

SPECIFICATIONS

COMPRESSED AIR SYSTEM

INTRODUCTION: This work statement gives the requirements for providing a compressed air system to supply 150 PSIG air to GFE 400 gallon receiver tank via a one inch NPT fitting. This system will replace the Naval Research Laboratory, Stennis Space Center (NRLSSC) Building 1005 NASA supplied air handling system. The compressor will be located external to the building. The remaining components must fit in a space 2' 6" wide by 6' high by 1' 6" deep. All components must meet or exceed ANSI standards. A site visit is recommended by potential vendors to verify existing system configurations. The new air handling system is comprised of off-the-shelf items which will have to be assembled to meet the outlined system configuration requirements.

SPECIFICATIONS: Air quality must meet or exceed: 150 PSIG, 50-55 cfm @ 175 PSIG, pressure dew point -65 degrees, 10 micron particulate filtration, and no more than 15 parts per million oil content. Basic system components shall consist of:

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| (a) Lubricated Reciprocating Compressor | 53 cfm @ 175 PSIG; Max pressure 175 PSIG
120 Gallon Receiver tank; 208V, 3 phase, 60
cycle, 50 amp |
| (b) Electronic starter for compressor | |
| (c) Electric drain valve for compressor | |
| (d) 110 Volt heatless desiccant dryer | maintain -65 degree dew point, continuous |
| (e) High efficiency Coalescing filter | 10 micron particulate filtration and oil removal |
| (f) Dust particulate filter | 10 micron particulate filtration |
| (g) Activated carbon filter | filter oil to 15 PPM or better |
| (h) System air controller | maintains system pressure and reduced dew
points |
| (i) Oil - Water separator | separate oil from exhausted condensate |
| (j) Power management controller | maintain power to compressor and systems |

The attached are pictures of the proposed location at NRLSSC for installation of the compressor and controls. The contractor should consider the exterior wall to the boiler room which is constructed with 8" of precast concrete and will have to be core drilled to allow power and other cable, hoses, or pipes to penetrate.

Picture 0622.001 is a photo outside the boiler room and is an ideal location for the compressor to be located. Should this location be selected you will have a space of 10' x 4' to locate the compressor and your run to the inside controls will be a maximum of 7' 6".

Picture 0622.002 shows the location where I propose to locate the controls and you will have an area of 30" wide by 5" tall this will place you above the transformer, to the left of the disconnect and to the right of the vertical conduit.

Picture 0622.003 shows the proximity of the electrical distribution panel which will feed the power for the compressor.

Picture 0622.004 gives a reference of the distance from the second pad (0622.005) to the boiler room door.

Picture 0622.005 shows an alternate location for the compressor. This pad is 4' x 10' and is located approximately 30' from the boiler room exterior wall. This location is least desirable as we will have long runs for power and air to get back into the building.

INSTALLATION: The compressor and all other system components shall be installed on-site at NRLSSC, within the specified locations.

PERIOD OF PERFORMANCE: The complete system shall be delivered and installed no later than 31 July 2004.