferred).

x

Proposal Information:

Type of Quotation needed:

| | |
|--|---|
| Budgetary (Project is not approved): | x |
| Preliminary (Approved but not Funded): | x |
| Firm Quotation (Approved and Funded): | x |

| | |
|------------------------------|---|
| Project will be approved: | x |
| Order will be placed (date): | x |
| Budget (Dollars Available): | x |

Who in your organization will make the buying decision?

x

What other types of equipment are you considering?

x

What are the most important factors you will consider in evaluating our offer?

x

Environmental Test Specifications – If Applicable:

Environmental Conditions:

Is an environmental test or process required?

x

Please provide details including specific information on the procedure or test.

| | | | | | | |
|-----------------------------|------|---|----|---|-------|---|
| Temperature Range (F or C): | From | x | To | x | Units | x (C or F) |
| Humidity Range (% RH): | From | x | To | x | Units | % RH |
| Altitude Range (Feet): | From | x | To | x | Units | Feet height |
| Vacuum Range: | From | x | To | x | Units | Torr or mmHg |
| High Vacuum Range | From | x | To | x | Units | 10 ⁻³ to 10 ⁻⁶ Torr |

Control Tolerances specified by procedure:

x

Temperature uniformity required:

x

Temperature Change Rate needed:

x /minute Units x (C or F)

Describe the test profile sequence:

x

Does the product outgas any fluids or gasses? Please describe with descriptions of fluids and quantities.

x

Test items or products description:

Please state each major item separately, include support structures and attached wiring or hoses:

Item 1 description, weight, dimensions, and average material of construction:

x

Item 2 description, weight, dimensions, and average material of construction:

x

Item 3 description, weight, dimensions, and average material of construction:

x

How much heat does each Test Item Dissipate in Watts? Please state each item separately and attach a cycle on and off chart or description of the relationship between product heat dissipation and the desired Test Cycle or process procedure.

Item 1

x

Item 2

x

Item 3

x

How many items must be tested simultaneously?

X

Mechanical and Electrical Fixturing – If Applicable:

Is test or process fixturing required (please describe)?

X

Is automatic handling equipment required (please describe)?

X

Are product carriers required (please describe)?

X

Are product handling carts required (please describe)?

X

Are interconnection cables or connectors needed (please describe)?

X

Do you have equipment you wish us to integrate with this system?

X

Instrumentation:

What types of instrumentation do you prefer? Please indicate model numbers or provide catalogue cuts if available.

X

Do you have existing personal computers, mainframe computers, or software you would like to use on this project?

X

Do you require a paper record of test or process conditions? If so, describe the type of record desired.

X

Do you have other instruments, power supplies or controls you want us to integrate with this equipment?

X

Facility Considerations:

What processes or equipment interface with the desired TetraTek equipment in the production or testing area?

X

If our equipment must interface with conveyors, robots, handling systems, carts, process machinery, or test systems by others, please provide: sketches; drawings; software interface descriptions; photographs (bmp, jpg; or tiff preferred); technical bulletins; and specifications.

What type of floor will the system be installed on?

x

What other pieces of equipment are near the installation location?

x

What is the building ceiling height in the installation area?

x

What is the minimum clearance dimension for installation of the equipment? For example door clearance or hall width?

x

What facility utilities are available? Please state value and quantity available.

| | | | | | |
|---------------------------|---|-------|----|---|---------|
| Plant Air: | x | Psig | at | x | SCFM |
| City Water: | x | Psig | at | x | Gpm |
| Condensing Water: | x | F | at | x | Gpm |
| Electrical Power: | x | Volts | at | x | Amperes |
| Gaseous Nitrogen: | x | Psig | at | x | SCFM |
| Dry Air (state Dewpoint): | x | F DP | at | x | SCFM |
| Liquid Nitrogen: | x | Psig | at | x | Gpm |
| Liquid Carbon Dioxide: | x | Psig | at | x | Gpm |

Does the equipment needed operate in a clean room or special environment? Please describe. If yes, what is the Class of the clean room?

x

Who will actually use the equipment at your facility? Please include type of person, typical height, and information on operator qualifications.

x

What is the current production rate of the item in units per week or month?

x

What is the projected future production rate of the item in units per week or month?

x

What are the requirements of your safety organization? Please include specifications if they are available.

x

Are special approvals required for equipment operating in your facility or area?

x

Important Other Considerations:

Are there any other important things we should consider?

x