WHAT SHOULD I INCLUDE IN MY LEAK TEST SYSTEM REQUEST FOR PROPOSAL (RFP)?

Successful implementation of a leak test system in a production environment starts with clearly stated requirements. Those requirements are often supplied to a prospective supplier in a Request for Proposal (RFP). Often RFP's are either not formally provided, or they are inadequate to communicate the customer's requirements so that the equipment provided has a clear understand of what the customer is expecting.

RFP's can include the following elements:

- Requirements for submissions of the RFP to the customer (deadlines, pricing breakdowns, shipping terms, etc.)

- Templates for submitting proposal information

- References to general industry design, safety, testing, or documentation standards

- General machine requirements that are specific to the customer (acceptable component manufacturers, safety requirements, design requirements, maintenance requirements, paint colors, etc.)

- Specific requirements for the leak test system (test requirements, production requirements, part descriptions, system validation and acceptance testing) Drawings of parts to be tested

- Actual sample parts

The document that contains the specific requirements for the leak test system should contain sufficient information to allow the prospective supplier to thoroughly understand the specific requirements and provide a clear and relevant proposal.

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The document could include some of the elements described in the table below.

TEST REQUIREMENTS	
Test Method	Describe the test method.
Leak Rate Limit	Specify the maximum allowable leak rate.
Test Pressure	Specify the gas pressure during leak test.
Tracer Gas Concentration	If using tracer gas method, enter the desired concentration (1 - 100%)
Flow Direction	Specify the flow direction of the leak during test, with reference to the part.
Leak Location	Specify if the leak test method must also identify the location of the leak.
Proof Test Pressure	If required as part of the leak test process, specify the gas pressure for proof test.
Operator Independent	Is it required for the pass/fail decision to be operator independent?
Requires Calibration	Specify if the leak test method must be able to be calibrated to a certified leak standard.
Global Test	Specify if the leak test method must measure the total global leak rate of the test part.
PRODUCTION REQUIREMENTS	
Production Rate	Specify the parts per hour produced, or the Takt time.
Part Loading	Describe how the parts will arrive to the station and how they will be loaded.
Part Unloading	Describe how the parts are to be unloaded from the station.
Part ID Tracking	Describe how parts are identified and if part ID needs to be scanned and tracked.
Data Logging	Describe the data that is required to be logged for each part/cycle.
Post Test Part Marking	Specify if parts are to be marked after testing and describe the requirements.
Multiple Part Configurations	Specify variety of part configurations to be tested on the station.
Tooling Change-Over	If required, specify the tooling change-over time to meet production needs.
TEST PART CHARACTERISTICS	
Name of Test Part	Specify the name of the test part.
Use/Application of Test Part	Describe the use and application of the test part, including fluids the part might contain when in use.
Approximate Size	Specify the overall size of the part. Provide drawings, photos, solid models.
Internal Volume	Specify the part internal volume.
Materials of Construction	Specify the materials of construction of the test part.
Part Cleanliness	Specify potential contamination or residues in/on the part from previous operations.
Part Temperature	Specify the approximate part temperature (relative to ambient) when arriving at the leak test station.
OTHER REQUIREMENTS	
Machine Specification	If desired, provide a machine specification.
Controls System	Describe the preferred controls sytem platform and requirements.
Machine Comm. Interface	If required, describe the communication method and protocol for the station to customer network.
Documentation	Describe any special requirements for documentation, including languages other than english.
System Qualification/Runoff	Describe any special requirements for qualifying and buying off the system.
Equipment Budget	Specify a range of budget that is available for the project.
Project Timing	Describe the anticipated phases and timing of the project, particularly the need date of the station.