

CRYOGENIC TECHNICIAN SERIES

<u>Code No.</u>	<u>Class Title</u>	<u>Occ. Area</u>	<u>Work Area</u>	<u>Prob. Period</u>	<u>Effective Date</u>
3899	Cryogenic Technician I	14	503	6 mo.	05/18/92
3900	Cryogenic Technician II	14	503	6 mo.	05/18/92

Promotional Line: 179

Series Narrative

Employees in this series receive, liquefy, transfer, store, and dispense cryogenic fluids and/or supervise such operations.

DESCRIPTIONS OF LEVELS OF WORK

Level I: Cryogenic Technician I

3899

Employees at this level receive, liquefy, transfer, store, and dispense cryogenic fluids and maintain performance records of the operations involved. They work under general supervision from a designated supervisor.

A Cryogenic Technician I typically--

1. operates and maintains machinery for the production and storage of liquefied gases
2. receives bulk shipments of liquefied gases
3. transfers liquefied gases from one container to another
4. records disbursements on stores vouchers or other instruments for charging purposes
5. keeps continuous records of loss rates (such as from storage vessels or during transfer operations)
6. cascades gases at pressures up to 3000 psig (pounds per square inch gauge) from tank to cylinder, as required
7. builds and maintains gas transfer systems up to a pressure of 3000 psig
8. builds and maintains transfer tubes, pumps, valves, and related apparatus used in transferring liquefied gases
9. assists in the training of new employees in the class
10. performs related duties as assigned

Level II: Cryogenic Technician II**3900**

Employees at this level are responsible for the operation, testing, and maintenance of gas liquefying apparatus and the safe and efficient handling of cryogenic liquids. They work under general supervision from a designated supervisor.

A Cryogenic Technician II typically--

1. operates gas liquefying equipment with a high degree of skill and keeps such equipment producing at maximum efficiency
2. instructs others in the operation of gas liquefying equipment
3. prepares and analyzes records of operating performance
4. schedules maintenance of equipment
5. maintains inventory of parts for gas liquefying apparatus and related equipment and orders new parts as required
6. maintains and repairs gas liquefying equipment
7. operates basic machine tools
8. performs assembly operations (welding, brazing, and hard and soft soldering) with a high degree of skill
9. designs, constructs, and installs specialized cryogenic equipment (such as helium transfer tubes and safety devices) and builds related equipment as directed
10. is responsible for the control of supplies of high pressure gases and cryogenic liquids
11. assists in and advises on the safe and efficient handling of cryogenic liquids
12. supervises employees of lower rank
13. performs related duties as assigned

MINIMUM ACCEPTABLE QUALIFICATIONS REQUIRED FOR ENTRY INTO:**Level I: Cryogenic Technician I****3899**

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. high school graduation or equivalent
2. (A) two years of full-time employment as a mechanic in a machine shop and/or as an automobile or refrigeration mechanic

or

- (B) one year of experience in the handling of cryogenic fluids

PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

1. familiarity with hand tools
2. mechanical aptitude
3. ability to work well with others

Level II: Cryogenic Technician II

3900

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. high school graduation or equivalent
2. (A) two years of full-time employment as a mechanic in a machine shop and/or as an automobile or refrigeration mechanic

or

- (B) one year of experience in handling cryogenic fluids
3. three years of experience in operating gas liquefiers and working with cryogenic fluids in addition to the experience required in #2

PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

1. familiarity with the materials and procedures of machine shop practice
2. familiarity with materials used in cryogenics and their application
3. skill and ability to maintain and repair gas liquefying and cryogenic fluid handling equipment
4. supervisory ability
5. proven reliability for assuming responsibility for safety of personnel and equipment

Cryogenic Technician I
Cryogenic Technician II

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