

- E. Piping attached to plant items shall be supported in such way that the weight of the piping is not taken by the plant item. All supports shall be shop fabricated.
- F. Support spacing for horizontally and vertically installed pipes and the location of fixed and sliding points shall be in accordance with manufacturer's written recommendation under consideration of flow media density, pressure, ambient conditions and flow media, flow velocity and start / stop conditions of pumping system, taking also into account seismic wave vibrations in horizontal and vertical directions.
- G. Where possible supports shall be positioned near to joints and valves and shall be located in order to facilitate easy maintenance.
- H. Since certain parts of the building are constructed in reinforced concrete, the position of all supports and anchors, and the resulting loads, shall be defined early enough to allow appropriate provisions to be made. The Contractor shall allow in his rates for cutting anchor holes etc. required for the installation of the Plant.
- I. Supports shall be designed for the load resulting from equipment and piping system under fully operational conditions (filled with water, etc.), during hydraulic testing, and under unexpected uncontrolled plant shut down.
- J. All design and fabrication, including loads and allowable stresses, shall be in accordance with the relevant codes and standards.
- K. A stress analysis calculation shall be submitted to the Engineer. The location of anchors, guides or restraints shall be based on the result of the final stress analysis. Spring type hangers shall be selected to allow the movements determined by the stress analysis.
- L. The Contractor shall design, locate and provide all supplementary steel required to properly secure and support all equipment and pipe supports furnished.
- M. Designs, generally accepted as exemplifying good engineering practice, using stock or production parts, shall be utilised wherever possible.
- N. Accurate weight balancing calculations shall be made to determine the required supporting force at each support location and the pipe weight at each equipment connection.
- O. Adequate provisions shall be made for supports that may be disconnected during maintenance works.