| Name of Appendix: **Safety for those working with pressure absorvers – for air and other gases, vapor and steam** | | |
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| Instructions for conduct |  | Treatment (storage, transport, use) of vapors, air and other compressed gases, and steam entails risk and requires suitable safety precautions. |
|  |  | In addition to the risk of a mechanical shock wave (explosion) when handling pressure absorbers there are other special dangers when handling them, depending on the type of substances that are liable to cause heat or chemical burns, choking, poisoning, destruction, explosion and fire. Those that handle these must be familiar with them and act accordingly. |
|  |  | Pressure absorbers must have a mechanical strength suited to the “working pressure” (test pressure plus the relevant safety factor), and should be used only for their intended purpose. |
|  |  | Any pressure absorber, except for condensed gas canisters, must be equipped with following three safety devices:   1. Safety valve or other equivalent device; 2. Pressure gauge; 3. Release tap. |
|  |  | The diameter of the safety valve must not be less than the required standard, in order to ensure the release of excess pressure at the rate needed. Do not attached a disconnect valve between the safety valve and the absorber itself. |
|  |  | The range for readings on the pressure gauge should allow someone to distinguish a 10% change (at least) from the maximum permitted pressure. Its upper reading limit should be 100% above its working pressure. |
|  |  | The release tap of the pressure absorber should be installed so that it allows both liquid and solid waste to be emptied, even from the lowest part of the absorber. |
|  |  | Pressure absorbers for steam and compressed air (except compressed air canisters) must be checked periodically and approved by a “certified tester.” |
|  |  | All components of the pressure system – the absorber, tubes, instruments and work installation itself (the consumer) must be strong enough to bear the maximum pressure of the original (in the absorber) plus 50% (for a total of 150% of the original pressure).  Regarding pressure facilities for use under especially high pressure and pressure facilities with a particularly small capacity, a testing pressure of 125% will be permitted with the consent of a certified tester or University safety engineer. |
|  |  | The ends of flexible tubing must be connected with reliable clips that can bear the testing pressure (150% of the maximum working pressure). |
|  |  | Pressure absorbers must be placed in spaces that are adequately ventilated, upper and/or lower, according to the specific gravity (relative to the air) of the gas / vapor in the absorber. |
|  |  | Large arrays of pressure absorbers, as well as large-volume pressure absorbers, should be located in an uncovered location or in rooms equipped with shock wave release openings or a “soft” wall. |
| Responsible for performance |  | The following are responsible for performance of these directives:  Maintenance Unit manager  Mechanical systems operations manager |